1.1.1 The Institution Ensures Effective Curriculum Delivery through a Well-planned and Documented Process

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1.1 Curriculum Planning and Implementation:

1.1.1 The institution ensures effective curriculum delivery through a well-planned and documented process:

RESPONSE:

Our institution follows the Curriculum and Syllabi prescribed by Anna University (Affiliated Colleges). Steps that are followed by the institution to ensure curriculum delivery are:

- The institution develops an academic schedule based on the University calendar
- Allocation of the subjects to the faculty is done based on qualification, area of specialization, experience, and willingness.
- Suggesting the students to select electives based on the industrial requirement
- Course files are prepared and maintained by the faculty as per ISO requirement which includes:
  - Previous year Question Paper(5 years)
  - Learning Materials
  - Two Mark Question Bank with Answers
  - Students Name List
  - Class and Laboratory Timetable
  - Individual Faculty Timetable
  - Syllabus Copy
  - Course Objectives and Outcomes
  - Lecture, Practical and Tutorial Plan
  - Bridge Course Plan/Content Beyond Syllabus
  - Tutorial and Assignment Sheet
  - Academic Process and Academic Performance Monitoring
  - Course Progress Report and Performance Details
- Each department has a set of framed objectives for its curriculum and deployed various mechanisms to ensure that the stated objectives of the curriculum are achieved through:
  - Department Advisory Committee consists of Class Advisor, Head of the Department and the Principal do a periodical review of the portions covered by the staff members and also the student's attendance
  - Three Internal Assessment Tests, Unit Test/Assignments/Tutorials, Online Quiz and University Examination
- To enrich the knowledge of students, faculty members adopt different techniques, such as assignments, collaborative learning, NPTEL lectures, case studies, projects, surveys, quiz, field trip, etc., apart from regular/traditional chalk and talk methods with modern teaching facilities
  - Smart Classrooms (265Mbps Speed Internet Connection)
  - Video Conferencing
  - Technical Video Resources
- Final year projects are reviewed by industrial experts
- Feedback is obtained from the students twice a semester to enhance the teaching-learning process
- In addition to the curriculum, students are educated about the latest developments in their respective fields through, Guest Lectures, Industrial Visits, Workshops, Value Added Courses, Internships, Innovative Projects, Online Courses, Corresponding club activities, and technical association, etc.,
- Encouraging the students to do innovative projects and resent papers in seminars and international conferences
- Persuade the teaching faculty with the task of mentoring students on academic and personal issues thereby strengthening better learning atmosphere and sustaining their performance
- Class Committee meetings are held thrice in a semester by the chairperson to improve the teaching-learning process, academic progress of the students,

grievances if any, and suitable remedial measures are taken

- If a subject is common to more than one branch then a course coordinator conducts a course committee meeting with all faculty handling that subject and students representatives to deliberate the mode of teaching
- For each laboratory class, lab manuals are available to the students
- Faculty skill up-gradation includes Refresh Courses, FDTPs, Workshops, IPT, International Conferences, Seminars, Guest Lectures, Ph.D., etc.,

Date: 27.07.2021

CENTRE FOR ACADEMIC COURSES

ANNA UNIVERSITY: : CHENNAI – 600 025

ACADEMIC SCHEDULE FOR NON AUTONOMOUS AFFILIATED COLLEGES

August 2021 – December 2021 (ODD SEMESTER)*

UG & PG Programmes

Sl. No.	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B.Tech.(Full-Time)	III, V, VII	18.08.2021	30.11.2021**	02.12.2021	13.12.2021
2.	B.E. / B.Tech (Part-Time)	III, V, VII				
3.	B.Arch. (Full-Time)	III, V, VII, IX				
4.	M.C.A. (Full-Time)	V				
5.	M.Sc (5 Yrs-Integrated)	V, VII, IX				
6.	M.B.A. (5 Yrs-Integrated)	V, VII, IX				

* As per the directives of the Government of Tamil Nadu, the classes will be conducted in ONLINE mode

RE - OPENING DAY FOR THE NEXT SEMESTER: 19.01.2022 (Wednesday)

NOTE:

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

** In order to ensure minimum no. of working days, the following 7 Saturdays are declared as working days.

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	28.08.2021	Friday
2.	11.09.2021	Monday
3.	25.09.2021	Friday
4.	09.10.2021	Thursday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
5.	23.10.2021	Friday
6.	06.11.2021	Tuesday
7.	20.11.2021	Thursday

27.07.2021

DIRECTOR
ACADEMIC COURSES

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001: 2015 Certified Institution

ACADEMIC CALENDAR

Academic year: 2021-2022 (Odd Semester)

III Semester/ V Semester/ VII Semester B.E. Courses

Reference: Anna University Academic Schedule August - December 2021 (Dated: 27.07.2021)

Programme: UG	B.E	II Year	III Semester
		III Year	V Semester
		IV Year	VII Semester

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Activity/ Event	II year / III Semester	III year/ V Semester	IV year/ VII Semester
Communication to Anna University regarding Advancement Courses / Value Added Courses	-	07.08.2021	15.07.2021
Course registration – Open Elective, Professional Elective	NA	22.07.2021	26.07.2021
Submission of Course Outcomes Exit Survey for Even Semester 2020-2021	06.08.2021		
Distribution of Timetable to faculty Members	12.08.2021		
Submission of Course Files of 2020-2021 Even Semester with calculation of attainment of Course outcomes	14.08.2021		
Uploading Course Plan in Learning Management System	16.08.2021		
Display of Class Time table in the class Notice board	17.08.2021		
Submission of Industrial Training/ Industrial Visit/ Internship Report (if Any)	18.08.2021		
College Reopening	**18.08.2021**		
Dissemination of Institute Vision & Mission and Department Vision & Mission, PEO, PO & PSO to the students	18.08.2021 (3.30 PM to 4.00 PM)		
Constitution of Class Committee/ Course Committee	19.08.2021 to 23.08.2021		
Registration & Collection of Anti Ragging Affidavit for the Academic year 2021-2022	27.08.2021	28.08.2021	31.08.2021
Submission of Class Committee / Course Committee Meeting I Minutes to the Department	31.08.2021		
Course file & Logbook Verification (Unit I)	13.09.2021 to 17.09.2021		
Collection of Students Feedback	27.09.2021 to 05.10.2021		
Course file & Logbook Verification (Unit II)	01.10.2021 to 06.10.2021		
Submission of Class Committee / Course Committee Meeting II Minutes to the Department	09.10.2021		
Course file & Logbook Verification (Unit III)	16.10.2021 to 22.10.2021		
Course file & Logbook Verification (Unit IV)	11.11.2021 to 17.11.2021		
Submission of Class Committee / Course Committee Meeting III Minutes to the Department	23.11.2021		
Last Working Day	**30.11.2021**		

Activity/ Event	II year / III Semester	III year/ V Semester	IV year/ VII Semester
Updating Innovative Practices followed in the website with reflective critics'	30.11.2021		
Feedback on Curriculum by Faculty & Student	30.11.2021		
Course file & Log book Verification (Unit V)	03.12.2021 to 08.12.2021		
Quality of Question Paper Audit	11.12.2021 to 18.12.2021		
Submission of Analysis of all Feedbacks from the Stakeholders	15.12.2021 to 22.12.2021		
Academic Audit	18.12.2021 / 24.12.2021		

Details of Meeting	Frequency/ Day / Date
Institute Planning and Development Committee (IPDC) Meeting	Every Week/ Wednesday
College Academic Committee (CAC) Meeting	First Week of Every Month / Friday
Department Review Meeting	Twice in a Month / Second and Fourth Monday
ISO MRM Meeting	Once in a semester / 11.08.2021
Department Advisory Committee (DAC) Meeting (All Department)	Once in a Semester/ 28.08.2021 or 04.09.2021
ISO Internal Audit	Twice in a semester/ 07.10.2021 to 09.10.2021 and 09.12.2021 to 11.12.2021
Parents Teachers Meeting	Once in a semester / 03.10.2021
IQAC Meeting	Once in 3 Months / 21.08.2021 & 04.12.2021
Programme Assessment and Quality Improvement Committee (PAQIC) Meeting	Once in a semester / 11.12.2021
Alumni Meeting	Once in a Semester / Sunday
Anti-ragging Committee Meeting	Once in a Year / Odd Semester
Compliance and Grievance Redressal Committee Meeting	First Week of Every Month / Monday
Internal Complaint Committee Meeting/ Sexual Harassment Meeting	Once in a semester
SC/ST Cell Meeting	Once in a semester
Note: Changes shall be made if required based on availability of External Experts with prior approval by the principal	

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Detailed Academic Calendar						2021-2022 (Odd Semester)			
AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
1 SUN	Holiday	1 WED		1 FRI		1 MON		1 WED	
2 MON		2 THU		2 SAT	Gandhi Jayanthi Holiday	2 TUE		2 THU	AU Practical Examination
3 TUE		3 FRI		3 SUN	Holiday	3 WED	Holiday	3 FRI	Consolidated Mark statement
4 WED		4 SAT	MON TT	4 MON		4 THU	Deepavali	4 SAT	
5 THU		5 SUN	Holiday	5 TUE	Students Feedback (Ends)	5 FRI	Holiday	5 SUN	Holiday
6 FRI		6 MON	Completion of Unit I	6 WED	CoCM &CCM 2 (Ends)	6 SAT	Completion of Unit IV TUE TT	6 MON	
7 SAT	Holiday	7 TUE		7 THU		7 SUN	Holiday	7 TUE	
8 SUN	Holiday	8 WED		8 FRI		8 MON		8 WED	
9 MON		9 THU		9 SAT	THU TT	9 TUE		9 THU	
10 TUE		10 FRI	Vinayagar Chathurthi	10 SUN	Holiday	10 WED		10 FRI	
11 WED		11 SAT	Holiday	11 MON		11 THU		11 SAT	
12 THU		12 SUN	Holiday	12 TUE	Completion of Unit III	12 FRI		12 SUN	Holiday
13 FRI		13 MON		13 WED	IAT QP-2 Submission	13 SAT	Holiday	13 MON	End Semester Examination
14 SAT		14 TUE		14 THU	Ayutha Pooja	14 SUN	Holiday	14 TUE	
15 SUN	Independence Day Holiday	15 WED		15 FRI	Vijaya Dasami	15 MON	CoCM & CCM 3 (starts)	15 WED	
16 MON		16 THU	IAT QP-1 Submission	16 SAT	FRI TT	16 TUE		16 THU	
17 TUE		17 FRI		17 SUN	Holiday	17 WED		17 FRI	
18 WED	Commence ment of Classes	18 SAT	Holiday	18 MON	IAT-2 (Starts)	18 THU		18 SAT	
19 THU		19 SUN	Holiday	19 TUE	Milad-un-Nabi	19 FRI	CoCM & CCM 3 (Ends)	19 SUN	Holiday
20 FRI	Muharram	20 MON	IAT-1 (Starts)	20 WED		20 SAT	THU TT	20 MON	

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AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
21 SAT	Holiday	21 TUE		21 THU		21 SUN	Holiday	21 TUE	
22 SUN	Holiday	22 WED		22 FRI		22 MON	IAT QP-3 Submission	22 WED	
23 MON	CoCM & CCM 1 (starts)	23 THU		23 SAT	Holiday	23 TUE	Completion of Unit V	23 THU	
24 TUE		24 FRI	Completion of Unit II	24 SUN	Holiday	24 WED	IAT-3 (Starts)	24 FRI	
25 WED		25 SAT	IAT - 1(Ends) FRI TT	25 MON		25 THU	Model Practical ExamStarts	25 SAT	Christmas
26 THU		26 SUN	Holiday	26 TUE	IAT-2 (Ends)	26 FRI		26 SUN	Holiday
27 FRI	CoCM & CCM 1 (Ends)	27 MON	Students Feedback (starts)	27 WED		27 SAT	FRI TT	27 MON	
28 SAT	FRI TT	28 TUE		28 THU		28 SUN	Holiday	28 TUE	
29 SUN	Holiday	29 WED	Consolidated Mark statement	29 FRI	Consolidated Mark statement	29 MON	Model Practical Exam Ends	29 WED	
30 MON	Krishna Jayanthi	30 THU	CoCM &CCM 2 (starts)	30 SAT	WED TT	30 TUE	IAT -3 (Ends) Last Working Day	30 THU	
31 TUE		–	–	31 SUN	Holiday	–	–	31 FRI	
Total Number of Working Day: 75									

Note:

1. Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
2. The faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation or through Online Mode. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office
3. No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60%

of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from HOD and Principal.

Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 project work in addition to 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.

5. Faculty Members are advised to implement project-based learning and problem-based learning in their courses and document the outcomes in terms of knowledge and skill attainment.

List of Holidays				List of Saturday Working – Day order		
Month	**Date**	**Day**	**Occasion**	**Month**	**Date**	**Day order**
August	15	Sunday	Independence Day	August	28.08.2021	Friday
	20	Friday	Muharram	September	04.09.2021	Monday
	30	Monday	Krishna Jayanthi		25.09.2021	Friday
September	10	Friday	Vinayakar Chathurthi	October	09.10.2021	Thursday
October	2	Saturday	Gandhi Jeyanthi		16.10.2021	Friday
	14	Thursday	Ayutha Pooja		30.10.2021	Wednesday
	15	Friday	Vijaya Dasami	November	06.112021	Tuesday
	19	Tuesday	Milad-un-Nabi		20.11.2021	Thursday
November	3	Wednesday	Deepavali		27.11.2021	Friday
	4	Thursday				
	5	Friday				
December	25	Saturday	Christmas			

6/8/21 6/8/21 6/8/21

Academic Coordinator **Vice Principal** **Principal**

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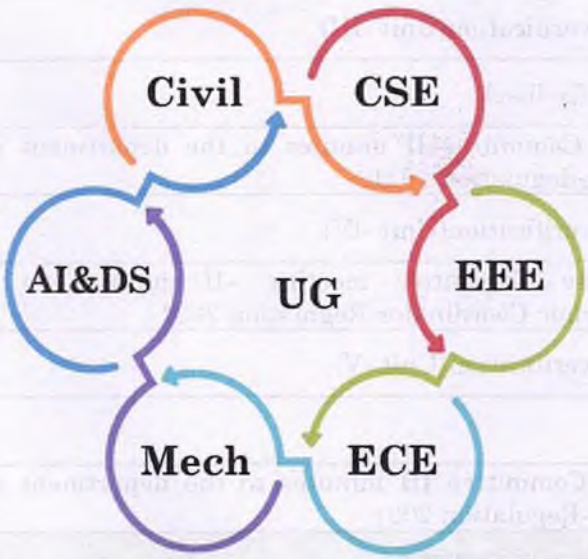
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

ACADEMIC CALENDAR

Academic year: 2021-2022 (Odd Semester)

I Semester B.E./B.Tech Courses

Reference: Anna University Academic Schedule – November 2021-March-2022(Semester-1) Dated 25.10.2021



Programme: UG	B.E/B.Tech.	I Year	I Semester

Activity/ Event	I year / I Semester
Distribution of Time table to faculty member	08.11.2021
Submission of course file	08.11.2021
Uploading course plan in LMS	10.11.2021
College reopening	08.11.2021
Induction program	08.11.2021 to 19.11.2021
Constitution of Class Committee/Course Committee	23.11.2021
Submission of Class Committee/Course Committee meeting –I minutes to the department and Academic Coordinator-Regulation 2021	02.12.2021
Course file & logbook verification(Unit -I)	07.12.2021 to 10.12.2021
Course file & logbook verification(Unit -II)	21.12.2021 to 24.12.2021
IAT1 Schedule	05.01.2022 to 11.01.2022
Course file & logbook verification(Unit -III)	12.01.2022 to 17.01.2022
Collection of students feedback	12.01.2022 to 20.01.2022
Submission of Class Committee–II minutes to the department and Academic Coordinator-Regulation 2021	21.01.2022 to 25.01.2022
Course file & logbook verification(Unit -IV)	04.02.2022 to 10.02.2022
Submission of Course Committee meeting –II minutes to the department and Academic Coordinator-Regulation 2021	21.02.2022 to 23.02.2022
Course file & logbook verification(Unit -V)	25.02.2022 to 01.03.2022
IAT2 Schedule	01.03.2022 to 05.03.2022
Submission of Class Committee III minutes to the department and Academic Coordinator-Regulation 2021	07.03.2022 to 08.03.2022
Last working day, Course exit survey	08.03.2022
Commencement of AU practical examination	10.03.2022
Feedback on curriculum by students & Faculty	15.03.2022
Submission of Analysis of all the stakeholder feedback	15.03.2022
Commencement of End Semester Examination	21.03.2022
Quality of Question paper Audit	02.04.2022 to 07.04.2022
Academic Audit	15.04.2022

Details of Meeting	Frequency/Day/Date
Institute Planning and Development Committee(IPDC) meeting	Every week/Wednesday
College Academic Committee (CAC) meeting	First week of every month/Friday
Department Review meeting(DRM)	Twice in a month/Second and Fourth Monday
ISO MRM Meeting	Once in a semester
Department Advisory Committee(DAC) meeting	Once in a semester
ISO Internal Audit	Twice in a semester
Academic audit	Twice in a semester
Parents Teachers Meeting	Once in a semester/08.01.2022
IQAC meeting	Once in 3 Months/04.12.2021
Programme Assessment and Quality Improvement Committee(PAQIC) meeting	Once in a semester/11.12.2021
Alumni meeting	Once in a semester/Sunday
Anti-ragging Committee Meeting	Once in a Year/Odd Semester
Compliance and Grievance Redressal Committee Meeting	First week of every month/Monday
Internal Complaint Committee Meeting/Sexual Harassment Meeting	Once in a semester
Industrial visit	Once in a semester
Internship	During Semester Holidays
SC/ST Cell Meeting	Once in a semester
Note: Changes shall be if required based on availability of External Experts with prior approval by the principal	

Detailed Academic Calendar				2021-2022 (Odd Semester)					
NOVEMBER		**DECEMBER**		**JANUARY**		**FEBRUARY**		**MARCH**	
1 MON		1 WED		1 SAT	New Year	1 TUE		1 TUE	IAT-2 Starts
2 TUE		2 THU		2 SUN	Holiday	2 WED		2 WED	Log book sign
3 WED	Holiday	3 FRI		3 MON	IAT-1 QP Submission	3 THU		3 THU	
4 THU	Diwali	4 SAT	Training Program	4 TUE		4 FRI	**Completion of UNIT IV**	4 FRI	
5 FRI	Holiday	5 SUN	Holiday	5 WED	**IAT-I Starts**	5 SAT	Holiday	5 SAT	IAT-2 Ends
6 SAT	Holiday	6 MON	**Completion of Unit-I**	6 THU		6 SUN	Holiday	6 SUN	Holiday
7 SUN	Holiday	7 TUE	**Log book sign**	7 FRI		7 MON	**Log book sign**	7 MON	CCM3 (Starts)
8 MON	Induction Program	8 WED		8 SAT	Training Program PTA Meeting	8 TUE		8 TUE	CCM3 (Ends) Last working day
9 TUE		9 THU		9 SUN	Holiday	9 WED		9 WED	Consolidated Mark statement
10 WED		10 FRI		10 MON		10 THU		10 THU	Commencement of AU practical Examination
11 THU		11 SAT	Holiday	11 TUE	**IAT-I Ends**	11 FRI		11 FRI	
12 FRI	Training program	12 SUN	Holiday	12 WED	Students Feedback (starts) Completion of Unit-III	12 SAT	Training	12 SAT	Holiday
13 SAT	Training program	13 MON		13 THU	Log book sign	13 SUN	Holiday	13 SUN	Holiday
14 SUN	Holiday	14 TUE		14 FRI	Holiday	14 MON		14 MON	
15 MON		15 WED		15 SAT	Pongal	15 TUE		15 TUE	
16 TUE		16 THU		16 SUN	Holiday	16 WED		16 WED	
17 WED		17 FRI		17 MON	Mark statement submission	17 THU		17 THU	
18 THU		18 SAT	Training program	18 TUE		18 FRI		18 FRI	
19 FRI		19 SUN	Holiday	19 WED		19 SAT	Holiday	19 SAT	

20 SAT	Holiday	20 MON		20 THU	Students Feedback (Ends)	20 SUN	Holiday	20 SUN	Holiday
21 SUN	Holiday	21 TUE	**Completion of Unit-II**	21 FRI	CCM2 (Starts)	21 MON	CoCM2 (Starts)	21 MON	Commencement of End Semester Examination
22 MON	Commencement of classes	22 WED	**Log book sign**	22 SAT	Co/Extra-curricular Activities	22 TUE		22 TUE	
23 TUE		23 THU		23 SUN	Holiday	23 WED	CoCM2 (Ends)	23 WED	
24 WED	CoCM&CCM 1(Starts)	24 FRI		24 MON		24 THU	IAT-III QP Submission	24 THU	
25 THU		25 SAT	Christmas	25 TUE	CCM2 (Ends)	25 FRI	**Completion of Unit V**	25 FRI	
26 FRI		26 SUN	Holiday	26 WED	Republic Day	26 SAT	**Model practical**	26 SAT	Holiday
27 SAT	Training CoCM&CCM 1(Ends)	27 MON		27 THU		27 SUN	Holiday	27 SUN	Holiday
28 SUN	Holiday	28 TUE		28 FRI		28 MON	National Science Day	28 MON	
29 MON		29 WED		29 SAT	Holiday	-	-	29 TUE	
30 TUE		30 THU		30 SUN	Holiday	–	–	30 WED	
-	-	31 FRI		31 MON		-	-		
Total Number of Working Day: 75									

AWARDING MARKS FOR INTERNAL ASSESSMENT

THEORY COURSES (Clause 12.1)

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment I (100 Marks)		**Assessment 2 (100 Marks)**		**Total** Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
40	**60**	**40**	**60**	**200***

*The weighted average shall be converted into 40 marks for internal Assessment

LABORATORY COURSES (Clause 12.2)

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criterion for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer

Assessment (100 Marks)	
Evaluation of Laboratory Observation, Record	Test
75	**25**

* Internal assessment marks shall be converted into 60 marks

Note:

1. Internal Assessment Test I covers the syllabus of Unit I, Unit II, and ½ of UNIT III. Internal Assessment Test II covers the syllabus of ½ of Unit III, Unit IV and UNIT V.
2. During the regular period, the concerned faculty member may conduct a revision test/Unit test (optional) following the completion of each unit. The Question paper, as well as the mark statement, should be sent to the exam cell.
3. The faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation or through Online Mode. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
4. No Retest will be conducted and it is not encouraged. However, the Students who are absent for the Test due to genuine reasons such as Medical grounds, Sports Activities etc with prior permission are permitted for retest.
5. Model exam will be conducted subjected to availability of working days.
6. Each student shall submit the given Individual Assignment / Case Study / Seminar / Mini Project to fulfill the norms of the Anna University for calculating the internal marks as per the weightage given in Clause 12.1 for all the courses.
7. Outcome based assessment will be done using the direct assessment tools such as Individual Assignment / Case Study / Seminar / Mini Project and the attainment of course outcomes, program outcomes and program specific outcomes will be calculated to fulfill the requirement of NBA/NAAC accreditation.

Note:

List of Holidays				List of Saturday Working – Day order		
Month	**Date**	**Day**	**Occasion**	**Month**	**Date**	**Day order**
November	3.11.2021	Wednesday	Diwali	November	12.11.2021	Training program
	4.11.2021	Thursday			13.11.2021	
	5.11.2021	Friday			27.11.2021	
	6.11.2021	Saturday		December	04.12.2021	
	20.11.2021	Saturday	Holiday		18.12.2021	
December	11.11.2021	Saturday	Holiday	January	08.01.2022	Training program PTA Meeting
	25.11.2021	Saturday	Christmas		22.01.2022	Co-Curricular & Extra-curricular activity
January	01.01.2022	Saturday	New Year	February	12.02.2022	Training program
	14.01.2022	Friday	Pongal		26.02.2022	Model practical
	15.01.2022	Saturday		March	10.03.2022	Commencement of AU practical Examination
	16.01.2022	Sunday	Uzhavar Thirunal		21.03.2022	Commencement of End Semester Examination
	26.01.2022	Wednesday	Republic Day			
	29.01.2022	Saturday	Holiday			
February	05.02.2022	Saturday	Holiday			
	19.02.2022	Saturday				
March	12.03.2022	Saturday	Holiday			
	26.03.2022	Saturday				

22/11/21
Academic Coordinator
Regulation 2021

22/11/21
Vice Principal

22/11/21
Principal

ANNA UNIVERSITY:: CHENNAI 600 025

Internal Assessment Schedule for Non Autonomous Affiliated Institutions

August - December 2021 - For all UG/PG - Programmes (ODD SEMESTER) – Except M.C.A 2 Years

Report No	Report Period	Test Period	Report Entry Period
I	18-08-2021 – 13-09-2021	----	13-09-2021 – 18-09-2021
II	14-09-2021 – 07-10-2021	01-10-2021 – 07-10-2021	07-10-2021 -- 13-10-2021
III	08-10-2021 – 05-11-2021	29-10-2021 – 05-11-2021	05-11-2021 --11-11-2021
IV	06-11-2021 – 30-11-2021	23-11-2021 – 30-11-2021	30-11-2021 -- 02-12-2021

Saturdays may be included as working days to make good the Shortages, if any.

CONTROLLER OF EXAMINATIONS

01/09/2021

01-09-2021

ANNA UNIVERSITY :: CHENNAI 600 025

Internal Assessment Schedule for Non Autonomous Affiliated Institutions

Period : November 2021 – March 2022 (ODD Semester – First Semester) Examinations

B.E./B.Tech – Full Time / Part Time Programmes (R-2021)

Report No	Report Period	Test Period	Report Entry Period
I	22-11-2021 – 12-01-2022	03-01-2022 – 12-01-2022	12-01-2022 -- 21-01-2022
II	13-01-2022 -- 08-03-2022	25-02-2022 – 08-03-2022	08-03-2022 -- 09-03-2022

Period : November 2021 – March 2022 (ODD Semester – First Semester) Examinations

B.Arch – Programme (R-2021)

Report No	Report Period	Test Period	Report Entry Period
I	29-11-2021 – 31-12-2021	21-12-2021 – 31-12-2021	31-12-2021 – 10-01-2022
II	03-01-2022 -- 09-02-2022	31-01-2022 – 09-02-2022	09-02-2022 – 18-02-2022
III	10-02-2022 -- 15-03-2022	07-03-2022 – 15-03-2022	15-03-2022 – 16-03-2022

Saturdays may be included as working days to make good the Shortages, if any.

27/12/21

CONTROLLER OF EXAMINATIONS

Date: 16.02.2022

CENTRE FOR ACADEMIC COURSES

ANNA UNIVERSITY: : CHENNAI – 600 025

ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

March 2022 – June 2022 (Even Semester – Except Semester II)

UG (FT/PT) Degree Programmes

Sl. No.	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B.Tech.(Full-Time)	IV,VI,VIII	07.03.2022	11.06.2022**	13.06.2022	22.06.2022
2.	B.E. / B.Tech (Part-Time)	IV,VI				
3.	B.Arch. (Full-Time)	IV,VI,VIII,X				

RE - OPENING DAY FOR THE NEXT SEMESTER: 01.08.2022 (Monday)

NOTE:

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

**** In order to ensure minimum no. of working days, the following Saturdays are declared as working days.**

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	12.03.2022	Thursday
2.	26.03.2022	Friday
3.	09.04.2022	Tuesday
4.	23.04.2022	Monday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
5.	07.05.2022	Tuesday
6.	21.05.2022	Wednesday
7.	04.06.2022	Thursday
8.	11.06.2022	Friday

16/02/2022

DIRECTOR
ACADEMIC COURSES

RAMCO INSTITUTE OF TECHNOLOGY

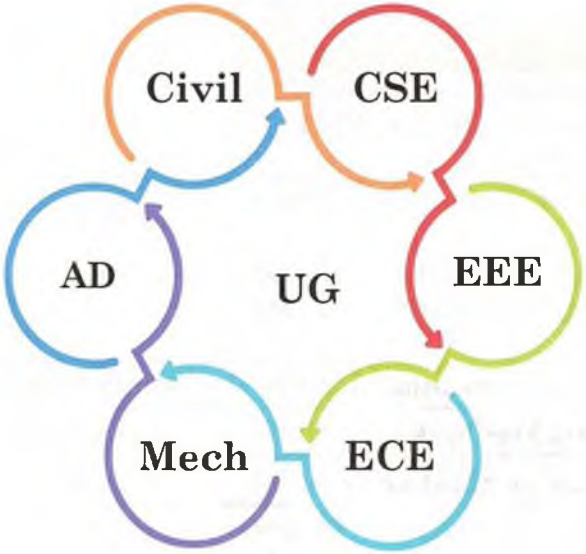
Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

ACADEMIC CALENDAR

Academic year: 2021-2022 (Even Semester)

IV Semester/ VI Semester/ VIII Semester B.E. Courses

Reference: Anna University Academic Schedule March - June 2022 (Dated: 16.02.2022)



Programme: UG	B.E	II Year	IV Semester
		III Year	VI Semester
		IV Year	VIII Semester

Activity/ Event	II year / IV Semester	III year/ VI Semester	IV year/ VIII Semester
Communication to Anna University regarding Advancement Courses	-	02.03.2022	-
Submission of Course Outcomes End Survey for odd Semester 2021-2022	25.02.2022		
Distribution of Timetable to faculty Members	28.02.2022		
Submission of Course Files of 2021-2022 Odd Semester	25.02.2022		
Uploading Course Plan in Learning Management System	02.03.2022		
Display of Class Time table in the class Notice board	05.03.2022		
Submission of Industrial Training/ Industrial Visit/ Internship Report (if Any)	10.03.2022		
College Reopening	**07.03.2022**		
Dissemination of Institute Vision & Mission and Department Vision & Mission, PEO, PO & PSO to the students	07.03.2022		
Constitution of Class Committee/ Course Committee	07.03.2022 to 12.03.2022		
Submission of Class Committee / Course Committee Meeting I Minutes to the Department	22.03.2022		
Course file & Logbook Verification (Unit I)	28.03.2022 to 31.03.2022		
Collection of Students Feedback	18.04.2022 to 22.04.2022		
Course file & Logbook Verification (Unit II)	18.04.2022 to 21.04.2022		
Submission of Class Committee / Course Committee Meeting II Minutes to the Department	04.05.2022		
Course file & Logbook Verification (Unit III)	05.05.2022 to 09.05.2022		
Course file & Logbook Verification (Unit IV)	23.05.2022 to 26.05.2022		
Submission of Class Committee / Course Committee Meeting III Minutes to the Department	07.06.2022		
Course file & Log book Verification (Unit V)	08.06.2022 to 11.06.2022		
Last Working Day	**11.06.2022**		
Updating Innovative Practices followed in the website with reflective critics'	22.06.2022		

Activity/ Event	II year / IV Semester	III year/ VI Semester	IV year/ VIII Semester
Feedback on Curriculum by Faculty & Student	20.06.2022		
Submission of Analysis of all Feedbacks from the Stakeholders	25.06.2022		
Quality of Question Paper Audit	30.06.2022		
Academic Audit	27.06.2022 to 09.07.2022		

Details of Meeting	Frequency/ Day / Date
Institute Planning and Development Committee (IPDC) Meeting	Every Week/ Wednesday
College Academic Committee (CAC) Meeting	Second Week of Every Month / Friday
Department Review Meeting	Twice in a Month / Second and Fourth Monday
ISO MRM Meeting	Once in a semester / 15.06.2022
Department Advisory Committee (DAC) Meeting (All Department)	Once in a year (preferably odd semester)
ISO Internal Audit	Twice in a semester
Parents Teachers Meeting	Once in a semester / 30.04.2022
IQAC Meeting	Once in 3 Months / 23.04.2022
Programme Assessment and Quality Improvement Committee (PAQIC) Meeting	Once in a semester / 02.07.2022 to 09.07.2022
Alumni Meeting	Once in a Semester / Sunday
Anti-ragging Committee Meeting	Once in a Year / Odd Semester
Compliance and Grievance Redressal Committee Meeting	First Week of Every Month / Monday
Internal Complaint Committee Meeting/ Sexual Harassment Meeting	Once in a semester
SC/ST Cell Meeting	Once in a semester
Note: Changes shall be made if required based on availability of External Experts with prior approval by the principal	

Detailed Academic Calendar				2021-2022 (Even Semester)					
MARCH		**APRIL**		**MAY**		**JUNE**		**JULY**	
1 TUE		1 FRI		1 SUN	Holiday	1 WED	IAT QP-3 Submission	1 FRI	
2 WED		2 SAT	Telugu New Year	2 MON	IAT QP-2 Submission	2 THU	CoCM& CCM 3 (Ends)	2 SAT	PAQIC Meeting
3 THU		3 SUN	Holiday	3 TUE	Ramzan	3 FRI	**Completion of Unit V**	3 SUN	Holiday
4 FRI		4 MON	IAT QP-1 Submission	4 WED		4 SAT	**IAT-3 (Starts) THU TT**	4 MON	
5 SAT		5 TUE		5 THU	ISO Audit Starts	5 SUN	Holiday	5 TUE	
6 SUN	Holiday	6 WED		6 FRI	**IAT-2 (Starts)**	6 MON		6 WED	
7 MON	**Commencement of Classes**	7 THU	**IAT-1 (Starts)**	7 SAT	Training Program	7 TUE		7 THU	
8 TUE		8 FRI		8 SUN	Holiday	8 WED		8 FRI	
9 WED		9 SAT	Training Program	9 MON		9 THU		9 SAT	PAQIC Meeting
10 THU		10 SUN	Holiday	10 TUE		10 FRI	**IAT-3 (Ends)**	10 SUN	Holiday
11 FRI		11 MON	**Completion of Unit II**	11 WED		11 SAT	**Last Working Day FRI TT**	11 MON	
12 SAT	Training Program	12 TUE		12 THU	**IAT-2 (Ends)**	12 SUN	Holiday	12 TUE	
13 SUN	Holiday	13 WED	**IAT-1 (Ends)**	13 FRI		13 MON	AU Practical Examination	13 WED	
14 MON	CoCM &CCM 1 (starts)	14 THU	Tamil New year	14 SAT	Holiday	14 TUE		14 THU	
15 TUE		15 FRI	Good Friday	15 SUN	Holiday	15 WED	MRM Meeting	15 FRI	
16 WED		16 SAT	Holiday	16 MON		16 THU	Consolidated Mark statement	16 SAT	**Academic Audit**
17 THU		17 SUN	Holiday	17 TUE	Consolidated Mark statement	17 FRI		17 SUN	Holiday
18 FRI	CoCM & CCM 1(Ends)	18 MON	Students Feedback (starts)	18 WED	**Completion of Unit IV**	18 SAT		18 MON	
19 SAT	Holiday	19 TUE		19 THU		19 SUN	Holiday	19 TUE	Holiday

MARCH		APRIL		MAY		JUNE		JULY	
20 SUN	Holiday	20 WED	Consolidated Mark statement	20 FRI		20 MON		20 WED	
21 MON		21 THU		21 SAT	Training Program	21 TUE		21 THU	
22 TUE	**Completion of Unit I**	22 FRI	Students Feedback (Ends)	22 SUN	Holiday	22 WED	**End Semester Examination**	22 FRI	
23 WED		23 SAT	Training Program IQAC Meeting	23 MON		23 THU		23 SAT	**Academic Audit**
24 THU		24 SUN	Holiday	24 TUE		24 FRI		24 SUN	Holiday
25 FRI		25 MON	CoCM & CCM 2 (starts)	25 WED		25 SAT		25 MON	
26 SAT	Training Program	26 TUE		26 THU		26 SUN	Holiday	26 TUE	
27 SUN	Holiday	27 WED	ISO Audit Starts	27 FRI		27 MON		27 WED	
28 MON		28 THU		28 SAT	Holiday	28 TUE		28 THU	
29 TUE		29 FRI	CoCM & CCM 2 (Ends)	29 SUN	Holiday	29 WED		29 FR	
30 WED		30 SAT	**Completion of Unit III PTA Meeting**	30 MON	CoCM & CCM 3 (starts)	30 THU		30 SAT	
31 THU		–	–	31 TUE		–	–	31 SUN	Holiday
Total Number of Working Day: 76									

Note:

1. Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
2. The faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned

within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office

3. No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from HOD and Principal.

   Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 project work in addition to 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.

5. Faculty Members are advised to Practice project-based learning and problem-based learning in their courses and document the outcomes in terms of knowledge and skill attainment.

List of Holidays				List of Saturday Working – Day order		
Month	**Date**	**Day**	**Occasion**	**Month**	**Date**	**Day order/Activity**
March	19.03.2022	Saturday	-	March	12.03.2022	Training Program
April	02.04.2022	Saturday	Telugu New year		26.03.2022	
	14.04.2022	Thursday	Tamil New year	April	09.04.2022	
	15.04.2022	Friday	Good Friday		23.04.2022	
	16.04.2022	Saturday	-	May	07.05.2022	
May	01.05.2022	Sunday	May Day		21.05.2022	
	03.05.2022	Tuesday	Ramzan	June	04.06.2022	Thursday
	14.05.2022	Saturday	-		11.06.2022	Friday
	28.05.2022	Saturday	-			

21/2/22 — **Academic Coordinator**
R-2017

21/2/22 — **Vice Principal**

Principal

Date: 04.03.2022

REVISED

CENTRE FOR ACADEMIC COURSES

ANNA UNIVERSITY: : CHENNAI – 600 025

ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

March 2022 – June 2022 (Even Semester – Except Semester II)

UG (FT/PT) Degree Programmes

Sl. No.	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B.Tech.(Full-Time)	IV,VI,VIII	16.03.2022	16.06.2022**	18.06.2022	28.06.2022
2.	B.E. / B.Tech (Part-Time)	IV,VI				
3.	B.Arch. (Full-Time)	IV,VI,VIII,X				

RE - OPENING DAY FOR THE NEXT SEMESTER: 10.08.2022 (Wednesday)

NOTE:

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

**** In order to ensure minimum no. of working days, the following Saturdays are declared as working days.**

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	19.03.2022	Tuesday
2.	26.03.2022	Wednesday
3.	09.04.2022	Thursday
4.	23.04.2022	Friday
5.	30.04.2022	Tuesday
6.	07.05.2022	Monday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
7.	14.05.2022	Tuesday
8.	21.05.2022	Wednesday
9.	28.05.2022	Thursday
10.	04.06.2022	Friday
11.	11.06.2022	Monday

04/03/2022

DIRECTOR
ACADEMIC COURSES

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

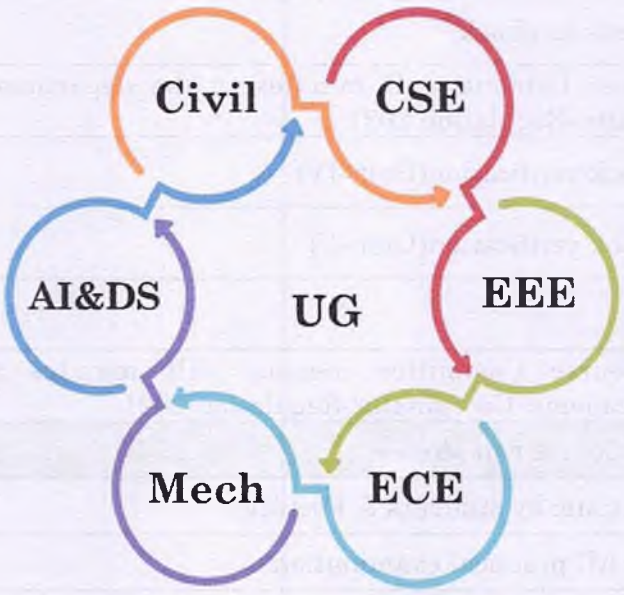
ACADEMIC CALENDAR

Academic year: 2021-2022 (Even Semester)

UG Degree Programmes

II Semester B.E./B.Tech Courses

Reference: Anna University Academic Schedule – April 2022-July-2022(Semester-II) Dated 21.03.2022



Programme: UG	B.E/B.Tech.	I Year	II Semester

Activity/ Event	I year / II Semester
Distribution of Time table to faculty member	02.04.2022
Submission of course file	02.04.2022
Uploading course plan in LMS	02.04.2022
College reopening	04.04.2022
Constitution of Class Committee/Course Committee	05.04.2022
Submission of Class Committee/Course Committee meeting –I minutes to the department and Academic Coordinator-Regulation 2021	11.04.2022 to 20.04.2022
Course file & logbook verification(Unit -I)	21.04.2022 to 23.04.2022
Course file & logbook verification(Unit -II)	09.05.2022 to 13.05.2022
IAT1 Schedule	18.05.2022 to 25.05.2022
Course file & logbook verification(Unit -III)	26.05.2022 to 28.05.2022
Collection of students feedback	27.05.2022 to 31.05.2022
Submission of Class Committee–II minutes to the department and Academic Coordinator-Regulation 2021	27.05.2022 to 02.06.2022
Course file & logbook verification(Unit -IV)	10.06.2022 to 13.06.2022
Course file & logbook verification(Unit -V)	25.06.2022 to 28.06.2022
IAT2 Schedule	27.06.2022 to 02.07.2022
Submission of Course Committee meeting –III minutes to the department and Academic Coordinator-Regulation 2021	04.07.2022 to 06.07.2022
Last working day, Course exit survey	04.07.2022
Feedback on curriculum by students & Faculty	05.07.2022
Commencement of AU practical examination	06.07.2022
Submission of Analysis of all the stakeholder feedback	06.07.2022
Commencement of End Semester Examination	18.07.2022
Academic Audit / Question paper Audit	30.07.2022

Details of Meeting	Frequency/Day/Date
Institute Planning and Development Committee(IPDC) meeting	Every week/Wednesday
College Academic Committee (CAC) meeting	Second week of every month/Friday
Department Review meeting(DRM)	Twice in a month/Second and Fourth Monday
ISO MRM Meeting	Once in a semester
Department Advisory Committee(DAC) meeting	Once in a Year
Programme Assessment and Quality Improvement Committee (PAQIC) meeting	Once in a semester
ISO Internal Audit	Twice in a semester
Academic audit	Once in a semester
IQAC meeting	Once in 3 Months/23.04.2022
Parents Teachers Meeting	Once in a semester/05.06.2022
Alumni meeting	Once in a semester/Sunday
Compliance and Grievance Redressal Committee Meeting	First week of every month/Monday
Internal Complaint Committee Meeting/Sexual Harassment Meeting	Once in a semester
Industrial visit	Once in a semester
Internship	During Semester Holidays
SC/ST Cell Meeting	Once in a semester
Note: Changes shall be if required based on availability of External Experts with prior approval by the principal	

Detailed Academic Calendar				2021-2022 (Even Semester)			
APRIL		MAY		JUNE		JULY	
1 FRI		1 SUN	Holiday	1 WED		1 FRI	
2 SAT	Telugu New year	2 MON		2 THU	CoCM&CCM2 (Ends)	2 SAT	IAT 2 End
3 SUN	Holiday	3 TUE	Ramzan	3 FRI		3 SUN	Holiday
4 MON	Commencement of the class	4 WED		4 SAT	Training	4 MON	Last working day CoCM&CCM3
5 TUE		5 THU		5 SUN	Holiday	5 TUE	Consolidated mark statement
6 WED		6 FRI		6 MON		6 WED	Commencement of practical Examination
7 THU		7 SAT	Training	7 TUE		7 THU	
8 FRI		8 SUN	Holiday	8 WED		8 FRI	
9 SAT	Training	9 MON	Completion of UNIT-2	9 THU		9 SAT	
10 SUN	Holiday	10 TUE		10 FRI	Completion of UNIT-4	10 SUN	Holiday
11 MON	CoCM&CCM 1(starts)	11 WED		11 SAT		11 MON	
12 TUE		12 THU	IAT-1 QP Submission	12 SUN	Holiday	12 TUE	
13 WED		13 FRI		13 MON		13 WED	
14 THU	Tamil New year	14 SAT	Holiday	14 TUE		14 THU	
15 FRI	Good Friday	15 SUN	Holiday	15 WED		15 FRI	
16 SAT	Holiday	16 MON		16 THU		16 SAT	
17 SUN	Holiday	17 TUE		17 FRI		17 SUN	Holiday
18 MON		18 WED	IAT-1 Starts	18 SAT		18 MON	Commencement of End Semester Examination
19 TUE		19 THU		19 SUN	Holiday	19 TUE	
20 WED	CoCM&CCM 1(Ends)	20 FRI		20 MON		20 WED	
21 THU	Completion of UNIT-1	21 SAT	Training	21 TUE		21 THU	

22 FRI		22 SUN	Holiday	22 WED	IAT-2 QP Submission	22 FRI	
23 SAT	Training	23 MON		23 THU		23 SAT	
24 SUN	Holiday	24 TUE		24 FRI		24 SUN	Holiday
25 MON		25 WED	IAT-1-End	25 SAT	Completion of UNIT-5	25 MON	
26 TUE		26 THU	Completion of UNIT-3	26 SUN	Holiday	26 TUE	
27 WED		27 FRI	CoCM&CCM 2(starts),Feed back starts	27 MON	IAT-2 Starts	27 WED	
28 THU		28 SAT	Holiday	28 TUE		28 THU	
29 FRI		29 SUN	Holiday	29 WED		29 FRI	
30 SAT		30 MON	Consolidated mark statement	30 THU		30 SAT	Academic Audit
		31 TUE	Feedback Ends			31 SUN	Holiday
Total Number of Working Day: 73							

AWARDING MARKS FOR INTERNAL ASSESSMENT

THEORY COURSES (Clause 12.1)

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment I (100 Marks)		**Assessment 2 (100 Marks)**		**Total** Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
40	**60**	**40**	**60**	**200***

*The weighted average shall be converted into 40 marks for internal Assessment

LABORATORY COURSES (Clause 12.2)

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criterion for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for

successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer

Assessment (100 Marks)	
Evaluation of Laboratory Observation, Record	Test
75	**25**

* Internal assessment marks shall be converted into 60 marks

Note:

1. Internal Assessment Test I covers the syllabus of Unit I, Unit II, and ½ of UNIT III. Internal Assessment Test II covers the syllabus of ½ of Unit III, Unit IV and UNIT V.
2. During the regular period, the concerned faculty member may conduct a revision test/Unit test (optional) following the completion of each unit. The Question paper, as well as the mark statement, should be sent to the exam cell.
3. The faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation or through Online Mode. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
4. No Retest will be conducted and it is not encouraged. However, the Students who are absent for the Test due to genuine reasons such as Medical grounds, Sports Activities etc with prior permission are permitted for retest.
5. Model exam will be conducted subjected to availability of working days.
6. Each student shall submit the given Individual Assignment / Case Study / Seminar / Mini Project to fulfill the norms of the Anna University for calculating the internal marks as per the weightage given in Clause 12.1 for all the courses. The faculty member evaluates the Individual Assignment / Case Study / Seminar / Mini Project based on the rubrics and submit the mark statement to the Exam cell.
7. Outcome based assessment will be done using the direct assessment tools such as Internal Assessment Test / Individual Assignment / Case Study / Seminar / Mini Project and the attainment of course outcomes, program outcomes and program specific outcomes will be calculated to fulfill the requirement of NBA/NAAC accreditation.

Note:

	List of Holidays		
Month	**Date**	**Day**	**Occasion**
April	02.04.2022	Saturday	Telugu new year
	14.04.2022	Thursday	Tamil new year
	15.04.2022	Friday	Good Friday
	16.04.2022	Saturday	-
May	01.05.2022	Sunday	May day
	03.05.2022	Tuesday	Ramzan
	14.05.2022	Saturday	-
	28.05.2022	Saturday	-

	List of Saturday Working – Day order/Activity	
Month	**Date**	**Order**
April	09.04.2022	Placement Training
	23.04.2022	
	30.04.2022	Thursday
May	07.05.2022	Placement Training
	21.05.2022	
June	04.06.2022	
	11.06.2022	Friday
	18.06.2022	Tuesday
	25.06.2022	Monday
July	02.07.2022	Tuesday

28/3/22 — **Academic Coordinator**
Regulation 2021

28/3/22 — **Vice Principal**

26/3/22 — **Principal**

Date: 21.03.2022

CENTRE FOR ACADEMIC COURSES

ANNA UNIVERSITY: : CHENNAI – 600 025

ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

April 2022 – July 2022 (Semester II)

UG (FT/PT) & PG (FT/PT) Degree Programmes

Sl. No.	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B.Tech.(Full-Time)	II	04.04.2022	04.07.2022**	06.07.2022	18.07.2022
2.	B.Arch. (Full-Time)	II				
3.	B.E. / B.Tech (Part-Time)	II				
4.	M.B.A. (Full-Time & Part-Time)	II				
5.	M.B.A. (5 Yrs-Integrated)	II				

RE - OPENING DAY FOR THE NEXT SEMESTER: 22.08.2022 (Monday)

NOTE:

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

**** In order to ensure minimum no. of working days, the following Saturdays are declared as working days.**

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	09.04.2022	Thursday
2.	23.04.2022	Friday
3.	30.04.2022	Tuesday
4.	07.05.2022	Monday
5.	14.05.2022	Tuesday
6.	21.05.2022	Wednesday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
7.	28.05.2022	Thursday
8.	04.06.2022	Friday
9.	11.06.2022	Monday
10.	18.06.2022	Tuesday
11.	25.06.2022	Wednesday
12.	02.07.2022	Thursday

21/3/22

DIRECTOR i/c
ACADEMIC COURSES

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

Ref: RIT/ECE/Subject Allocation/01 09.07.2021

Circular

All the faculty members are requested to give their subject preference for the Academic Year 2021-2022 odd semester on or before 12.07.2021. The Subject details are enclosed for your reference.

9/7/21

Timetable Coordinator(s)

9/7/21

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022

Theory Course: Odd Semester

Sl. No.	Subject Code	Name of the Subject	Year/Semester/Class	No. of sections
1.	GE 8151	Problem Solving and Python Programming	I/I ECE A & B	2
2.	EC8351	Electronic Circuits- I	II/III ECE A & B	2
3.	EC8352	Signals and Systems	II/III ECE A & B	2
4.	EC8392	Digital Electronics	II/III ECE A & B	2
5.	EC8391	Control Systems Engineering	II/III ECE A & B	2
6.	EC8501	Digital Communication	III/V/ECE A & B	2
7.	EC8553	Discrete-Time Signal Processing	III/V/ECE A & B	2
8.	EC8552	Computer Architecture and Organization	III/V/ECE A & B	2
9.	EC8551	Communication Networks	III/V/ECE A & B	2
10.	EC8701	Antennas and Microwave Engineering	IV/VII/ECE A & B	2
11.	EC8751	Optical Communication	IV/VII/ECE A & B	2
12.	EC8791	Embedded and Real Time systems	IV/VII/ECE A & B	2
13.	EC8702	Ad hoc and Wireless sensor networks	IV/VII/ECE A & B	2
14.	**Professional Elective III**		IV/VII ECE A & B	2
	CS8082	Machine Learning Techniques		
15.	**Advancement Course**		IV/VII ECE A & B	1
	EC8094	Satellite Communication		
Other Department Subjects				
16.	CS8351	Digital Principles and System Design	II/III/CSE	1
17.	EC8395	Communication Engineering	II/III/CSE	1
18.	EC8691	Microprocessors and microcontrollers	III/V/CSE	1
Open Elective				
19.	OAN 551	Sensors and Transducers	III/V/CSE, Mechanical, Civil & EEE	1
20.	OML 752	Electronic Materials	IV/VII/ Mechanical	1

21.	OEC 756	MEMS and NEMS	IV/VII/CSE	1
22.	OMT 751	MEMS and NEMS	IV/VII/ Mechanical	1

Laboratory Course: Odd Semester

Sl. No.	Subject Code	Name of the Subject	Year/Semester/ Class	No. of sections
1.	GE 8161	Problem Solving and Python Programming Laboratory	I/I ECE A &B	2
2.	EC8361	Analog and Digital Circuits Laboratory	II/III ECE A &B	2
3.	EC8562	Digital Signal Processing Laboratory	III/V/ECE A & B	2
4.	EC8561	Communication Systems Laboratory	III/V/ECE A & B	2
5.	EC8563	Communication Networks Laboratory	III/V/ECE A & B	2
6.	EC8711	Embedded Laboratory Laboratory	IV/VII/ECE A & B	2
7.	EC8761	Advanced Communication Laboratory	IV/VII/ECE A & B	2
8.	CS8381	Digital Systems Laboratory	II/III/CSE	1
9.	EC8681	Microprocessors and Microcontrollers Laboratory	III/V/CSE	1

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Letter of Requisition

To,

HOD/Department of Mechanical Engineering:

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	GE8071 - Disaster Management	IV/VII/ECE A & B	15 - 20 Students

15/7/21

HOD

15.7.21

Principal

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Letter of Requisition

To,

HOD/ Department of Computer Science and Engineering:

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	GE8151 Problem Solving and Python Programming	I/I/ECE A	-
2.	GE8161 Problem Solving and Python Programming Laboratory	I/I/ECE A & B	-

15/7/21
HOD

15-7-21
Principal

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Letter of Requisition

To,

HOD/ Department of Computer Science and Engineering:

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	EC8393 Fundamentals of Data Structures In C	II/III/ECE A & B	-
2.	EC8381 Fundamentals of Data Structures in C Laboratory	II/III/ECE A & B	-
3.	CS8392 Object Oriented Programming	III/V/ECE A & B	-

16/6/2021
HOD

Principal 16/6

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Letter of Requisition

To,

HOD/Department of Mathematics:

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	MA8352 Linear Algebra and Partial Differential Equations	II/III/ECE A & B	-

16/6/2021

HOD

16/6

Principal

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

2021

Faculty-Subject Preference

Name of the Faculty Member: Dr. S. Periyanayagi **Designation:** Professor

Area of Specialization: communication system

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8553 - Discrete time Signal Processing	III/V ECE	yes (6 times)	95.36%. 97.21%. 100%.
2.				
3.				
4.				

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.			
2.			
3.			

15/7/21

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Handled the subject in RIT already and area of Interest.
2.	
3.	
4.	
Signature of the Faculty Member:	15/7/21

Opinion of HOD:
- Discrete time signal Processing is alloted based on Interest + specialization.
Signature of the HOD: 15/7/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Odd Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. A. Azhagu Jaisudhan Pazhani **Designation:** Associate Professor

Area of Specialization: VLSI Design

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8691 Microprocessor and Microcontroller	III/V/CSE	Yes	
2.	EC8552 Computer Architecture and Organization	III/V/ECE	Yes	
3.	CS8351 - Digital principle and System design	II/III/CSE	NO	
4.	EC8791 Embedded and Real time system	IV/VII/ECE	NO	

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC8681 Microprocessor and Microcontroller Laboratory	III/CSE	Yes
2.	EC8711 - Embedded Lab	IV/VII/ECE	NO
3.			

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	EC8691 Already handled many times and Produces good results.
2.	EC8552 - CAO Interested to handle this Subject.
3.	Interest to handle
4.	Interest to handle.
Signature of the Faculty Member:	

Opinion of HOD:
- microprocessor + microcontroller is alloted because he has handled already in RIT. - computer Architecture and organization is alloted based on his interest.
Signature of the HOD: 15/7/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mathematics

Academic Year: 2021 - 2022 (Odd Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. S. Vairaprakash **Designation:** AP

Area of Specialization: Communication System

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8501 - Digital Communication	III / V ECE	No	
2.	EC8395 - Communication Engineering.	II / III CSE	No	
3.	EC8352 - Signals & System	II / III ECE	No	
4.	EC8392 - Digital Electronics	II / III ECE	No	

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC8561 - Communication System Lab	III / V ECE	2.
2.	EC8361 - Analog and Digital Circuits Lab	II / III ECE	2.
3.	EC8761 - Advanced Communication Lab	IV / VII ECE	-

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Since I have taken this subject already, I prefered this subjects.
2.	I Preferred this subject because I like to handle the Communication subjects.
3.	I handled this subject many time and it is interest to solve the problems.
4.	Since it is very interest to derive ~~the~~ design the Combinational and sequential circuit, I prefered this subject
Signature of the Faculty Member:	

Opinion of HOD:
- Digital communication + communication Engineering is alloted based on his specialization and Interest.
Signature of the HOD: 15/7/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Faculty-Subject Preference

Name of the Faculty Member: K. Ragavan **Designation:** AP(SG)

Area of Specialization: Communication & Networking

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8702 - Adhoc & wireless Sensor Networks	IV year VII sem ECE	Yes 1 time	96%.
2.	EC8551 - Communication Networks	III year V sem ECE	Yes 2 times	94%. 96%.
3.	CS8351 - Digital principles and System Design	II year III sem CSE	Yes 3 times	more than 90%.
4.	EC8501 - Digital Communicatn	III / II ECE	NO	—

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	CS8382 - Digital Systems lab	II year / III sem CSE	Yes 2 times
2.	EC8361 - Analog & Digital circuits lab	II year / III sem ECE	Yes 2 times
3.			

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Already handled in RIT and time. and Produced good result.
2.	Already handled in RIT for 2013 Regulation and 2017 regulation
3.	Already handled is RIT - 3 times & produced good results
4.	Interested to handle this subject
Signature of the Faculty Member:	

Opinion of HOD:
- Adhoc + wireless sensor network is alloted based on his specialization and already handled the subject.
Signature of the HOD: 15/7/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Odd Semester)

Letter of Requisition

To,

HOD/Incharge of the Department: Electronics and Communication Engineering

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	CS8351- Digital Principles and System Design	II/III/CSE	
2.	EC8395-Communication Engineering	II/III/CSE	
3.	EC8691- Microprocessors and Microcontrollers	III/V/CSE	

Sl. No.	Laboratory Course Code and Title	Year / Semester/ Branch	Remarks
1.	CS8382-Digital Systems Laboratory	II/III/CSE	
2.	EC8681- Microprocessors and Microcontrollers Laboratory	III/V/CSE	

HOD 26/6/2021

Principal 26/6/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Odd Semester)

Faculty-Subject Preference

Name of the Faculty Member: G. GNANA PRIYA **Designation:** A P (SG)

Area of Specialization: Communication Systems

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8352 / Signals and Systems	II / III / ECE	Yes, 5 times	Above 90%. (4 times)
2.	EC8501 / Digital Communication	III / V / ECE	Yes 3 times	Above 90%.
3.	EC8553 / Discrete-Time Signal Processing	III / V / ECE	No	—
4.	CS8351 / Digital Principles and System Design	II / III / CSE	No	—

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC8561 / Communication Systems Laboratory	III / V / ECE	Yes, 4 times
2.	EC8361 / Analog & Digital Circuits Laboratory	II / III / ECE	No
3.			

G Gnana

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	As I already handled and produced good results, I preferred this subject.
2.	As my area of specialization is Communication Systems, I preferred this subject.
3.	As I already handled DSP for EEE and produced good results I preferred this course.
4.	As I am interested in Digital Principles and System Design, I preferred this subject.
Signature of the Faculty Member:	

Opinion of HOD:
- Signals + System is alloted because she has handled the subject already and Produced Good Results.
Signature of the HOD: 15/7/21

RAMCO INSTITUTE OF TECHNOLOGY
Department of Electronics and Communication Engineering
Faculty Subject Allocation
Academic Year: 2021-2022 (Odd Semester)
(with effect from: 01.09.2021)

Sl. No.	Name of the Faculty Member	Names of the Subjects allotted				Total Periods/ Week	Remarks
		Theory	Semester/ Branch	Practical	Semester/ Branch		
1.	Dr.S.Periyanayagi	EC8553 Discrete-Time Signal Processing	III/ECE/V-B	-	-	4	-
2.	Mr.K.Ragavan	EC8702 Adhoc and Wireless Sensor Networks	IV/ECE/VII-B	EC8563 Communication Networks Laboratory (M)	III/ECE/V-B	3.5+1+8+8=20.5	-
		Training and Placement	II/ECE/III-B	EC8563 Communication Networks Laboratory (S)	III/ECE/V-A		
3.	Dr.A.Azhagu Jaisudhan Pazhani	EC8552 Computer Architecture and Organization	III/ECE/V-B	EC8681- Microprocessors and Microcontrollers Laboratory (M)	III/CSE/V	3.5+3.5+2+8=17	-
		EC8691 Microprocessors and Microcontrollers	III/CSE/V				
		Training and Placement	IV/ECE/VII-A				
4.	Mr.B.Kannan	EC8791 Embedded and Real Time Systems	IV/ECE/VII-B	EC6711 Embedded Laboratory(M)	IV/ECE/VII-B	4+8+8=20	-
				EC8681- Microprocessors and Microcontrollers Laboratory (S)	III/CSE/V		
5.	Mrs.R.Ramalakshmi	EC8751 Optical Communication	IV/ECE/VII-B	EC8761 Advanced Communication laboratory (S)	IV/ECE/VII-B	4+8+8=20	Class Adviser IV ECE B
				EC8561 Communication Systems Laboratory (M)	III/ECE/V-B		
6.	Mrs.G.Gnana Priya	EC8352 Signals and Systems	II/ECE/III-A	EC8561 Communication Systems Laboratory (S)	III/ECE/V-B	5+8+8=21	-
				EC8561 Communication Systems Laboratory (M)	III/ECE/V-A		

Sl. No.	Name of the Faculty Member	Names of the Subjects allotted				Total Periods/ Week	Remarks
		Theory	Semester/ Branch	Practical	Semester/ Branch		
7.	Mrs.V.SrirengaNachiyar	EC8351 Electronic Circuits-I	II/ECE/III-A	EC8361 Analog and Digital Circuits Laboratory (M)	II/ECE/III-B	3.5+3.5+1+4=12	Class Adviser IV ECE A
		EC8351 Electronic Circuits-I	II/ECE/III-B				
		Training and Placement	IV/ECE/VII-A				
8.	Mrs.S.Jeeva	EC8553 Discrete-Time Signal Processing	III/ECE/V-A	EC8562 Digital Signal Processing Laboratory (M)	III/ECE/V-A	4+1+4+4=13	Class Adviser III ECE B
		Training and Placement	III/ECE/V-B	EC8562 Digital Signal Processing Laboratory (S)	III/ECE/V-B		
9.	Mrs.R.Divya	EC8751 Optical Communication	IV/ECE/VII-A	EC8562 Digital Signal Processing Laboratory (M)	III/ECE/V-B	4+3.5+4+4=15.5	-
		OMT751 MEMS and NEMS	IV/MECH/VII-A &B	EC8761 Advanced Communication laboratory (S)	IV/ECE/VII-A		
10.	Mr.D.Gopinath	EC8392 Digital Electronics	II/ECE/III-B	EC8761 Advanced Communication laboratory (M)	IV/ECE/VII-A	3.5+4.5+8=16	Class Adviser III ECE A
		EC8701 Antennas and Microwave Engineering	IV/ECE/VII-A				
11.	Mr.S.Vijayakumar	EC8392 Digital Electronics	II/ECE/III-A	EC8361 Analog and Digital Circuits Laboratory (M)	II/ECE/III-A	3.5+3+4=10.5	-
		OAN551 Sensors and Transducers	III/EEE,MECH/V				
12.	Mr.A.RameshBabu	CS8351 Digital Principles and System Design	II/CSE/III	CS8382 Digital Systems Laboratory (M)	II/CSE/III	4+2+8=14	-
		Training and Placement	IV/ECE/VII-A				
13.	Mr.P.Gunasekaran	EC8702 Adhoc and Wireless Sensor Networks	IV/ECE/VII-A	EC8563 Communication Networks Laboratory (S)	III/ECE/V-B	3.5+3.5+8=15	-
		EC8501 Digital Communication	III/ECE/V-B				
14.	Mr.R.DeivaNayagam	GE8151- Problem Solving and Python Programming	I/ECE/I-B	GE8161- Problem Solving and Python Programming	I/ECE/I -B	4+4+4+4=16	-

Sl. No.	Name of the Faculty Member	Names of the Subjects allotted				Total Periods/ Week	Remarks
		Theory	Semester/ Branch	Practical	Semester/ Branch		
				Laboratory (M)			
		CS8082 Machine Learning Techniques (Professional Elective II)	IV/ECE/VII-B	GE8161- Problem Solving and Python Programming Laboratory (S)	I/ECE/I-A		
15.	Mr.G.Sivakumar	EC8791 Embedded and Real Time Systems	IV/ECE/VII-A	EC6711 Embedded Laboratory (M)	IV/ECE/VII-A	4+3.5+8=15.5	Class Adviser II ECE A
		EC8551 Communication Networks	III/ECE/V-B				
16.	Mr.P.Venkatesh	EC8391 Control Systems Engineering	II/ECE/III-B	EC8361 Analog and Digital Circuits Laboratory (S)	II/ECE/III-B	4.5+4+4=12.5	-
		CS8082 Machine Learning Techniques (Professional Elective II)	IV/ECE/VII-A				
17.	Dr.S.Vairaprakash	EC8501 Digital Communication	III/ECE/V-A	EC8561 Communication Systems Laboratory (S)	III/ECE/V-A	3.5+3+3+8=17.5	-
		EC 8395 Communication Engineering	II/CSE/III				
		Training and Placement	IV/ECE/VII-B				
18.	Mr.L.K.Balaji Vignesh	EC8552 Computer Architecture and Organization	III/ECE/V-A	EC8563 Communication Networks Laboratory (M)	III/ECE/V-A	3.5+5+1+8=17.5	-
		EC8094- Satellite Communication	IV/ECE/VII-A & B				
		Training and Placement	III/ECE/V-A				
19.	Ms.S.Harini Shriram	EC8352 Signals and Systems	II/ECE/III-B	GE8161- Problem Solving and Python Programming Laboratory (S)	I/ECE/I - B	5+3.5+4+8=20.5	Class Adviser II ECE B
		EC8551 Communication Networks	III/ECE/V-A	CS8382 Digital Systems Laboratory (S)	II/CSE/III		

Sl. No.	Name of the Faculty Member	Names of the Subjects allotted				Total Periods/ Week	Remarks
		Theory	Semester/ Branch	Practical	Semester/ Branch		
20.	Ms.S.A.Radhika	EC8701 Antennas and Microwave Engineering	IV/ECE/VII-B	EC8761 Advanced Communication laboratory (M)	IV/ECE/VII-B	4.5+3+8+4=19.5	-
		Training and Placement		EC8761 Advanced Communication laboratory (S)	IV/ECE/VII-A		

Faculty In-charge

HOD 01/9/21

VICE PRINCIPAL

PRINCIPAL

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

Faculty Workload

Sl.No.	Name of the Faculty member	Teaching			Co-Curricular Periods	Total Contact Periods/week	Workload (Hours)
		Theory	Practical	Tutorial			
1.	Dr.S.Periyanayagi	4	-	-	-	4	4
2.	Mr.K.Ragavan	3.5	16	-	1	20.5	12
3.	Mr.A.AzhaguJaisudhan Pazhani	7	8	-	2	17	12
4.	Mr.B.Kannan	4	16	-	-	20	12
5.	Mrs.R.Ramalakshmi	4	16	-	-	20	12
6.	Mrs.G.GnanaPriya	5	16	-	-	21	13
7.	Mrs.V.SrirengaNachiyar	7	4	-	1	12	9.5
8.	Mrs.S.Jeeva	4	8	-	1	13	8.5
9.	Mrs.R.Divya	7.5	8	-	-	15.5	11.5
10.	Mr.D.Gopinath	8	8	-	-	16	12
11.	Mr.S.Vijayakumar	6.5	4	-	-	10.5	8.5
12.	Mr.A.RameshBabu	4	8	-	2	14	9
13.	Mr.P.Gunasekaran	7	8	-	-	15	11

14.	Mr.R.DeivaNayagam	8	8	-	-	16.	12
15.	Mr.G.Sivakumar	7.5	8	-	-	15.5	11.5
16.	Mr.P.Venkatesh	8.5	4	-	-	12.5	10.5
17.	Dr.S.Vairaprakash	6.5	8	-	3	17.5	12
18.	Mr.L.K.Balaji Vignesh	8.5	8	-	1	17.5	13
19.	Ms.S.Harini Shriram	8.5	12	-	-	20.5	14.5
20.	Ms.S.A.Radhika	4.5	12	-	3	19.5	12

1/9/21

HOD

Note:

1. Teaching workload includes the number of hours of theory, tutorial, practical and project work. The 2 hours of practical is considered as 1 hour of workload.
2. Co-curricular Periods include counseling hour, Training & Placement hour, Aptitude hour, Internet hour, Association hour, Communication Skills hour, Library hour etc.

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Even Semester)

Ref: RIT/ECE/Subject Allocation/01 01.12.2021

Circular

All the faculty members are requested to give their subject preference for the Academic Year 2021-2022 even semester on or before 06.12.2021. The Subject details are enclosed for your reference.

01/12/2021 1/12/21

Timetable Coordinator

01/12/21

HOD

1. 4/12/21 P. Gunasekaran.

2. 4/12/21 Dr. S. Vaiyapuri

3. 4/12/21 Dr. A. Azhagu Jaisudhan

4. 4/12/21 K. Ragavan

5. 4/12/21 R. DEIVA NAYAGAM

6. 4/12/21 Dr. A. Lakshmi

7. 4/12/21 S.A. Radhika.

8. 4/12/2021 S. JEEVA.

9. 04/12/21 G GNANA PRIYA.

10. A. RAMESHBABU – 4/12/21

11. L.K. BALAJI VIGNESH – L.K. Balajivignesh 04/12/21

12. P. Venkatesh – 4/12

13. G. SIVAKUMAR – 4.12

14. B. KANNAN – 4/12.

15. S. Vijaykumar – 04/12/2021

16. D GOPINATH – 4/12/21

17. 4/12/21 (Dr. R. Rajalakshmi)

18. V. Saravana Nachiyar (4/12/21)

19. R. RAMACHANDHI (6/12/21)

RAMCO INSTITUTE OF TECHNOLOGY
Department of Electronics and Communication Engineering
Academic Year: 2021-2022

Theory Course: Even Semester

Sl.No.	Subject Code	Name of the Subject	Year/Semester/Class	No. of sections
1.	EC3251	Circuit Analysis	I/II/ECE A & B	2
2.	BE3254	Electrical and Instrumentation Engineering	I/II/ECE A & B	2
3.	EC8452	Electronic Circuits II	II/IV/ECE A & B	2
4.	EC8491	Communication Theory	II/IV/ECE A & B	2
5.	EC8451	Electromagnetic Fields	II/IV/ECE A & B	2
6.	EC8453	Linear Integrated Circuits	II/IV/ECE A & B	2
7.	EC8691	Microprocessors and Microcontrollers	III/VI/ECE A & B	2
8.	EC8095	VLSI Design	III/VI/ECE A & B	2
9.	EC8652	Wireless Communication	III/VI/ECE A & B	2
10.	MG8591	Principles of Management	III/VI/ECE A & B	2
11.	EC8651	Transmission Lines and RF Systems	III/VI/ECE A & B	2
12.	EC8395	Communication Engineering	III/VI/EEE	1
13.	**Professional Elective II**		III/VI/ECE A & B	2
	CS8792	Cryptography and Network Security		
	EC8004	Wireless Networks		
14.	**Professional Elective IV**		IV/VIII ECE A & B	2
	GE8076	Professional Ethics in Engineering		
15.	**Professional Elective V**		IV/VIII ECE A & B	2
	EC8094	Satellite Communication		
16.	GE8076	Professional Ethics in Engineering (Advancement Course)	III/VI/ECE A & B	1

Laboratory Course: Even Semester

Sl.No.	Subject Code	Name of the Subject	Year/Semester/ Class	No. of sections
1.	EC3271	Circuits Analysis Laboratory	I/II/ECE A & B	2
2.	GE3271	Engineering Practices Laboratory	I/II/ECE A & B, I/II/Mech, I/II/Civil, I/II/AI&DS and I/II CSE	6
3.	BE3271	Basic Electrical and Electronics Engineering Laboratory	I/II/Mech	1
4.	BE3272	Basic Electrical, Electronics and Instrumentation Engineering Laboratory	I/II/Civil	1
5.	EC8461	Circuits Design and Simulation Laboratory	II/IV/ECE A & B	2
6.	EC8462	Linear Integrated Circuits Laboratory	II/IV/ECE A & B	2
7.	EE8461	Linear and Digital Integrated Circuits Laboratory	II/IV/EEE	2
8.	EC8681	Microprocessors and Microcontrollers Laboratory	III/VI/ECE A & B	2
9.	EC8661	VLSI Design Laboratory	III/VI/ECE A & B	2
10.	EC8611	Technical Seminar	III/VI/ECE A & B	2
11.	EE8681	Microprocessors and Microcontrollers Laboratory	III/VI/EEE	1
12.	EC8811	Project Work	IV/VIII/ ECE A & B	2

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Letter of Requisition

To,

HOD/Department of Mathematics:

I request you to allot suitable Faculty members for teaching the following course of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	MA8451- Probability and Random Processes	II/IV/ECE A & B	-

29/11/21
HOD

30/11/21
Principal

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Letter of Requisition

To,

HOD/Department of Mechanical Engineering:

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	GE8075 Intellectual Property Rights	III/VI/ECE A & B	-

HOD 29/11/21

Principal 30.11.21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Letter of Requisition

To,

HOD/Department of Chemistry:

I request you to allot suitable Faculty members for teaching the following course of our department.

Sl. No.	Theory Course Code and Title	Year / Semester/ Branch	Remarks
1.	GE8291 Environmental Science and Engineering	II/IV/ECE A & B	-

29/11/21

HOD

3/12/21

Principal

ECE

Deiva

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

Academic Year: 2021 - 2022 (Even Semester)

Letter of Requisition

To,

HOD/ Department of Electronics and Communication Engineering

I request you to allot suitable Faculty members for teaching the following courses of our department.

Sl. No.	Course Code and Title	Year / Semester/ Branch	Remarks
1.	EC8395 Communication Engineering (Professional Elective – II)	III / VI Semester B.E. EEE	
2.	EE8681 Microprocessors and Microcontrollers Laboratory	III / VI Semester B.E. EEE	
3.	EE8461 Linear and Digital Integrated Circuits Laboratory	II / IV Semester B.E EEE 'A' & 'B'	1 faculty from EEE and 1 faculty from ECE for each section

S.K 09/12/21
HOD/EEE

9/12/21
Principal

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. S. Periyanayagi **Designation:** Professor

Area of Specialization: communication system

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8453 Linear Integrated circuits	II / III / ECE	Yes 4 times	97.05%. 92.72%. 94%. 100 %
2.	EC3251 Circuit Analysis	I / II / ECE	NO	-
3.				
4.				

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.			
2.			
3.			

4/12/21

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Already handled the subject and Interested in handling Fundamental subject.
2.	Handled in old regulations along with devices Interested to handle Fundamental subject.
3.	
4.	
Signature of the Faculty Member:	4/12/21

Opinion of HOD:
circuit Analysis is alloted based on the willingness.
Signature of the HOD: 5/01/22

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. A. Azhagu Jai Sudhan Parthasarathi **Designation:** ASP/ECE

Area of Specialization: VLSI Design

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1. ✓	EC8691 Microprocessor and Microcontroller	III/VI/ ECE	Yes 6	100%, 100%, 90.90%, 94.23%, 98.52, 100%.
2.	EC8452 Electronic circuits II	III/IV/ ECE	Yes 6	100%, 100%, 99.31, 90.90%, 92.58, 92.54%
3.	EC8095 VLSI Design	III/VI/ ECE	NO	–
4.	EC8453 - Linear Integrated circuits	III/IV/ ECE	NO	–

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1. ✓	EC8681 Microprocessor and Microcontroller Lab	III/VI/ECE	YES
2.	EC8661 VLSI Design Laboratory	III/VI/ECE	NO
3.	EC8461 Circuit design and Simulation Laboratory	III/IV/ECE	NO

4/12/21

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Already handled many times and produces good result.
2.	Already handled and interested to handle.
3.	2013 regulation already handled. Interest to handle 2017 regulation.
4.	Interested to handle.
Signature of the Faculty Member:	4/1/22

Opinion of HOD:
- Microprocessor + microcontroller is allotted based on the Result Produced and willingness.
Signature of the HOD: 5/1/22

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. S. Vairaprakash **Designation:** ASP/ECE

Area of Specialization: Communication Systems

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8452 - Electronic Circuits II	II / IV / ECE	1	100%
2.	GE8076 - Professional Ethics in Engineering	IV / VII / ECE	1	100%
3.	EC8451 - Electromagnetic Fields.	II / IV / ECE		
4.	EC8395 - Communication Engineering	III / VI / EEE	1	

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC846 - Circuits Design and Simulation Lab	II / IV / ECE	1
2.	EE8681 - Micro Processor and Microcontroller Lab.	III / VI / EEE	
3.	EC8661 - Microprocessor and Microcontroller Lab	III / VI / ECE	

4/12/21

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Interest to take Subjects. I am very interest to derive the equation.
2.	Students must know Professional attitudes and have to learn. Hence I like to advice the students by taking this subjects
3.	I like deviation and Problematic subjects. I handled Three times.
4.	I handled this subject in this odd semester. But Syllabus is very vast.
	Signature of the Faculty Member: 4/12/21

Opinion of HOD:
- Electronic circuits - II is alloted based on the willingness.
Signature of the HOD: 5/12/21

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: Dr. A. Lakshmi **Designation:** Associate Professor

Area of Specialization: Image Processing & Optical Communication.

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	Electronic Circuits II / EC8452	II / IV / ECE	No	No
2.	Communication Theory / EC8401	II / IV / ECE	No	No
3.	Linear Integrated circuits / EC8453	II / IV / ECE	No	No
4.	Communication Engineering / EC8395	III / VI / EEE	No	No

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	Circuits Design and Simulation Lab / EC8461	II / IV / ECE	No
2.	Linear Integrated Circuits Lab / EC8462	II / IV / ECE	No
3.	Linear & Digital Integrated Circuits Lab / EE8461	II / IV / EEE	No

A. Lakshmi 4/12/21

Signature of the Faculty Member

(Dr. A. LAKSHMI)

Preference No.	Reason for the preference (Theory Courses only)
1.	I am very much familiar with the subject.
2.	My field of specialization in PG is Optical communication. So I have interested ~~in this subject~~.
3.	I am familiar with the subject.
4.	Based on my specialization in PG, I have given preference.
	Signature of the Faculty Member: A. Jalushma 4/12/21

Opinion of HOD:
- Linear Integrated circuit is allotted because it is a fundamental subject. - Based on the Experience this subject is allotted.
Signature of the HOD: ~~[illegible]~~ 5.1.22

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: R. RAMA LAKSHMI **Designation:** ASSISTANT PROFESSOR

Area of Specialization: COMMUNICATION SYSTEMS

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8652 WIRELESS COMMUNICATION	III/ VI/ ECE	4	100%. 98%.
2.	GE8076 PROFESSIONAL ETHICS IN ENGINEERING	IV/ VIII/ ECE	1	100%
3.	EC8452 ELECTRONIC CIRCUITS II	II/ IV/ ECE	—	-
4.				

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC8461 CIRCUITS DESIGN & SIMULATION LABORATORY	II / IV / ECE	YES 3
2.	EC8462 LINEAR INTEGRATED CIRCUITS LABORATORY	II / IV / ECE	YES 2
3.	GE3271 ENGINEERING PRACTICES LABORATORY	I / II / ECE	YES 3

6/12/2021

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	Since my area of specialization is Communication, I wish to handle.
2.	I have already handled the subject and wish to handle for my class.
3.	I have not handled so far and wish to take.
4.	
Signature of the Faculty Member:	6/12/2021

Opinion of HOD:
- wireless communication is alloted to her based on the specialization and Result Produced. - Professional Ethics in Engineering is alloted since she is the class Adviser for the class.
Signature of the HOD: 5/1/22

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

Faculty-Subject Preference

Name of the Faculty Member: S.A. Radhika **Designation:** Assistant Professor

Area of Specialization: Communication Systems

Preference No.	Theory Course Code / Course Title	Year / Semester/ Branch	Already Handled in RIT (Yes/No If yes, No. of Times)	Pass Percentage (If handled already)
1.	EC8451 Electromagnetic fields	II/IV/ ECE	No	
2.	GE8076 Professional ethics in Engineering	IV/VIII ECE	Yes	100 %
3.	EC8491 Communication theory	II/IV/ ECE	No	
4.	EC8094 Satellite Communication	IV/VIII ECE	No	

Preference No.	Laboratory Course Code / Course Title	Year /Semester / Branch	Already Handled (Yes/No If yes, No. of Times)
1.	EC8462 Linear Integrated Circuits	II/IV/ ECE A and B	No
2.	GE8261 Engineering Practices lab	I/II ECE A&B	Yes
3.	EC8611 Technical Seminar	III/VI/ ECE A and B	No

S.A. Radhika 01/12/2021

Signature of the Faculty Member

Preference No.	Reason for the preference (Theory Courses only)
1.	· Basic paper and eager to teach fundamentals
2.	Already handled and interesting subject.
3.	Interesting paper and eager to handle.
4.	Interesting subject and eagerness to try new
Signature of the Faculty Member:	

Opinion of HOD:
- Electromagnetic fields is alloted based on her willingness and specialization. - Professional Ethics in Engineering is alloted based on Result produced and She has already handled.
Signature of the HOD: 5/1/22

RAMCO INSTITUTE OF TECHNOLOGY
Department of Electronics and Communication Engineering
Faculty Subject Allocation
Academic Year: 2021-2022 (Even Semester)
(with effect from: 07.03.2022)

Sl. No.	Name of the Faculty Member	Names of the Subjects allotted				Total Periods/ Week	Remarks
		Theory	Semester/ Branch	Practical	Semester/ Branch		
1.	Dr.S.Periyanayagi	EC3251 Circuit Analysis	II/ECE/I-A	EC8811-Project Work	VIII/ECE/IV-A	5	-
2.	Dr.K.Ragavan	EC8491 Communication Theory	IV/ECE/II-B	GE3271 Engineering Practices Laboratory (M)	II/Mech/I	4+4+8=16	-
				EC8462 Linear Integrated Circuits Laboratory (S)	IV/ECE/II-B		
				EC8811-Project Work	VIII/ECE/IV-B		
3.	Dr.A.Azhagu Jaisudhan Pazhani	EC8691 Microprocessors and Microcontrollers	VI/ECE/III-B	EC8681- Microprocessors and Microcontrollers Laboratory (M)	VI/ECE/III-B	3.5+8+4=15.5	-
				EC8681- Microprocessors and Microcontrollers Laboratory (S)	VI/ECE/III-A		
4.	Mr.B.Kannan	MG8591 Principles of Management	VI/ECE/III-B	GE3271 Engineering Practices Laboratory (M)	II/ECE/I-A	4+4+4+2=14	-
				EC8681- Microprocessors and Microcontrollers Laboratory (S)	VI/ECE/III-B		
				EC8611 Technical Seminar (S)	VI/ECE/III-B		
5.	Mrs.R.Ramalakshmi	EC8652 Wireless Communication	VI/ECE/III-A	GE3271 Engineering Practices Laboratory (M)	II/AI&DS/I	4+5+4=13	Class Adviser IV ECE B
		GE8076 Professional Ethics in Engineering	VIII/ECE/IV-B	EC8811-Project Work	VIII/ECE/IV-B		

6.	Mrs.G.Gnana Priya	EC8491 Communication Theory	IV/ECE/II-A	EC8461 Circuits Design and Simulation Laboratory (M)	IV/ECE/II-A	4+8+2+1=15	-
				EC8611 Technical Seminar (S)	VI/ECE/III-A		
				Internet Lab	VIII/ECE/IV-B		
7.	Mrs.V.SrirengaNachiyar	EC8452 Electronic Circuits- II	IV/ECE/II-B	EC3271 Circuit Analysis Laboratory (M)	II/ECE/I-A	4+2+8=14	Class Adviser IV ECE A
				EC8461 Circuits Design and Simulation Laboratory (S)	IV/ECE/II-B		
				EC8811-Project Work	VIII/ECE/IV-A		
8.	Mrs.S.Jeeva	EC8451 Electromagnetic Fields	IV/ECE/II-A	EC8462 Linear Integrated Circuits Laboratory (S)	IV/ECE/II-A	5.5+8+4=17.5	Class Adviser III ECE B
				EE8461 Linear and Digital Integrated Circuits Laboratory (S)	IV/EEE/II-A		
9.	Mr.D.Gopinath	EC8691 Microprocessors and Microcontrollers	VI/ECE/III-A	EC8681 Microprocessors and Microcontrollers Laboratory (M)	VI/ECE/III-A	3.5+4.5+8 = 16	Class Adviser III ECE A
		EC8651 Transmission Lines and RF Systems	VI/ECE/III-B				
10.	Mr.S.Vijayakumar	EC3251 Circuit Analysis	II/ECE/I-B	EC3271 Circuit Analysis Laboratory (M)	II/ECE/I-B	5+2+8+1=16	-
				EC8661 VLSI Design Laboratory (S)	VI/ECE/III-B		
				Placement	VIII/ECE/IV-B		
11.	Mr.A.RameshBabu	CS8792 Cryptography and Network Security	VI/ECE/III-A&B	EC8661 VLSI Design Laboratory (M)	VI/ECE/III-B	4+4+8 = 16	-
		EC8095 VLSI Design	VI/ECE/III-B				

12.	Mr.P.Gunasekaran	EC8004 Wireless Networks	VI/ECE/III-A&B	GE3271 Engineering Practices Laboratory (M)	II/ECE/I-B	4+4+4+1= 13	-
		BE3254 Electrical and Instrumentation Engineering	II/ECE/I-B	Internet Lab	VIII/ECE/IV-A		
13.	Mr.R.DeivaNayagam	EC8094 Satellite Communication	VIII/ECE/IV-A	GE3271 Engineering Practices Laboratory (M)	II/Civil/I	5+4+4+2 = 15	-
				BE3271 Basic Electrical and Electronics Engineering Laboratory (S)	II/Mech/I		
				EC8611 Technical Seminar (M)	VI/ECE/III-B		
14.	Mr.G.Sivakumar	BE3254 Electrical and Instrumentation Engineering	II/ECE/I-A	EC3271 Circuit Analysis Laboratory (S)	II/ECE/I-A	4+4+2+2+1+1= 14	Class Adviser II ECE A
		GE8076 Professional Ethics in Engineering	VI/ECE/III-A&B	EC8611 Technical Seminar (M)	VI/ECE/III-A		
				Internet Lab	VIII/ECE/IV-A		
				Library	VIII/ECE/IV-B		
15.	Mr.P.Venkatesh	EC8651 Transmission Lines and RF Systems	VI/ECE/III-A	EC8661 VLSI Design Laboratory (M)	VI/ECE/III-A	4.5+8+2+1 = 15.5	-
				EC3271 Circuit Analysis Laboratory (S)	II/ECE/I-B		
				Library	VIII/ECE/IV-A		
16.	Dr.S.Vairaprakash	EC8452 Electronic Circuits II	IV/ECE/II-A	EE8681- Microprocessors and Microcontrollers Laboratory (M)	VI/EEE/III	4+4+8=16	-
				EC8461 Circuits Design and Simulation Laboratory (S)	IV/ECE/II-A		
				EC8811-Project Work	VIII/ECE/IV-B		
17.	Mr.L.K.Balaji Vignesh	EC8094 Satellite Communication	VIII/ECE/IV-B	EC8681- Microprocessors and Microcontrollers Laboratory (S)	VI/ECE/III-A	5+4+4+4=17	-

		MG8591 Principles of Management	VI/ECE/III-A	EC8681- Microprocessors and Microcontrollers Laboratory (S)	VI/ECE/III-B		
18.	Ms.S.Harini Shriram	EC8652 Wireless Communication	VI/ECE/III-B	EC8461 Circuits Design and Simulation Laboratory (M)	IV/ECE/II-B	4+8+4+1=17	Class Adviser II ECE B
				EE8681- Microprocessors and Microcontrollers Laboratory (S)	VI/EEE/III		
				Internet Lab	VIII/ECE/IV-A		
19.	Ms.S.A.Radhika	EC8451 Electromagnetic Fields	IV/ECE/II-B	GE3271 Engineering Practices Laboratory (M)	II/CSE/I	5+5+4+1=15	-
		GE8076 Professional Ethics in Engineering	VIII/ECE/IV-A	Placement	VIII/ECE/IV-A		
20.	Dr.A.Lakshmi	EC8453 Linear Integrated Circuits	IV/ECE/II-B	EC8462 Linear Integrated Circuits Laboratory (M)	IV/ECE/II-B	5+8+4=17	-
				EE8461 Linear and Digital Integrated Circuits Laboratory (S)	IV/EEE/II-B		
				EC8811-Project Work	VIII/ECE/IV-A		
21.	Dr.R.Rajalakshmi	EC8453 Linear Integrated Circuits	IV/ECE/II-A	EC8462 Linear Integrated Circuits Laboratory (M)	IV/ECE/II-A	5+8+4=17	-
				BE3272 Basic Electrical, Electronics & Instrumentation Engineering Laboratory (S)	II/Civil/I		
22.	Mrs.G.Subhashini	EC8095 VLSI Design	VI/ECE/III-A	EC8661 VLSI Design Laboratory (S)	VI/ECE/III-A	4+4+8=16	-
		EC8395 Communication Engineering	VI/EEE/III				

Note: Mrs.R.Divya is on maternity leave for 6 months.

4/3/22
Faculty In-charge(s)

4/3/22
HOD

(4/3/22
Vice-Principal

11/3/22
PRINCIPAL

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Even Semester)

Faculty Workload

Sl.No.	Name of the Faculty member	Teaching			Co-Curricular Periods	Total Contact Periods/week	Workload (Hours)
		Theory	Practical	Tutorial			
1.	Dr.S.Periyanayagi	5.5	-	-	-	5.5	5.5
2.	Dr.K.Ragavan	4	12	-	-	16	10
3.	Dr.A.AzhaguJaisudhan Pazhani	3.5	12	-	-	15.5	9.5
4.	Mr.B.Kannan	4	10	-	-	14	09
5.	Mrs.R.Ramalakshmi	9	4	-	-	13	11
6.	Mrs.G.GnanaPriya	4	10	-	1	15	9.5
7.	Mrs.V.SrirengaNachiyar	4	10	-	-	14	9
8.	Mrs.S.Jeeva	5.5	12	-	-	17.5	11.5
9.	Mr.D.Gopinath	8	8	-	-	16	12
10.	Mr.S.Vijayakumar	5.5	10	-	1	16	11
11.	Mr.A.RameshBabu	8	8	-	-	16	12
12.	Mr.P.Gunasekaran	8	4	-	1	13	10.5
13.	Mr.R.DeivaNayagam	5	10	-	-	15	10

14.	Mr.G.Sivakumar	8	4	-	2	14	11
15.	Mr.P.Venkatesh	4.5	10	-	1	15.5	10
16.	Dr.S.Vairaprakash	4	12	-	-	16	10
17.	Mr.L.K.Balaji Vignesh	9	8	-	-	17	13
18.	Ms.S.Harini Shriram	4	12	-	1	17	10.5
19.	Ms.S.A.Radhika	10	4	-	1	15	12.5
20.	Dr.A.Lakshmi	5	12	-	-	17	11
21.	Dr.R.Rajalakshmi	5	12	-	-	17	11
22.	Mrs.Subhashini	8	8	-	-	16	12

HOD 4/4/22

Note:

1. Teaching workload includes the number of hours of theory, tutorial, practical and project work. The 2 hours of practical is considered as 1 hour of workload.
2. Co-curricular Periods include counseling hour, Training & Placement hour, Aptitude hour, Internet hour, Association hour, Communication Skills hour, Library hour etc.
3. Mrs. R. Divya is on maternity leave for 6 months

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (ODD Semester)

STUDENTS NAMELIST

Semester /Class: III Semester B.E. ECE-A&B

Sl. No.	Reg. No.	Name of the Student
1.	953620106001	AARTHI S
2.	953620106002	ABHINAYA M
3.	953620106003	AKILA M
4.	953620106004	AKSHAYA K
5.	953620106005	AKSHIYA RAJASRI B
6.	953620106006	ANUSUYA G
7.	953620106007	APARNA K
8.	953620106008	ARUN PRAGASH K R
9.	953620106009	ASHOKKUMAR R
10.	953620106010	AZHAGU SUNDAR M
11.	953620106011	BADRI CHELVA M
12.	953620106012	BAGAVATHI GAYATHRI S
13.	953620106013	BHARATHI LAKSHMI A
14.	953620106014	DHAMEENA ISMAIL S
15.	953620106015	DHINESH M
16.	953620106016	DILIPKUMAR A
17.	953620106017	DIVYASRI B
18.	953620106018	GOKUL R
19.	953620106019	GOKULPRIYA G
20.	953620106020	GOWDHAM M
21.	953620106021	GOWTHAM P
22.	953620106022	GUNAKSHA B R
23.	953620106023	HAARIS I
24.	953620106024	HARIHARAN M
25.	953620106025	HARIPRASAD N
26.	953620106026	HARIPRASAD R
27.	953620106027	HARISH R
28.	953620106028	JACKSON E
29.	953620106029	JAYASURIYA B
30.	953620106030	JEYARUDHRA B
31.	953620106031	JEYA SELVA KARTHICKEYAN L
32.	953620106032	KAANTHA VISHNU K M
33.	953620106033	KAMALESH J

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE III

GE8071-DISASTER MANAGEMENT

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106002	ABUBACKER SIDDIQ A
2.	953618106003	ACHUTHAN R
3.	953618106017	GOKUL S
4.	953618106022	JEBISH ROBIN R
5.	953618106023	KALIPRAKASH M
6.	953618106024	KARTHIK R
7.	953618106025	KATHIR K
8.	953618106035	MOHANASUDHAN M

V. Srimya Nanjan 13/8/2021
Class Adviser

13/8/2021
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Department of Electronics and Communication Engineering
Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE III

CS8082- MACHINE LEARNING TECHNIQUES

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106001	AARTHI K
2.	953618106004	ALPHINA CHRISTY V
3.	953618106005	ANITHA RAM R
4.	953618106006	ANU LAKSHMI K S
5.	953618106007	ANUSUYA R
6.	953618106008	APINEYA SRI M
7.	953618106009	ARUN K
8.	953618106011	BALAJI RAJA K
9.	953618106012	BALA KIRUTHIKA A
10.	953618106013	DEEPIKA A
11.	953618106014	DHITCHANAA R
12.	953618106015	DINESH R
13.	953618106016	GAYATHRI R
14.	953618106018	HARSHETHAA N
15.	953618106019	HELANMARY M
16.	953618106020	JAYALAKSHMI S
17.	953618106021	JAYAMADAN K
18.	953618106026	KEERTHANA S
19.	953618106027	KIRUTHIKA P
20.	953618106028	KIRUTHIKA T
21.	953618106029	K J HARISH KALYAN
22.	953618106030	KOHILAPRIYA N
23.	953618106031	KRISHNA VENI S
24.	953618106032	MAHADEVI G
25.	953618106033	MANIMALA N
26.	953618106034	MIRRA S
27.	953618106046	P MADHAV
28.	953618106301	HARINIDURGA I

V. Saranya Narayan 13/8/2021
Class Adviser

13/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST

OEN751 Green Building Design

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106002	ABUBACKER SIDDIQ A
2.	953618106009	ARUN K
3.	953618106015	DINESH R
4.	953618106022	JEBISH ROBIN R
5.	953618106023	KALIPRAKASH M
6.	953618106024	KARTHIK R
7.	953618106028	KIRUTHIKA T
8.	953618106035	MOHANASUDHAN M

V. Sowmya Narayan 14/8/2021

Class Adviser

14/8/21

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST

OCH752 Energy Technology

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106001	AARTHI K
2.	953618106018	HARSHETHAA N
3.	953618106019	HELANMARY M
4.	953618106032	MAHADEVI G
5.	953618106034	MIRRA S

V. Soumya Narayan 14/8/2021
Class Adviser

14/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST

OCE751 Environmental and Social Impact Assessment

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106004	ALPHINA CHRISTY V
2.	953618106014	DHITCHANAA R
3.	953618106020	JAYALAKSHMI S
4.	953618106026	KEERTHANA S
5.	953618106033	MANIMALA N
6.	953618106301	HARINIDURGA I

V. Saranya Nanjiya 14/8/2021

Class Adviser

14/8/21

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST

OCS752 Introduction to C Programming

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106003	ACHUTHAN R
2.	953618106005	ANITHA RAM R
3.	953618106008	APINEYA SRI M
4.	953618106011	BALAJI RAJA K
5.	953618106012	BALA KIRUTHIKA A
6.	953618106016	GAYATHRI R
7.	953618106017	GOKUL S
8.	953618106021	JAYAMADAN K
9.	953618106027	KIRUTHIKA P
10.	953618106029	K J HARISH KALYAN
11.	953618106031	KRISHNA VENI S
12.	953618106046	P MADHAV

V. Sriramya Nanjiyan 14/8/2021
Class Adviser

14/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Odd Semester)

STUDENTS NAME LIST

OML751 Testing of Materials

Semester / Class: VII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106006	ANU LAKSHMI K S
2.	953618106007	ANUSUYA R
3.	953618106013	DEEPIKA A
4.	953618106025	KATHIR K
5.	953618106030	KOHILAPRIYA N

V. Srimanya Narayan 14/8/2021

Class Adviser

14/8/21

HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
PROFESSIONAL ELECTIVE – III

STUDENTS NAME LIST

Course Code/ Title: GE8071 Disaster Management
Year/Semester: IV Year/ VII Semester ECE B
Name of the Faculty member: Dr.S.Godwin Barnabas, ASP/Mech

Sl. No.	Reg. No.	Student Name
1.	953618106055	SANTHOSH R
2.	953618106057	SARATH K
3.	953618106059	SHUNMUGA SIVA CHIDAMBARAM S
4.	953618106060	SIVARAMAN P
5.	953618106072	VISHNU T
6.	953618106074	YASHWANTH K
7.	953618106303	VENKATRAMANAN M

14/08/2021
Class Adviser

14/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
PROFESSIONAL ELECTIVE – III

STUDENTS NAME LIST

Course Code/ Title: CS8082 Machine Learning Techniques
Year/Semester: IV Year / VII Semester ECE B
Name of the Faculty member: Mr.R.Deiva Nayagam, AP/ECE

Sl. No.	Reg. No.	Student Name
1.	953618106037	MONISHA A
2.	953618106038	M SATHIS KANNAN
3.	953618106039	NARMADHADEVI M
4.	953618106040	NINEL BERT COSTA J
5.	953618106041	NIRMALA L
6.	953618106042	NISHA P
7.	953618106043	NITHISH BALAJI A
8.	953618106044	NUNAGOPPULA SHAMBHIREDDY
9.	953618106045	PAVITHRA P
10.	953618106047	PRAVEENKUMAR P
11.	953618106050	RAAJASEKAR M
12.	953618106051	RAMASURESH M
13.	953618106053	SAI SIDDARTH R
14.	953618106054	SAKTHI PRAKASH ADITHYA B
15.	953618106056	SANTHOSHRAJ M
16.	953618106058	SHRIRAM V
17.	953618106061	SOPNA S
18.	953618106062	SRIDHAR G
19.	953618106063	SUKUNA K
20.	953618106064	SUNDHAR S
21.	953618106065	SURYAKALA A
22.	953618106066	SWETHA K
23.	953618106067	UVASRI S
24.	953618106068	VENKATASUBBU N
25.	953618106069	VETRIRANJANI G
26.	953618106070	VIDHULA T
27.	953618106071	VISHALINI K
28.	953618106073	VISHNUPRIYA K
29.	953618106302	RAMKISHORE K R

14/08/2021
Class Adviser

14/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
OPEN ELECTIVE – II
STUDENTS NAME LIST

Course Code/ Title: OCE751 – Environmental and Social Impact Assessment
Year/Semester: IV Year/ VII Semester ECE B
Offered by: Department of Civil Engineering
Name of the Faculty member: Mr.T.Chockalingam, AP/Civil

Sl.No	Register Number	Name of the Student
1.	953618106037	MONISHA A
2.	953618106038	M SATHIS KANNAN
3.	953618106040	NINEL BERT COSTA J
4.	953618106063	SUKUNA K
5.	953618106067	UVASRI S

16/08/2021
Class Adviser

16/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
OPEN ELECTIVE – II
STUDENTS NAME LIST

Course Code/ Title: OCH752 – Energy Technology
Year/Semester: IV Year/ VII Semester ECE B
Offered by: Department of EEE
Name of the Faculty member: Mrs.S.Jeyanthi, AP/EEE

Sl.No	Register Number	Name of the Student
1.	953618106045	PAVITHRA P
2.	953618106051	RAMASURESH M
3.	953618106055	SANTHOSH R
4.	953618106058	SHRIRAM V
5.	953618106059	SHUNMUGA SIVA CHIDAMBARAM S
6.	953618106060	SIVARAMAN P
7.	953618106072	VISHNU T
8.	953618106074	YASHWANTH K

16/08/2021
Class Adviser

16/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
OPEN ELECTIVE – II
STUDENTS NAME LIST

Course Code/ Title: OCS752 – Introduction to C Programming
Year/Semester: IV Year/ VII Semester ECE B
Offered by: Department of Computer Science and Engineering
Name of the Faculty member: Dr.V.Anusuya, ASP/CSE

Sl.No	Register Number	Name of the Student
1.	953618106039	NARMADHADEVI M
2.	953618106044	NUNAGOPPULA SHAMBHIREDDY
3.	953618106047	PRAVEENKUMAR P
4.	953618106050	RAAJASEKAR M
5.	953618106053	SAI SIDDARTH R
6.	953618106054	SAKTHI PRAKASH ADITHYA B
7.	953618106056	SANTHOSHRAJ M
8.	953618106057	SARATH K
9.	953618106062	SRIDHAR G
10.	953618106065	SURYAKALA A
11.	953618106066	SWETHA K
12.	953618106068	VENKATASUBBU N
13.	953618106073	VISHNUPRIYA K

16/08/2021
Class Adviser

16/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
OPEN ELECTIVE – II
STUDENTS NAME LIST

Course Code/ Title: OEN751 – Green Building Design
Year/Semester: IV Year/ VII Semester ECE B
Offered by: Department of Civil Engineering
Name of the Faculty member: Mr.J.Ram Prasath, AP/Civil

Sl.No	Register Number	Name of the Student
1.	953618106041	NIRMALA L
2.	953618106064	SUNDHAR S
3.	953618106069	VETRIRANJANI G
4.	953618106070	VIDHULA T
5.	953618106071	VISHALINI K

16/08/2021
Class Adviser

16/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY
Academic year: 2021-2022 (Odd Semester)
OPEN ELECTIVE – II
STUDENTS NAME LIST

Course Code/ Title: OML751 – Testing of Materials
/Semester: IV Year/ VII Semester ECE B
Offered by: Department of Mechanical Engineering
Name of the Faculty member: Mr.J.Jerold John Britto, AP(SG)/Mech

Sl.No	Register Number	Name of the Student
1.	953618106042	NISHA P
2.	953618106043	NITHISH BALAJI A
3.	953618106061	SOPNA S
4.	953618106302	RAMKISHORE K R
5.	953618106303	VENKATRAMANAN M

16/08/2021
Class Adviser

16/8/21
HOD

RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Even Semester)
PROFESSIONAL ELECTIVE – V

STUDENTS NAME LIST

Course Code/ Title: EC8094 Satellite Communication
Year/Semester: IV Year/ VIII Semester ECE B
Name of the Faculty Member: Mr.L.K.Balaji Vignesh, AP/ECE

Sl. No.	Reg. No.	Student Name
1.	953618106037	MONISHA A
2.	953618106039	NARMADHADEVI M
3.	953618106040	NINEL BERT COSTA J
4.	953618106041	NIRMALA L
5.	953618106042	NISHA P
6.	953618106043	NITHISH BALAJI A
7.	953618106044	NUNAGOPPULA SHAMBHIREDDY
8.	953618106045	PAVITHRA P
9.	953618106047	PRAVEENKUMAR P
10.	953618106050	RAAJASEKAR M
11.	953618106051	RAMASURESH M
12.	953618106053	SAI SIDDARTH R
13.	953618106054	SAKTHI PRAKASH ADITHYA B
14.	953618106055	SANTHOSH R
15.	953618106056	SANTHOSHRAJ M
16.	953618106057	SARATH K
17.	953618106058	SHRIRAM V
18.	953618106059	SHUNMUGA SIVA CHIDAMBARAM S
19.	953618106060	SIVARAMAN P
20.	953618106061	SOPNA S
21.	953618106062	SRIDHAR G
22.	953618106064	SUNDHAR S
23.	953618106065	SURYAKALA A
24.	953618106068	VENKATASUBBU N
25.	953618106069	VETRIRANJANI G
26.	953618106070	VIDHULA T

Sl. No.	Reg. No.	Student Name
27.	953618106071	VISHALINI K
28.	953618106072	VISHNU T
29.	953618106074	YASHWANTH K
30.	953618106302	RAMKISHORE K R
31.	953618106303	VENKATRAMANAN M

4/3/22
Class Adviser

HOD 4/3/22

RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Even Semester)
PROFESSIONAL ELECTIVE – IV

STUDENTS NAME LIST

Course Code/ Title: GE8076 Professional Ethics in Engineering
Year/Semester: IV Year/ VIII Semester ECE B
Name of the Faculty member: Mrs.R.Ramalakshmi, AP/ECE

Sl. No.	Reg. No.	Student Name
1.	953618106037	MONISHA A
2.	953618106039	NARMADHADEVI M
3.	953618106040	NINEL BERT COSTA J
4.	953618106041	NIRMALA L
5.	953618106042	NISHA P
6.	953618106043	NITHISH BALAJI A
7.	953618106044	NUNAGOPPULA SHAMBHIREDDY
8.	953618106045	PAVITHRA P
9.	953618106047	PRAVEENKUMAR P
10.	953618106050	RAAJASEKAR M
11.	953618106051	RAMASURESH M
12.	953618106053	SAI SIDDARTH R
13.	953618106054	SAKTHI PRAKASH ADITHYA B
14.	953618106055	SANTHOSH R
15.	953618106056	SANTHOSHRAJ M
16.	953618106057	SARATH K
17.	953618106058	SHRIRAM V
18.	953618106059	SHUNMUGA SIVA CHIDAMBARAM S
19.	953618106060	SIVARAMAN P
20.	953618106061	SOPNA S
21.	953618106062	SRIDHAR G
22.	953618106064	SUNDHAR S
23.	953618106065	SURYAKALA A
24.	953618106068	VENKATASUBBU N
25.	953618106069	VETRIRANJANI G
26.	953618106070	VIDHULA T

Sl. No.	Reg. No.	Student Name
27.	953618106071	VISHALINI K
28.	953618106072	VISHNU T
29.	953618106074	YASHWANTH K
30.	953618106302	RAMKISHORE K R
31.	953618106303	VENKATRAMANAN M

4/3/22
Class Adviser

4/3/22
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021-2022 (Even Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE

Semester / Class: VIII Semester B.E. ECE A

Sl. No.	Reg. No.	Name of the Student
1.	953618106002	ABUBACKER SIDDIQ A
2.	953618106003	ACHUTHAN R
3.	953618106005	ANITHA RAM R
4.	953618106009	ARUN K
5.	953618106011	BALAJI RAJA K
6.	953618106013	DEEPIKA A
7.	953618106015	DINESH R
8.	953618106016	GAYATHRI R
9.	953618106017	GOKUL S
10.	953618106020	JAYALAKSHMI S
11.	953618106021	JAYAMADAN K
12.	953618106022	JEBISH ROBIN R
13.	953618106023	KALIPRAKASH M
14.	953618106024	KARTHIK R
15.	953618106025	KATHIR K
16.	953618106026	KEERTHANA S
17.	953618106027	KIRUTHIKA P
18.	953618106028	KIRUTHIKA T
19.	953618106029	K J HARISH KALYAN
20.	953618106030	KOHILAPRIYA N
21.	953618106032	MAHADEVI G
22.	953618106033	MANIMALA N
23.	953618106034	MIRRA S
24.	953618106035	MOHANASUDHAN M
25.	953618106301	HARINIDURGA I

5/3/22
Class Adviser

5/3/22
HOD

RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering
Academic Year: 2021- 2022 (Even Semester)

STUDENTS NAME LIST FOR ADVANCEMENT COURSE

GE8076 - PROFESSIONAL ETHICS IN ENGINEERING

Semester / Class: VI Semester B.E. ECE 'A'

Sl. No.	Reg. No.	Name of the Student
1.	953619106001	ABINAYA S
2.	953619106002	ABIRAMI V
3.	953619106003	AKILANDESWARI K
4.	953619106004	AMUDHADEVI A S
5.	953619106006	ARAVIND M
6.	953619106008	ASIBA MINA K R
7.	953619106010	DEEPAK CHAKRAVARTHI P
8.	953619106011	DHARINI A
9.	953619106012	DHARSHINI K
10.	953619106013	DHARSHINI P
11.	953619106014	DIVYA SHREE R
12.	953619106015	DIWYA DHARSHINI R
13.	953619106016	ELAVARASI A
14.	953619106017	GAAYATRI V S
15.	953619106020	GAYATHRI K
16.	953619106023	HARIHARAN S
17.	953619106024	HARINI U
18.	953619106025	INDHUMATHI C
19.	953619106026	ISHWARYA R
20.	953619106027	JAYA MAHIMA M
21.	953619106028	JEYAGOMATHI S
22.	953619106029	JISHA P S
23.	953619106030	KALIDAS P
24.	953619106033	KAVIN KUMAR R
25.	953619106034	KAVIYA S
26.	953619106035	KAVYA P
27.	953619106036	KEERTHIKA B

Sl. No.	Reg. No.	Name of the Student
28.	953619106037	KESAVANAND M
29.	953619106039	LINGESH S
30.	953619106040	LOGGAA SRI AGITHA K

4/3/2022

Class Advisor

4/3/22

HOD

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Department of Electronics and Communication Engineering
Academic Year: 2021- 2022 (Even Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE II

CS8792 - CRYPTOGRAPHY AND NETWORK SECURITY

Semester / Class: VI Semester B.E. ECE 'A'

Sl. No.	Reg. No.	Name of the Student
1.	953619106010	DEEPAK CHAKRAVARTHI P
2.	953619106021	GIRITHARAN D
3.	953619106023	HARIHARAN S
4.	953619106028	JEYAGOMATHI S
5.	953619106029	JISHA P S
6.	953619106035	KAVYA P
7.	953619106039	LINGESH S

4/3/2022
Class Adviser

4/3/22
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Department of Electronics and Communication Engineering
Academic Year: 2021- 2022 (Even Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE II

EC8004 - WIRELESS NETWORKS

Semester / Class: VI Semester B.E. ECE 'A'

Sl. No.	Reg. No.	Name of the Student
1.	953619106001	ABINAYA S
2.	953619106002	ABIRAMI V
3.	953619106004	AMUDHADEVI A S
4.	953619106006	ARAVIND M
5.	953619106009	CHIDHAMBARANATHAN R
6.	953619106011	DHARINI A
7.	953619106012	DHARSHINI K
8.	953619106014	DIVYA SHREE R
9.	953619106015	DIWYA DHARSHINI R
10.	953619106016	ELAVARASI A
11.	953619106022	GOMATHI NAAYAGAM I S
12.	953619106024	HARINI U
13.	953619106026	ISHWARYA R
14.	953619106030	KALIDAS P
15.	953619106033	KAVIN KUMAR R
16.	953619106036	KEERTHIKA B
17.	953619106037	KESAVANAND M
18.	953619106040	LOGGAA SRI AGITHA K
19.	953619106302	KUMARAGURUPARAN A

4/3/2022
Class Adviser

4/3/22
HOD

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Department of Electronics and Communication Engineering
Academic Year: 2021- 2022 (Even Semester)

STUDENTS NAME LIST FOR PROFESSIONAL ELECTIVE II

GE8075 - INTELLECTUAL PROPERTY RIGHTS

Semester / Class: VI Semester B.E. ECE 'A'

Sl. No.	Reg. No.	Name of the Student
1.	953619106003	AKILANDESWARI K
2.	953619106005	ANUDHARSHINI M
3.	953619106007	ARUMUGA VISWANATH P
4.	953619106008	ASIBA MINA K R
5.	953619106013	DHARSHINI P
6.	953619106017	GAAYATRI V S
7.	953619106018	GANESH G
8.	953619106019	GANESHAMOORTHY I
9.	953619106020	GAYATHRI K
10.	953619106025	INDHUMATHI C
11.	953619106027	JAYA MAHIMA M
12.	953619106031	KALIMUTHU K
13.	953619106032	KAMALESH S
14.	953619106034	KAVIYA S
15.	953619106038	KESHAVA MUGESH KUMAR C M

4/3/2022
Class Adviser

4/3/22
HOD

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Department of Electronics and Communication Engineering

Academic Year: 2021 – 2022 (Even Semester)

STUDENTS NAME LIST

GE8075 INTELLECTUAL PROPERTY RIGHTS

Semester / Class : VI Semester B.E. ECE B

Sl. No.	Reg. No.	Name of the Student
1.	953619106043	MANOJKUMAR R
2.	953619106044	MARIKRISHNAUTHAMI S
3.	953619106045	MARIMUTHU B
4.	953619106046	MONIKA R
5.	953619106047	MUGESH M
6.	953619106048	NAMASIVAYAM T
7.	953619106049	NAVEEN KUMAR S
8.	953619106050	NHIDHEES LAKSH KUMAR
9.	953619106056	RAMESH KUMAR K
10.	953619106062	SANTHOSH I
11.	953619106063	SARAVANAKUMAR S
12.	953619106064	SEETHA DEVI M
13.	953619106065	SHANMUGAVISAL S.V
14.	953619106070	SUBHASH S
15.	953619106074	SUSHMITHA K
16.	953619106075	VAISHNAVI M
17.	953619106076	VEERAMANIMARAN P
18.	953619106077	VIJAYALAXMANASEN A
19.	953619106078	VIJAYARAMMSEN A

5/3/2022
Class Advisor

5/3/22
HOD

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Department of Electronics and Communication Engineering

Academic Year: 2021 – 2022 (Even Semester)

STUDENTS NAME LIST

EC8004 WIRELESS NETWORKS

Semester / Class : VI Semester B.E. ECE B

Sl. No.	Reg. No.	Name of the Student
1.	953619106053	PRAKATHI S
2.	953619106057	SABRIYAH M
3.	953619106059	SAKTHI ABIRAMI N
4.	953619106068	SNEHA P
5.	953619106071	SUJITHA K
6.	953619106073	SUSHMA A
7.	953619106079	VIJAYASANKARI P
8.	953619106080	VINOTHINI RAJAM R

5/3/2022
Class Advisor

5/3/22
HOD

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Department of Electronics and Communication Engineering

Academic Year: 2021 – 2022 (Even Semester)

STUDENTS NAME LIST

CS8792 CRYPTOGRAPHY AND NETWORK SECURITY

Semester / Class : VI Semester B.E. ECE B

Sl. No.	Reg. No.	Name of the Student
1.	953619106041	MAHENDRA PRAKASH R
2.	953619106042	MANJULA G
3.	953619106051	PADMA PRIYA C
4.	953619106052	PRADEEP C
5.	953619106054	PRIYADHARSHINI R
6.	953619106055	RAJESHWARAN R
7.	953619106058	SAI VISHNU L
8.	953619106061	SANGHAVI G
9.	953619106066	SHARON TRESHA A
10.	953619106067	SHRINITHIMEENA M
11.	953619106069	SNEKHA B
12.	953619106072	SURENDAR V
13.	953619106301	BALAJI S
14.	953619106303	NAVEEN AJAYKUMAR T

5/3/2022
Class Advisor

5/3/22
HOD

Department of Mechanical Engineering

Institute Vision

To evolve as an Institute of international repute in offering high-quality technical education, Research and extension programmes in order to create knowledgeable, professionally competent and skilled Engineers and Technologists capable of working in multi-disciplinary environment to cater to the societal needs.

Institute Mission

- To offer higher education in Engineering and Technology with highest level of quality, Professionalism and ethical standards
- To equip the students with up-to-date knowledge in cutting-edge technologies, wisdom, creativity and passion for innovation, and life-long learning skills
- To constantly motivate and involve the students and faculty members in the education process for continuously improving their performance to achieve excellence.

Program Outcomes (POs)

Engineering Graduates will be able to:

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

- **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering

Academic Year: 2021 – 2022 (Even Semester)

COURSE POLICY DOCUMENT

Degree, Semester & Branch: VI Semester B.E. Mechanical 'A', 'B' & 'C'
Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty member: Mr.R.Arun Kumar, AP / Mechanical
Class room venue: C2L02
Contact Details:

- **Phone:** +919994706629
- **E-mail:** arunr@ritrjpm.ac.in
- **Canvas Website Link:** https://canvas.instructure.com/courses/4533582

BROAD POLICY FOR THE COURSE

- The teaching learning process in the course will be transparent.
- The students can feel free to ask any clarifications regarding the course at any time in person or can post the question in course website / mail / phone / Whatsapp.
- Students can suggest change in mode of delivery of lecture for improvement if any.
- Students are expected to be punctual to the classes.
- Late comers (more than 10 minutes) can attend the class but will be marked absent for the lecture hour.
- Students are requested to give their valuable suggestion to improve overall teaching – learning process for the next batch of students.
- Students have to submit three assignments for the course as soft copy (doc file / pdf file) through Canvas LMS which will be decided by the course instructor
- Online submissions will be verified through Duplichecker / Plagiarism detector for plagiarism

PLAGIARISM POLICY

- Students are expected to avoid plagiarism in assignments that are planned for the course.
- Plagiarism if found any, the students involved (student copied and student helped to copy) has to resubmit their assignment for first time.
- If found repeated for the second time, his/her assignment will be evaluated on a maximum scale of 50% of total marks after allowing to resubmission.
- Repetition on third time will result to zero marks for submission and no further resubmission will be entertained.

PROGRAMME OUTCOMES

POs	Category	Statement
PO1	*Engineering Knowledge*	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of energy conservation related problems.
PO2	*Problem analysis*	Identify, formulate, research literature, and analyze energy management problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	*Design / Development of Solutions*	Design solutions for energy consumption and environmental problems and design system components or processes that meet the specific needs with appropriate consideration for the public health and safety, the cultural, societal and environmental considerations.
PO4	*Conduct investigations of complex problems*	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	*Modern Tool Usage*	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to undergo energy auditing with an understanding of the limitations.
PO6	*The Engineer and Society*	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the energy conservation.
PO7	*Environment and Sustainability*	Understand the impact of the energy management solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
PO8	*Ethics*	Apply ethical principles and commit to professional ethics and responsibilities and norms of the energy auditing practice.
PO9	*Individual and Team Work*	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	*Communication*	Communicate effectively on energy auditing report with the engineering community & with society at large. Some of them are, being able to comprehend & write effective reports & design documentation, make effective presentations & give & receive clear instructions.
PO11	*Project Management and Finance*	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	*Lifelong learning*	Recognize need for, & have preparation & ability to engage in independent & lifelong learning in the broadest context of technological change.

DELIVERABLES OF THE COURSE

- Any one IP filing by the student(s).
- Knowledge and information sharing among students through discussion forum
- Patent drafts from students through assignments
- Suggestions for scope of improvement

Faculty In-charge

HoD

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year 2021 - 22 (Even Semester)
Course Outcome End Survey

Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty Member: Mr.R.Arun Kumar, AP/Mechanical
Batch: 2019 - 2023

Timestamp	Email Address	Name of the Student	Register number	To what extent can you describe the concepts of various intellectual property rights? (1 - low ; 5 - high)	Rate the level on which you will be able to illustrate the practical aspects of registration in India and abroad. (1 - low ; 5 - high)	How far could you explain the implications of agreements and legislations? (1 - low ; 5 - high)	Rate your ability to interpret the methods used for digital content protection. (1 - low ; 5 - high)	The level on which you can Discuss the legal aspects governing IPR infringement is? (1 - low ; 5 - high)	Your capability to follow the procedure of Patent Landscape Analysis for a given set of patent journals is? (1 - low ; 5 - high)	Positives about the teaching learning process of the course which can be carry forward for the next batch of students	Share the negatives or scope for improvement in the teaching learning process which is to be rectified for the next batch of students
7-25-2022 15:56:04	953619114302@ritrjpm.ac.in	A Kanagaraj	953619114302	5	5	5	5	4	5	Teaching learning good and many processes learning development in my knowledge	
7-25-2022 15:59:44	953619114041@ritrjpm.ac.in	M Vijay Thirupathi	953619114041	5	5	5	5	5	5	Nil	Nil
7-25-2022 16:00:13	953619114039@ritrjpm.ac.in	C Thanga Dinesh	953619114039	5	4	5	5	5	4	Nill	Nill
7-25-2022 16:02:41	953619114015@ritrjpm.ac.in	Dineshkumar	953619114015	5	5	5	5	5	5	Give more hands on excercise to the students (like patent drafting, copyright applying)	Nil
7-25-2022 17:08:24	953619114001@ritrjpm.ac.in	D Anithrajaseelan	953619114001	5	5	5	5	5	5	Usefulness on having activities during class hours	None
7-25-2022 18:16:50	953619114032@ritrjpm.ac.in	K Ramkumar	953619114032	3	3	4	3	3	4	Awareness of IPR were taken by us and exploring lot of case study .The course is quit interesting at all.	Nothing but just teaching the subject with more pictorial representation and more case studies as it before for not getting bored.Thankyou!
7-25-2022 19:05:30	953619114034@ritrjpm.ac.in	S Saravanakumar	953619114034	5	4	4	4	4	4	Display some of the patent presented in a hardcopy .How more case studies from textbooks also.	Nil.
7-25-2022 21:34:56	953619114038@ritrjpm.ac.in	S Syed Thowfeek	953619114038	4	5	5	4	5	5	Easy to learn IPR rights with suitable example	nothing
7-25-2022 22:26:23	953619114012@ritrjpm.ac.in	S Biju Danie	953619114012	5	5	5	5	5	5	Filing procedure done practically	Nothing
7-26-2022 6:11:02	953619114025@ritrjpm.ac.in	K Manoj Kumar	953619114025	5	5	5	5	5	5	Good teaching	No
			Class Average on a scale of 5	4.7	4.6	4.8	4.6	4.6	4.7		
			CO attainment on a scale of 3	2.82	2.76	2.88	2.76	2.76	2.82		

Signature of the Faculty Member

Signature of the HoD

GE8075 IPR Course Outcome End Survey AY 2021 - 22 (Even)

10 responses

Publish analytics

Your name? (in Capital letters)

10 responses

A.KANAGARAJ

VIJAY THIRUPATHI M

C.THANGA DINESH

Dineshkumar

Anithrajaseelan D

K.RAMKUMAR

SARAVANAKUMAR S

SYEDTHOWFEEK S

BIJU DANIE S

MANOJKUMAR.K

Register number?

10 responses

953619114302

953619114041

953619114039

953619114015

953619114001

953619114032

953619114034

953619114038

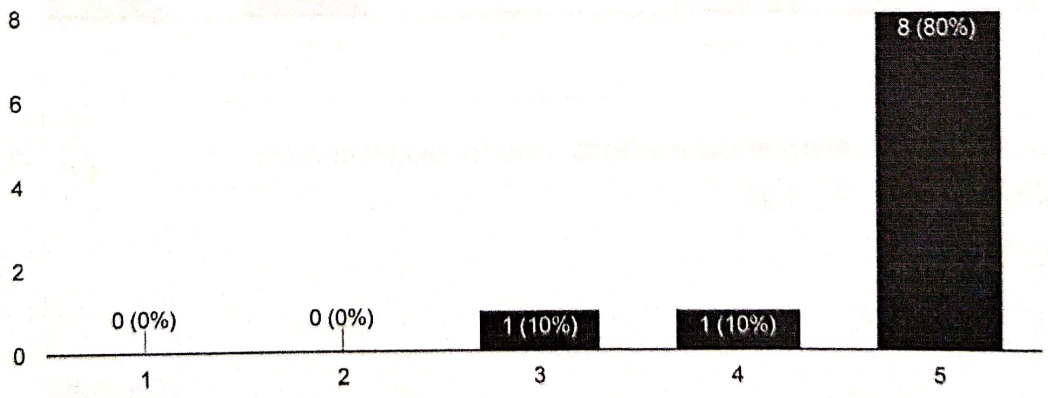
953619114012

953619114025

To what extent can you describe the concepts of various intellectual property rights? (1 - low ; 5 - high)

Copy

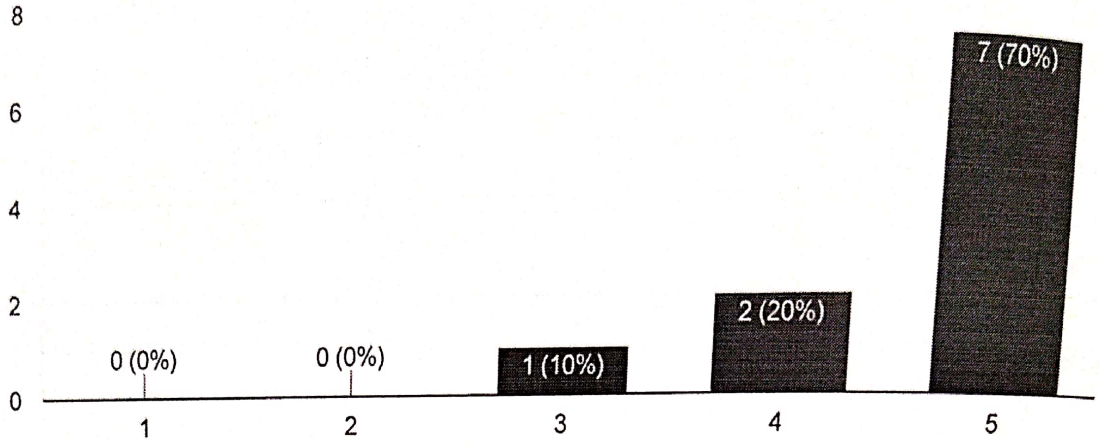
10 responses



Rate the level on which you will be able to illustrate the practical aspects of registration in India and abroad. (1 - low ; 5 - high)

Copy

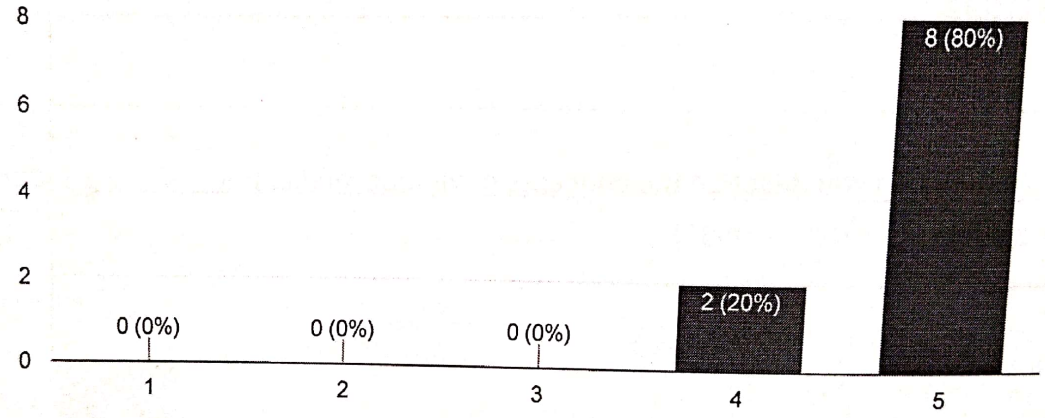
10 responses



How far could you explain the implications of agreements and legislations? (1 - low ; 5 - high)

Copy

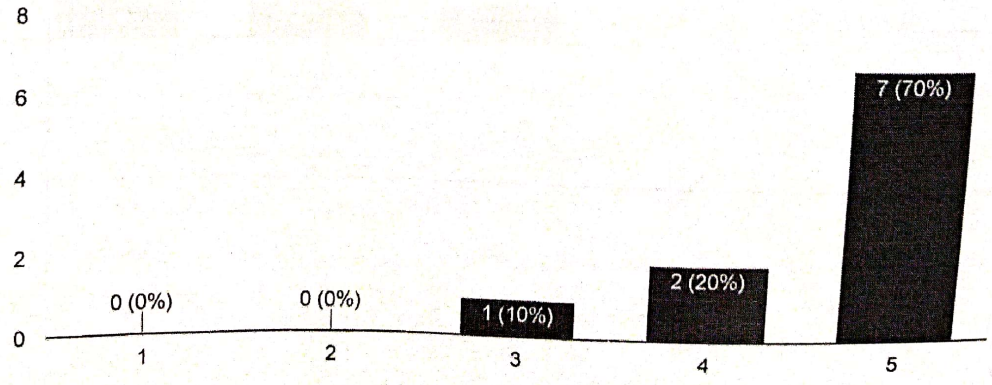
10 responses



Rate your ability to interpret the methods used for digital content protection. (1 - low ; 5 - high)

Copy

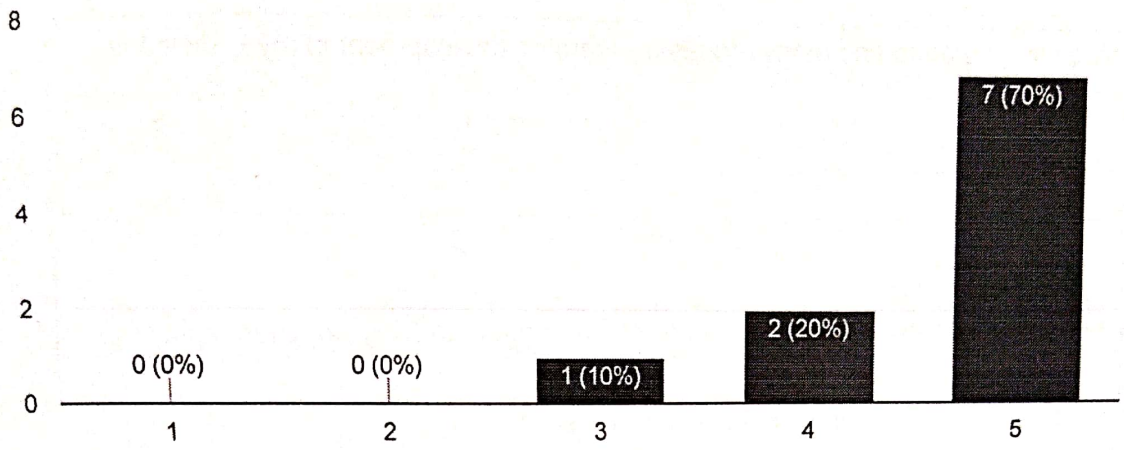
10 responses



The level on which you can Discuss the legal aspects governing IPR infringement is? (1 - low ; 5 - high)

Copy

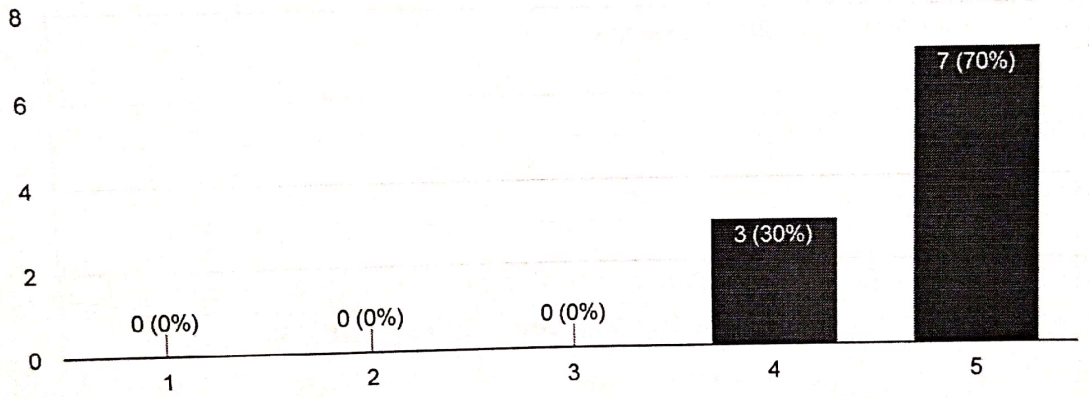
10 responses



Your capability to follow the procedure of Patent Landscape Analysis for a given set of patent journals is? (1 - low ; 5 - high)

Copy

10 responses



Positives about the teaching learning process of the course which can be carry forward for the next batch of students

10 responses

Teaching learning good and many processes learning development in my knowledge

Nil

Nill

Give more hands on excercise to the students (like patent drafting, copyright applying)

Usefulness on having activities during class hours

Awareness of IPR were taken by us and exploring lot of case study .The course is quit interesting at all.

Display some of the patent presented in a hardcopy .How more case studies from textbooks also.

Easy to learn IPR rights with suitable example

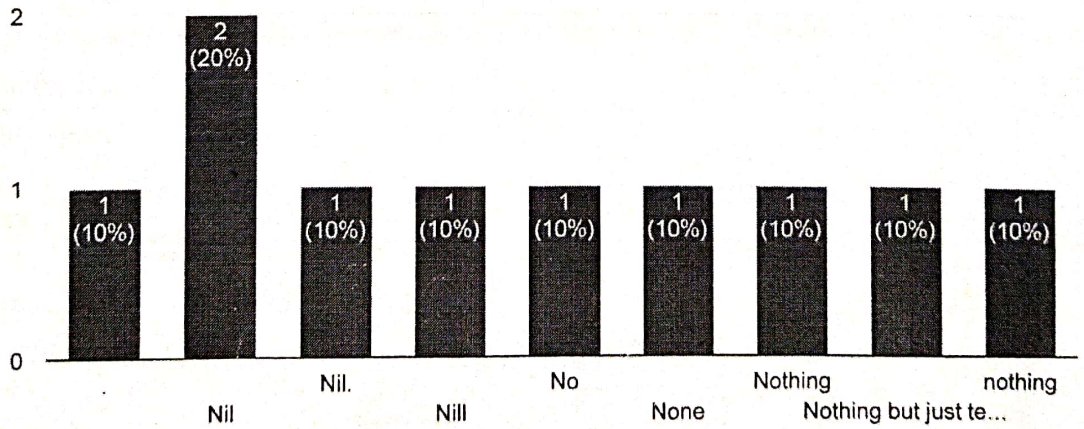
Filing procedure done practically

Good teaching

Share the negatives or scope for improvement in the teaching learning process which is to be rectified for the next batch of students

Copy

10 responses



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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:ARUN KUMAR R
Designation:AP/MECH
Experience in RIT:5 years, 10 months

		Teaching Effectiveness(40)				Maturity Level (30)				
SLNo	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	MG8591 - Principles of Management IV / VIII - MECH B Section	9.8	9.53	9.48	9.65	9.5	9.5	9.43	9.54	95.52

4522

2	GE8075 - Intellectual Property Rights III / VI - MECH A Section	10	10	10	9.67	10	10	10	9.89	99.34
3	GE8075 - Intellectual Property Rights III / VI - MECH B Section	9.57	9.43	9.29	9.29	9.57	9.43	9.43	9.43	94.3

Signature of Faculty

HoD

Principal

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 20692

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

Sixth/Eighth Semester

Aeronautical Engineering

GE 8075 – INTELLECTUAL PROPERTY RIGHTS

(Common to : Aerospace Engineering/Agriculture Engineering/Automobile Engineering/Biomedical Engineering/Civil Engineering/Computer Science and Engineering/Computer and Communication Engineering/Electrical and Electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Environmental Engineering/Geoinformatics Engineering/Industrial Engineering/Industrial Engineering and Management/Instrumentation and Control Engineering/Manufacturing Engineering/Marine Engineering/Material Science and Engineering/Mechanical Engineering/Mechanical Engineering (sandwich)/Mechanical and Automation Engineering/Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/Production Engineering/Robotics and Automation/Bio Technology/Chemical Engineering/Chemical and Electrochemical Engineering/Fashion Technology/Food Technology/Handloom and Textile Technology/Information Technology/Petrochemical Technology/Petroleum Engineering/ Plastic Technology/Polymer Technology/Textile Chemistry/Textile Technology)

(Regulations 2017)

Time : Three hours | Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Intellectual property.

2. Write short notes on the rights available to performer as per IPRs?

3. What is a patent? How it can be transferred?

4. Write briefly about trade secret.

5. What are all the rights covered by copyrights?

6. Write a short note on domain name.

7. "Protecting the visual design of object". Critique.

8. Write short notes on "Exclusive marketer of the variety".

9. Give two examples of unfair competition.

10. Define infringement.

PART B — (5 × 13 = 65 marks)

11. (a) Elaborate on the genesis of IPR in India.

Or

(b) Explain the need of IPR with suitable examples.

12. (a) Explain the process of getting patent with flowcharts.

Or

(b) Explain the registration of industrial in the engineering field.

13. (a) What is intellectual property and what is the role of WIPO?

Or

(b) Explain about TRIPS and outline how IPR plays a vital role for the same.

14. (a) Discuss about cyber content protection and cyber law in India.

Or

(b) Explain in detail about the IP management framework in detail.

15. (a) Illustrate the laws related to infringement.

Or

(b) Explain in detail the enforcement measures in IPR.

PART C — (1 × 15 = 15 marks)

16. (a) Generalize your views about the interaction between Ethics and Intellectual Property with a relevant example.

Or

(b) Critically evaluate how geographical indication impacts the macroeconomics level.

RAMCO INSTITUTE OF TECHNOLOGY

Academic Performance Monitoring

Academic Year : 2021 - 22 **Semester :** EVEN

Branch : Mechanical Engineering **Department :** Mechanical Engineering

Subject : GE8075 Intellectual Property Rights **Name of Faculty :** Mr.R.Arun Kumar, AP/Mech

Details of Students' performance in Internal Assessment Tests (For Theory Subjects only)

Internal Assessment Test	Date of Test	Overall Pass (%)*	Deviation from Quality Policy** (Yes/No)
I	29.04.22	88.89%	No
II	18.05.22	72.73%	Yes
III	11.06.22	81.81%	Yes
Improvement Test if any			

* For pass in each subject, the student has to score a minimum of 60%

** Deviation from Quality policy if the overall pass percentage is < 80% in IAT I, < 85% in IAT II and < 90% in IAT III.

Date : 18.06.22 Prepared by :

Corrective Action(s) planned in case of deviation and Target Date(s) for implementation

1. Students were given input for improving in IAT-III.
2. Students were addressed with the way to answer in end sem exam
3.

Date : 18.06.22 Proposed by : Approved by :

Verification of Corrective Action

Date : Verified by :

User: **ARUN KUMAR R** logout ROLE

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

HOME COURSE MARKS EMPLOYEE ACCOUNT

2021-2022/EVEN THIRD YEAR-MECH A
GE8075-Intellectual Property Rights

Cumulative Attendace Report from 07-03-2022 to 16-06-2022

S.No.	Register No.	Name	Total Hours	Absent	Attended	Percentage
1	953619114001	ANITH RAJASEELAN D	47	4	43	91.49
2	953619114038	SYEDTHOWFEEK S	47	9	38	80.85
3	953619114039	THANGA DINESH C	47	2	45	95.74
4	953619114302	KANAGARAJ A	47	0	47	100

Signature of Faculty

HoD

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

ASSESSMENT OF QUALITY OF EVALUATION

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering
Course Code & Title : GE8075 Intellectual Property Rights
Name of the Faculty member : Mr.R.Arun Kumar, AP/Mechanical
Name of the Test : Internal Assessment Test III

Register Number of Sample Answer sheets:

1. 953619114025
2. 953619114032
3. 953619114038
4.
5.

Sl. No.	Criteria	Yes/No
1.	Has the faculty member evaluated the answer scripts as per the scheme of evaluation?	Yes
2.	Are the marks awarded in the answer paper correctly entered in the front page?	Yes
3.	Has the faculty member awarded marks for subdivision questions properly?	Yes
4.	Has the faculty member highlighted the mistakes done by the students in the particular question?	Yes
5.	Has the faculty member evaluated the papers within the stipulated time specified by the Exam Cell?	Yes
6.	Is the evaluation liberal, moderate or strict? (specify)	Moderate

Remarks if any:

Significant contribution in part A is required from the Students. Most of the students attended 13 (6) Question in Part B.

HOD/Incharge

RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

IAT3 - 2021-2022/EVEN THIRD YEAR-MECH A
GE8075-Intellectual Property Rights

Verify the Marks that you have Entered
-1 Indicates Absent

S.No.	Register No.	Name	Marks
1	953619114001	ANITH RAJASEELAN D	70
2	953619114038	SYEDTHOWFEEK S	20
3	953619114039	THANGA DINESH C	70
4	953619114302	KANAGARAJ A	62

No. of Students appeared (n)	4	No. of Students absent (a)	0
No. of Students Scored > 60 marks (w) / Percentage (w/n)*100)			3 / 75%
No. of Students Passed (scored marks ≥ 60 out of 100) (x) / Percentage (x/n)*100			3 / 75%
No. of Students Scored marks < 60 and > 50 out of 100 (y)			0
No. of Students Scored ≥ 50 marks (z) / Percentage (z/n)*100			3 / 75%
No. of Students failed (scored marks < 50 out of 100) / Percentage			1 / 25%
Lowest Marks: 20	Average Marks: 55.5	Highest Marks: 70	
Attainment Level*		CO4	2
Attainment Level*		CO5	0
Attainment Level*		Test Attainment: 2	

Number of Students Scored Marks in Various Ranges:
<50: 1; 50-60: 0; 61-70: 3; 71-80: 0; 81-90: 0; 91-100: 0

*Attainment Level 1 : 60 % Students Scoring More than 60% of Marks;
Attainment Level 2 : 70 % Students Scoring More than 60% of Marks;
Attainment Level 3 : 80 % Students Scoring More than 60% of Marks

Signature of Faculty

HOD

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IAT3 - 2021-2022/EVEN THIRD YEAR-MECH B
GE8075-Intellectual Property Rights

Verify the Marks that you have Entered

-1 Indicates Absent

S.No.	Register No.	Name	Marks
1	953619114012	BIJU DANIE S	62
2	953619114015	DINESHKUMAR G	61
3	953619114025	MANOJKUMAR K	69
4	953619114032	RAMKUMAR K	82
5	953619114034	SARAVANAKUMAR S	68
6	953619114041	VIJAY THIRUPATHI M	36
7	953619114305	MOHAMED ARSATH S	21

No. of Students appeared (n)	7	No. of Students absent (a)	0
No. of Students Scored > 60 marks (w) / Percentage (w/n)*100			5 / 71.43%
No. of Students Passed (scored marks ≥ 60 out of 100) (x) / Percentage (x/n)*100			5 / 71.43%
No. of Students Scored marks < 60 and > 50 out of 100 (y)			0
No. of Students Scored ≥ 50 marks (z) / Percentage (z/n)*100			5 / 71.43%
No. of Students failed (scored marks < 50 out of 100) / Percentage			2 / 28.57%
Lowest Marks: 21	Average Marks: 57	Highest Marks: 82	
Attainment Level*		CO4	2
Attainment Level*		CO5	0
Attainment Level*		Test Attainment: 2	

Number of Students Scored Marks in Various Ranges:
<50: 2; 50-60: 0; 61-70: 4; 71-80: 0; 81-90: 1; 91-100: 0

*Attainment Level 1 : 60 % Students Scoring More than 60% of Marks;
Attainment Level 2 : 70 % Students Scoring More than 60% of Marks;
Attainment Level 3 : 80 % Students Scoring More than 60% of Marks

Signature of Faculty

HOD

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year: 2021-22 (Even Semester)
Marks Statement for Internal Assessment Test III

Semester/Class: VI Semester B.E. Mechanical Engineering
Name of Faculty member: Mr.R.Arun Kumar, AP/Mechanical
Max. Marks: 100
Date of Examination: 13.06.2022
Subject Code/Name of Subject: GE8075 Intellectual Property Rights

Sl. No.	Register No.	Name of the Student	Part A											Part B													Part C			Marks out of 100
			CO4	CO4	CO4	CO4	CO4	CO5	CO5	CO5	CO5	CO5		CO4	CO4	CO4	CO4	CO4	CO5	CO4	CO5	CO5	CO5	CO5	CO5		CO4	CO5		
			1	2	3	4	5	6	7	8	9	10	TOTAL	11(a)	11(b)	12(a)	12(b)	13a(i)	13a(ii)	13b(i)	13b(ii)	14(a)	14(b)	15(a)	15(b)	Total	16(a)	16(b)	TOTAL	
1	953619114001	ANITH RAJASEELAN D	1	0	1.5	1.5		0.5	0	0.5	1	0	6	11		12				6	5		5	12		51	13		13	70
2	953619114038	SYEDTHOWFEEK S	1		1	2		2	2	2	2		12		8					0	0					8	0		0	20
3	953619114039	THANGA DINESH C	1.5	1.5	1.5	1.5		1	1.5	1.5	1.5	1	12.5		7		11			6	4	6.5			11	45.5		12	12	70
4	953619114302	KANAGARAJ A	1.5	1.5	1	1	0	0	0	1	0	0	6	8			8			4.5	4.5		8	11		44	12		12	62
5	953619114012	BIJU DANIE S	1.5	2	1.5	0.5		2	1.5	1.5	1.5	1.5	13.5	12.5			12			6	2	4			12	48.5	0		0	62
6	953619114015	DINESHKUMAR G	1.5	1.5	2	1.5	0	0.5	1	1.5	1	1.5	12	11			12			6					12	41		8	8	61
7	953619114025	MANOJKUMAR K	1	1	1.5	1		0		1	1.5		7	11			11			5.5	3.5		10	11		52		10	10	69
8	953619114032	RAMKKUMAR K	1.5	1.5	2	1.5	0	1.5	1.5	2	2	1.5	15	11			12			6	4	10			11	54	13		13	82
9	953619114034	SARAVANAKUMAR S	1	1	1.5	1.5		1	1.5	1.5	1.5	1	11.5		6.5	7.5				6	5	8			10.5	43.5		13	13	68
10	953619114041	VIJAY THIRUPATHI M	1	1	1.5	1.5		0		1			6		8	10				5			7			30		0	0	36
11	953619114305	MOHAMED ARSATH S	2	1	1.5	0	1			0			5.5				0			3.5	0					3.5		12	12	21

No. of Students appeared (n)	11
No. of Students absent (a)	0
No. of Students passed (scored marks > 60 out of 100) (w)	8
Pass(%) with > 60	72.73
No. of Students passed (scored marks ≥ 60 out of 100) (x)	8
Pass (%) with 60% as pass mark = (x/n)*100	72.73%
No. of Students scored marks < 60 and > 50 out of 100 (y)	0
No. of Students Scored ≥ 50 marks (z)	8
Pass (%) with 50% as pass mark = (z/n)*100	72.73%
No. of Students failed (scored marks < 50 out of 100) / Percentage	3 / 27.27%
Average mark	56.45454545

<50: 3; 50-60: 0; 61-70: 7; 71-80: 0; 81-90: 1; 91-100: 0

Signature of the valuer with date

HOD

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year 2021 – 2022 (Even Semester)

INTERNAL ASSESSMENT TEST III
ANSWER KEY & SCHEME OF EVALUATION

Subject Code & Title : GE8075 Intellectual Property Rights
Class and Branch : VI Semester B.E. Mechanical Engineering
Name of the Faculty Member : Mr.R.Arun Kumar, AP/Mechanical ***(External QP)***

PART – A

1. Define unfair competition. ***(2 Marks)***

"Unfair competition" is a term that applies to dishonest or fraudulent rivalry in trade and commerce

2. How cyber-squatting differs from cyber-stalking ***(2 Marks)***

Cyber squatting	Cyber stalking
Cybersquatting means registering, trafficking, or using an Internet domain name with bad faith intent to profit from the goodwill of a trademark belonging to someone else	Cyberstalking is the use of the Internet or other electronic means to stalk or harass an individual, group, or organization. It may include false accusations, defamation, slander and libel.

3. What is meant by digital innovation? ***(2 Marks)***

Digital innovation means making rapid change by using digital technology to enhance services, traditional models, products and processes

4. Distinguish e-mail bombing and web defacement. ***(2 Marks)***

e-mail Bombing	Defacement
In Internet usage, an email bomb is a form of net abuse consisting of sending large volumes of email to an address in an attempt to overflow the mailbox	Website defacement is an attack on a website that changes the visual appearance of a website or a web page. These are typically the work of defacers, who break into a web server and replace the hosted website with one of their own

5. What is meant by DRM? ***(2 Marks)***

Digital Rights Management (DRM) technologies (also known as Electronic Rights Management Systems) ensure copyright through identifying and protecting the content, controlling access of the work, protecting the integrity of the work and ensuring payment for the access.

6. List two examples of criminal offence in IPR. ***(2 Marks)***

- Copyright infringement
- Trademark infringement

7. Compare plaintiff and infringer. *(2 Marks)*

Plaintiff	Infringer
Person/firm filing case against an infringement is called as plaintiff	Person/firm facing case against an infringement is called as infringer

8. What is meant by infringement of IPR? Give an example for it. *(2 Marks)*

In general terms, IP infringement is any breach of intellectual property rights. Examples of an IP infringement are "counterfeiting" and "piracy."

9. Define the term infringement of IPR with example. *(2 Marks)*

In general terms, IP infringement is any breach of intellectual property rights. Examples of an IP infringement are "counterfeiting" and "piracy."

10. Ignorance cannot be considered as an excuse of infringement. Justify. *(2 Marks)*

Intellectual property laws distinguish deliberate theft and innocent infringement. Different rules apply to different types of intellectual property.

PART – B

11a. "Unfair practices of business generally occur due to the mal practices of patent and IPR". Discuss with suitable examples.

Definition of unfair practices – *(1 Mark)*

Any patent infringement case study can be written – 2 numbers *(6 marks each)*

11b. Explain the most important issue related to intellectual property for an online content publisher.

Details about copyright infringement and then details of other suitable cyber-crimes – *(7 Marks)*

- Cyber Defamation *(6 marks)*
- Fake Social Media Profiles
- Unauthorized Access
- Web defacement
- Cyber Squatting
- Cyber Stalking

12a. Describe the protection against unfair competition.

- Digital Rights Management – *(4 marks)*
- Technical Protection Measures – *(4 marks)*
- Cryptography, Digital Watermark Technology, Digital Signature Technology, Electronic Marking, Security Features of Operating System – *(5 marks)*

12b. Discuss in detail about Digital Content Protection.

- Cryptography – *(2 marks)*
- Digital Watermark Technology – *(2 marks)*
- Digital Signature Technology – *(3 marks)*
- Electronic Marking – *(3 marks)*
- Security Features of Operating System – *(3 marks)*

13a (i). Elaborate Cyber Property Rights.

Discussion on digital content protection – *(7 marks)*

13a (ii). Detail the remedy offered for infringement of a TM.

Criminal remedy – (6 marks)

i. Damages
ii. Imprisonment

13b (i). Detail Cyber Crime with example

Definition: Cybercrime or computer-oriented crime, is a crime that involves a computer & a network. – *(2 marks)*

Examples: Cyber defamation, online matrimonial scams, Credit card fraudulent, Unauthorized access. – *(4 marks)*

13b (ii). Detail the remedy offered for infringement of a copyright.

Criminal remedy – (7 marks)

i. Damages
ii. Imprisonment

14a. What would happen if India applied stricter intellectual property protections, beyond existing Intellectual property protections and beyond what is required by international trade rules?

- Existing IP system and its impact – *(3 marks)*
- Changes expected to be implemented – *(3 marks)*
- Students' view – *(7 marks)*

14b. Express any four ways of enforcement measures in IPR.

- Definition for enforcement – *(1 Mark each)*
- Any four remedial measures among the following – *(3 Marks each)*
  - ✓ Injunction
  - ✓ Anton Pillar orders or Ex-parte orders
  - ✓ Orders for deliver up/surrender or seize and destroy
  - ✓ An award of costs and damages
  - ✓ Tracing orders
  - ✓ Imprisonment
  - ✓ Damages and imprisonment

15a. Discuss in detail various civil & criminal remedies for IPR infringement.

Civil remedies – (10 Marks)

- Injunction
- Anton Pillar orders or Ex-parte orders
- Orders for deliver up/surrender or seize and destroy
- An award of costs and damages
- Tracing orders

Criminal remedies – (3 Marks)

- Copyright aspects
- Trademark aspects

15b. Explain the infringement of any IP with case study and remedy available in law

- Definition – *(1 Mark)*
- Case Study – *(4 Marks)*
- Remedy – *(3 Marks)*

PART – C

16a. A researcher regularly writes short articles and publishes them on her blog using Warwick Blogs. The articles usually attempt to make some connection between her work on the history of the Middle East and current events in the news. The blog becomes a popular read for many specialists in the area. After some time, the lecturer is contacted by a friend who asks how she managed to get her work published on the web site of a slightly extreme Islamic student's organization in France. She is baffled. On looking at the URL, she finds a blog like web site, mostly in Arabic, with one of her articles sitting in the middle of the page, surrounded on all sides by Arabic, of which she can decipher nothing. The article is about the Arab Revolt of 1916, and the coordinated attacks on trains that were an essential part of it. She is a little concerned, as she has absolutely no idea what kind of context her work is being presented in. It is attributed to her, with a URL link to her blog, but it seems to be a very different article when presented out of its original context. Question: Has anything illegal been done? How would you respond?

- Student can propose his / her own suggestions based on the copyrights issue.
- Digital Rights Management discussion

Signature of Faculty Member **Head of the Department**

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

ASSESSMENT OF QUESTION PAPER QUALITY

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering
Course Code & Title : GE8075 Intellectual Property Rights
Name of the Faculty member : Mr.R.Arun Kumar. AP/Mechanical
Name of the Test : Internal Assessment Test III

Sl. No.	Criteria	Yes/No
1.	Does the question paper adhere to the coverage specified in the Lecture plan?	Yes
2.	Is information presented in the correct sequence/order as per the ISO format?	Yes
3.	Is the language clear and unambiguous with proper action verbs recommended in Bloom's Taxonomy?	Yes
4.	Do the questions reflect appropriate levels of knowledge and skill as per Bloom's Taxonomy?	Yes
5.	Are spelling, grammar and punctuation correct and consistent?	Yes
6.	Is the standard of the questions in line with the questions asked in the previous years?	Yes
7.	Are marks, course outcome number and its level of knowledge in cognitive domain correctly displayed?	Yes
8.	Is the allotment of marks for each question justified properly?	Yes
9.	Whether two question out of 5 in Part A reflect higher order levels in Bloom's Taxonomy?	Yes
10.	Whether 1 question out of 3 of either or type in Part B is of higher order level of Blooms Taxonomy?	Yes.
11.	Is there a repetition of any question in the question paper sets?	Yes
12.	Any question included in Question paper is taken from online course content/NPTEL video course content? If yes specify the Question no.	

Remarks if any:

In Part A Question No. 8 & 9 both are similar
Typo error can be eliminated [CO1 & CO2 should be written as CO4 & CO5]

Mark allocation for 13 b(i) & (ii) should be six and seven

HOD/Incharge

Reg. No.												

RAMCO INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
INTERNAL ASSESSMENT TEST – III
GE8075 INTELLECTUAL PROPERTY RIGHTS

Semester and Branch: VI Semester B.E. CSE & EEE
Max. Marks: 100

Date: 11.06.2022
Time: 3 hours

PART-A Answer ALL Questions (10x2=20 Marks)

1. Define unfair competition. [CO4, L1]
2. Differentiate Cyber-squatting and cyber-stalking. [CO4, L2]
3. What is meant by digital innovation? [CO4, L1]
4. Distinguish e-mail bombing and web defacement. [CO4, L2]
5. What is meant by DRM? [CO4, L1]
6. List few examples of criminal offence in IPR. [CO5, L1]
7. Compare plaintiff and infringer. [CO5, L2]
8. What is meant by infringement of IPR? Give an example for it. [CO5, L1]
9. Define the term infringement of IPR with an example. [CO5, L1]
10. Ignorance cannot be considered as an excuse of infringement. Justify. [CO5, L2]

PART-B Answer ALL Questions (5x13= 65 Marks)

11a. "Unfair practices of business generally occur due to the mal practices of patent and IPR". Discuss with suitable examples. [CO4, L3, PI: 6.2.1] (13 Marks)

OR

11b. Explain the most important issue related to intellectual property for an online content publisher. [CO4, L3, PI: 6.2.1] (13 Marks)

12a. Describe the protection against unfair competition. [CO4, L2, PI: 8.2.1] (13 Marks)

OR

12b. Discuss in detail about Digital Content Protection. [CO4, L2, PI: 8.2.1]

13a (i). Elaborate Cyber Property Rights. [CO4, L2, PI: 6.2.1] (7 Marks)
13a (ii). Detail the remedy offered for infringement of a TM. [CO5, L2, PI: 8.2.1] (6 Marks)

OR

13b (i). Detail Cyber Crime with eample. [CO4, L2, PI: 6.2.1] (7 Marks)
13b (i). Detail the remedy offered for infringement of a copyright. [CO5, L2, PI: 8.2.1] (6 Marks)

14a. What would happen if India applied stricter intellectual property protections, beyond existing intellectual property protections and beyond what is required by international trade rules? [CO5, L3, PI: 6.2.1] (13 Marks)

OR

14b. Express any four ways of enforcement measures in IPR. [CO5, L3, PI: 6.2.1] (13 Marks)

15a. Discuss in detail various civil & criminal remedies for IPR infringement. [CO5, L2, PI: 8.2.1] (13 Marks)

OR

15b. Explain the infringement of any IP with case study and remedy available in law. [CO5, L2, PI: 8.2.1] (13 Marks)

PART-C Answer ALL Questions (1x15= 15 Marks)

(It is compulsory Question, if it is case study or comprehensive type)

Reg. No.												

16a. A researcher regularly writes short articles and publishes them on her blog using Warwick Blogs. The articles usually attempt to make some connection between her work on the history of the Middle East and current events in the news. The blog becomes a popular read for many specialists in the area. After some time, the lecturer is contacted by a friend who asks how she managed to get her work published on the web site of a slightly extreme Islamic student's organisation in France. She is baffled. On looking at the URL, she finds a blog like web site, mostly in Arabic, with one of her articles sitting in the middle of the page, surrounded on all sides by Arabic, of which she can decipher nothing. The article is about the Arab Revolt of 1916, and the coordinated attacks on trains that were an essential part of it. She is a little concerned, as she has absolutely no idea what kind of context her work is being presented in. It is attributed to her, with a URL link to her blog, but it seems to be a very different article when presented out of its original context.
Question : Has anything illegal been done? How would you respond?

[CO4, L3, PI: 6.2.1] (15 Marks)

OR

16b. "Protecting the created intellectuality is a challenge now a days, Because of the cloning of one's idea is easier than the new creation" – How this statement is realistic in practicing business?

[CO5, L3, PI: 8.2.1] (15 Marks)

CO1: The students will be able to impart knowledge on digital products and laws in cyber space.
CO2: The students will be able to study the infringement and enforcement measures in IPR.
L1: Remember; L2: Understand; L3: Apply

*****

C2R05 (10)
III CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

ASSESSMENT OF QUALITY OF EVALUATION

Degree, Semester & Branch	: VI Semester B.E. Mechanical Engineering
Course Code & Title	: GE8075 Intellectual Property Rights
Name of the Faculty member	: Mr.R.Arun Kumar, AP/Mechanical
Name of the Test	: Internal Assessment Test II

Register Number of Sample Answer sheets:

1. 953619114039
2. 953619114015
3. 953619114034
4. 953619114305
5.

Sl. No.	Criteria	Yes/No
1.	Has the faculty member evaluated the answer scripts as per the scheme of evaluation?	Yes
2.	Are the marks awarded in the answer paper correctly entered in the front page?	Yes
3.	Has the faculty member awarded marks for subdivision questions properly?	Yes
4.	Has the faculty member highlighted the mistakes done by the students in the particular question?	Yes
5.	Has the faculty member evaluated the papers within the stipulated time specified by the Exam Cell?	Yes
6.	Is the evaluation liberal, moderate or strict? (specify)	Moderate

Remarks if any:
- Students should concentrate on Part A qs & Ans.
- Detailed description of answers for Part C is appreciated.

24/5/22

HOD/Incharge

24/5/22

RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering

Academic Year 2021 – 22 (Even Semester)

ASSIGNMENT ON PATENT LANDSCAPE ANALYSIS

Course Code & Title : GE8075 & Intellectual Property Rights

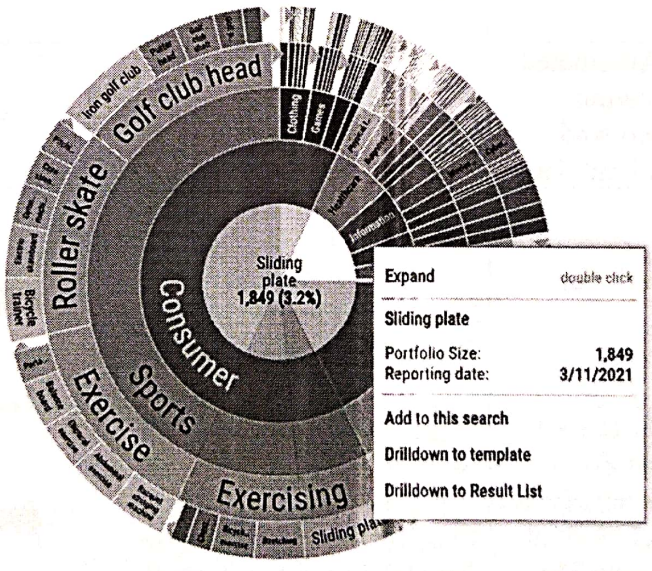
Assignment No. : 03

Addressed Course Outcome: CO6

Submitted by : **K.RAMKUMAR**

Submitted to : Mr.R.Arun Kumar, AP/Mech

Class & Section : **3rd year Mech "B"**



https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.lexisnexisip.com%2Fknowledge-center%2Fpatent-landscape-analysis%2F&psig=AOvVaw3xeTCVCQg0a7W5gSP0N29T&ust=1654740659243000&source=images&cd=vfe&ved=0CAwQjRxqFwoTCLjotcDjnPgCFQAAAAAdAAAAABAD

Sl. No.	Title Of The Invention	Field Of Invention	International Patent Classification Code	Sub Classification Code
1.	Secondary Battery And Apparatus Containing The Secondary Battery	Enabling Technologies; Technologies With A Potential Or Indirect Contribution To Ghg Emissions Mitigation	Y02E	Y02E60/10
2.	Secondary Battery, Process For Preparing The Same And Apparatus Containing The Secondary Battery	Enabling Technologies; Technologies With A Potential Or Indirect Contribution To Ghg Emissions Mitigation	Y02E	Y02E60/10
3.	Composite Graphite Material And Method For Preparation Thereof, Secondary Battery, And Apparatus	-	-	-
4.	Chassis Mounted Desilting Apparatus	-	-	-
5.	A Multilevel Marketing Marketplace System And A Method To Operate The Same	Performing Operations; Transporting	-	-
6.	: Dal-Spice Premix For Instant Preparation Of Dal Composition	Foods Or Foodstuffs; Treatment Thereof, Not Covered By Other Classes		
7.	: System For Automated User Authentication Based On Video And Audio Feed In Real-Time	-	-	-
8.	Insulating Sheath For Electric Poles	Apparatus For Treating Combustion-Air, Fuel, Or Fuel-Air Mixture, By Catalysts, Electric Means, Magnetism, Rays, Sound Waves	F02M	F02M27/04
9.	A Light Weight Impact Resitance, Blast Proof And Fire Resistant Hybrid Composite And Method For Manufacturing The Same	Apparatus For Treating Combustion-Air, Fuel, Or Fuel-Air Mixture, By Catalysts, Electric Means, Magnetism, Rays, Sound Waves	F02M	F02M27/06
10.	An Improved System And Method For Generating Electrical Energy From Air Hydropower	Generation Of Electric Power By Conversion Of Infra-Red Radiation, Visible Light Or Ultraviolet Light, E.G. Using Photovoltaic [Pv] Modules	H02S	H02S10/00

11.	Fabric Construction Using Minor Fibers For Sound Absorbing Materials	**Methods Or Devices For Transmitting, Conducting Or Directing Sound In General; Methods Or Devices For Protecting Against, Or For Damping, Noise Or Other Acoustic Waves In General**	**G10K**	**G10K11/002**
12.	A Sparkling Cold Press Juice	**Machines Or Apparatus For Extracting Juice (**	**A23N**	**A23N1/003**
13.	An Improved Injection Frame For Injection Molding Machine	**Injection Moulding,**	**B29C**	**B29C45/0001**
14.	A Holder For An Air Conditioning Unit	-	-	-
15.	A Ws/Cloud Data Performance Improved Using Machine Learning	**Network Arrangements Or Protocols For Supporting Network Services Or Applications**	**H04L**	**H04L67/1004**

Reference: *https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=/*

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

ASSIGNMENT SHEET

Degree, Semester & Branch: VI Semester B.E. Mechanical Engineering
Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty member: Mr.R.Arun Kumar, AP/Mechanical
Assignment No.: III **Date:** 10.06.2022

Questions:

1. Do 'Patent Landscape Analysis' for the allotted Indian patent applications with respect to the 'International Patent Classification (IPC) Code'. The application details are available in the patent journal issue number 22/2022. [CO6, L3].

Sl. No.	Name of the Student	Allotted applications
1.	Anith Rajaseelan D	Page 8 to 22
2.	Syed Thowfeek S	Page 23 to 37
3.	Thanga Dinesh C	Page 38 to 52
4.	Kanagaraj A	Page 53 to 67
5.	Biju Danie S	Page 68 to 82
6.	Dinesh Kumar G	Page 83 to 97
7.	Manoj Kumar K	Page 98 to 112
8.	Ram Kumar K	Page 113 to 127
9.	Saravan Kumar S	Page 128 to 142
10.	Vijay Thirupathi M	Page 143 to 157
11.	Mohammed Arsath S	Page 158 to 172

Use the following Espacenet link for **identifying** suitable index and classification subclasses.
https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=/

Rubrics for evaluation assignment

Criteria	Ratings			Marks
Timely Submission	***Excellent*** Submitting on or before time **(3 marks)**	***Satisfactory*** Submitting within 3 days from deadline **(2 marks)**	***Need Improvement*** Submitting after 3 days from deadline **(1 mark)**	3
Citation	***Excellent*** Reference sources are properly cited **(2 marks)**	***Good*** Reference sources are partially cited **(1 mark)**	***Unsatisfactory*** No proper citation **(0 mark)**	2
Content of the assignment	***Excellent*** All the classes and subclasses are properly classified **(10 marks)**	***Satisfactory*** Subclasses are not properly identified **(5 to 9 marks)**	***Need Improvement*** Classes as well as subclasses are not properly identified **(1 to 4 marks)**	10
Presentation	***Excellent*** Uniform font style and size is followed **(5 marks)**		***Need Improvement*** Alignment, font size and style are not uniform **(1 to 4 marks)**	5
			Total Marks	***20***

CO – PO Correlation

CO	PO5	PO8	PO9	PO10	PO12
CO6	2 (Moderate)	3 (High)	2 (Moderate)	3 (High)	3 (High)

PO	PO5	PO8	PO9	PO10	PO12
Outcome	Modern Tool Usage	Ethics	Individual and Team Work	Communication	Life-long learning
Justification	Students will be using the IPC code in Patent Scope website for patent landscape analysis. Hence it is mapped at level 2	Students will submit an assignment in which they will acknowledge the source they referred, elimination of copying among students is also ensured and the same will be given weightage in marks. So, the CO is mapped at level 3	Students will prepare the assignment as An individual in which they respect the values and opinion of each other and hence the PO is mapped at level 2	Students will be submitting assignment in which they need to interpret the data and submit a well-structured document as assignment. So, the course outcome is mapped at level 3	Students will source and refer few credible sources of information for preparing the assignment and learn to do a landscape analysis in a cluster of patent applications which impacts on the self-learning and hence the CO is mapped at level 3

CO6: Student will be able to follow the procedure of Patent Landscape Analysis for a given set of patent journals

L3: Apply

10/06/22

Signature of the Faculty member

HOD

GE8075-INTELLECTUAL PROPERITARY RIGHTS

ASSIGNMENT-2

(A write up report for online course

'DL177E21S1 e-Tutorial on Patent Information ')

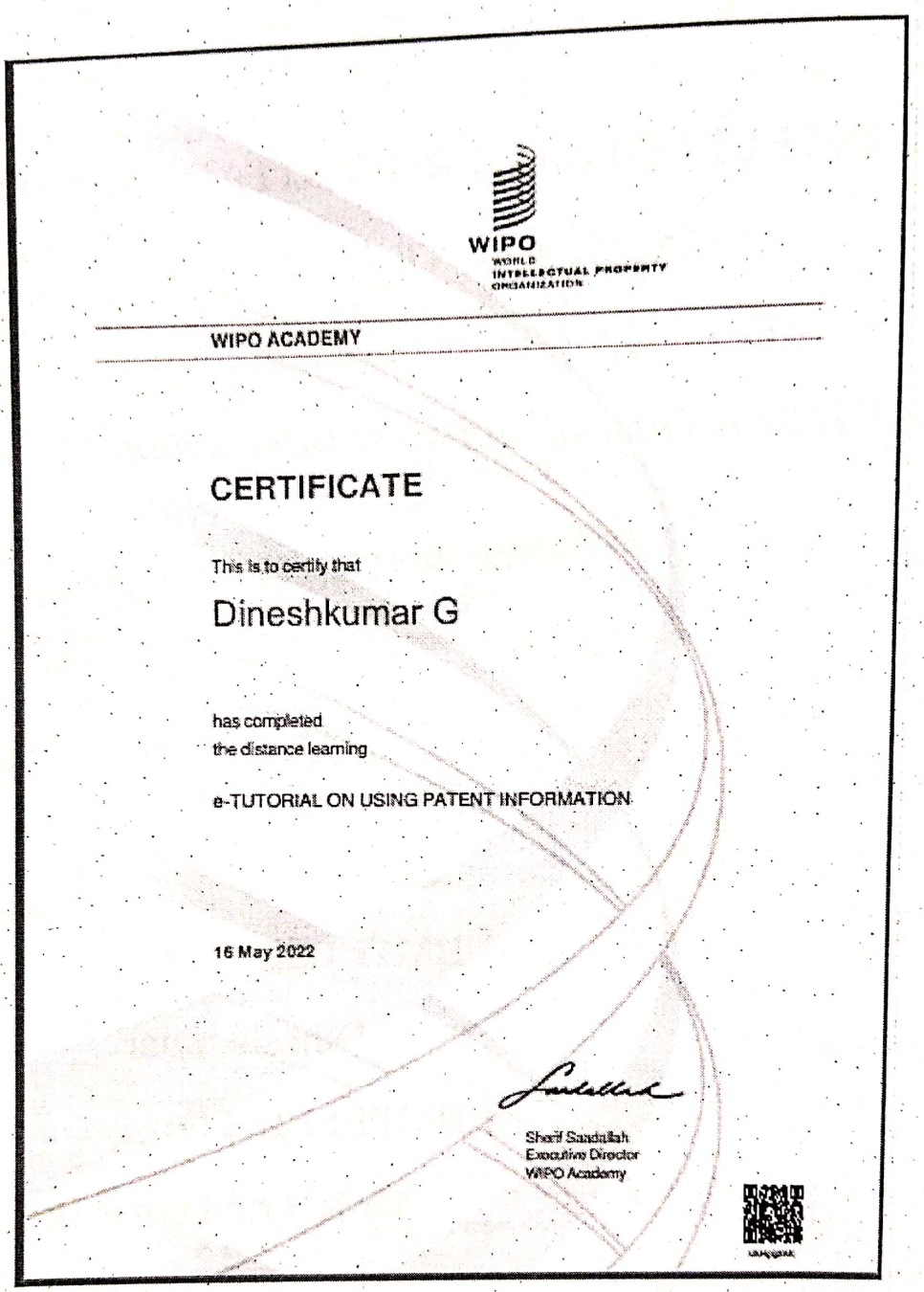
SUBMITTED BY:

G.Dineshkumar

SUBMITTED TO:

Mr.R.Arunkumar.B.E,M.E.

AP/MECH



WIPO
WORLD INTELLECTUAL PROPERTY ORGANIZATION

WIPO ACADEMY

CERTIFICATE

This is to certify that

Dineshkumar G

has completed
the distance learning

e-TUTORIAL ON USING PATENT INFORMATION

16 May 2022

Sherif Sandallah
Executive Director
WIPO Academy

Online course certificate

Patent basics:

Patent basics give a brief knowledge about why patents are important and how its helps to the inventor and how its give the the monetary benefit to the inventor .its also gives the brief knowledge about what are the steps involved in patent granting and publication process.its also have what are the terms required for patent application.its also describes the uses and importance of citations in a patent documents.

Before I pursue this course I don't know about the term "patent families".after learing this course I have gather some idea about patent families.

Patent search and retrival :

Patent search give a brief knowledge about why patent search is need for research students ,business man,companies,R&D section of a company.italso gives a knowledge about what are the stragies used to do a patent search and step by step procedure to doing a patent search and what are chellanges we have to face in patent searching .

Its also give the brief knowledge about patent search in biotechnology and chemistry like what doing a patent search in biosequences and chemical search and what are the challenges we have to face during biotechnological search

Patent analysis:

Patent analysis give a brief knowledge about,Those who are need to do a patent analysisand when we need to do a patent analysis. What are the content we need to check in the patent documents.it gives the idea about validity of patent .how we can solve the infringement challenge.it also gives a knowledge about what are the potential challenges to your patents.

(https://canvas.instructure.com/courses/453 2/12 Graded 19.5 / 20 (98%) Average 3/12

Arun Kumar R View Rubric

953619114015@ritrjpm.ac.in

Rubrics for Assignment II

Criteria	Ratings	
Certificate of completion (PI: 12.1.1 & 12.3.1)	**Excellent** High appreciation for your interest and commitment towards learning the course & expanding your knowledge **Comments** Good efforts Dinesh	13 / 13 pts
One page write-up (PI: 10.1.1 & 10.1.2)	**Good** Impressive and clearly represents your knowledge of learning in all aspects with good presentation having a front page **Comments** Good efforts Dinesh: The write-up expresses your learning	3 / 3 pts
Plagiarism (PI: 8.2.1)	**Good** Haven't copied from other student's one page write up content **Comments** Appreciable efforts	2 / 2 pts
Presentation (PI: 10.1.1 & 10.1.2)	**Good** Content is presented with good alignment, uniform font style and size and with a front page explaining the details of assignment **Comments** Your presentation had improved when compared to the previous submission. Keep up the efforts	2 / 2 pts

Total Points: 20

Assignment Comments

Dear Dinesh,
Excellent improvement when compared to your previous submission

× (javascript:void 0;)

Arun Kumar R, May 24 at 11:27am

Add a Comment

Submit

Reassign Assignment

Download Submission Comments

RAMCO INSTITUTE OF TECHNOLOGY

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Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)
Students' Categorization - Phase III

Degree, Semester & Branch: VI Semester B.E. Mechanical Engineering
Course Code & Title: GE8075 Intellectual Property Rights
Name of the faculty member: Mr.R.Arun Kumar, AP/Mechanical

Sl. No.	Register. No.	Name of the Student	% of Attendance during Phase II (10 hours)	Weightage based on Phase II rubrics (4 Marks)	Assignment II (20 Marks)	Weightage based on Phase II rubrics (6 Marks)	Score in IAT I (100 marks)	Weightage based on Phase III rubrics (5 Marks)	Score in IAT II (100 marks)	Weightage based on Phase III rubrics (10 Marks)	Overall Score (25 Marks) Rounded of	Category*	Phase II Category	Phase I Category
1.	953619114001	Anith Rajaseelan D	100	4	16	4.8	66	3.3	64	6.4	19	A	A	B
2.	953619114038	Syedthowfeek S	90	3.6	19	5.7	AB	0	80	8	17	A	B	B
3.	953619114039	Thanga Dinesh C	100	4	19	5.7	64	3.2	64	6.4	19	A	A	A
4.	953619114302	Kanagaraj A	100	4	15	4.5	62	3.1	62	6.2	18	A	A	A
5.	953619114012	Biju Danie S	100	4	17	5.1	70	3.5	62	6.2	19	A	A	A
6.	953619114015	Dineshkumar G	100	4	20	6	70	3.5	84	8.4	22	A	A	A
7.	953619114025	Manojkumar K	100	4	17	5.1	66	3.3	64	6.4	19	A	A	B
8.	953619114032	Ramkumar K	100	4	16	4.8	66	3.3	80	8	20	A	A	A
9.	953619114034	Saravanakumar S	100	4	19	5.7	62	3.1	54	5.4	18	A	A	B
10.	953619114041	Vijay Thirupathi M	100	4	18	5.4	28	1.4	30	3	14	B	B	B
11.	953619114305	Mohamed Arsath S	80	3.2	17	5.1	AB	0	24	2.4	11	B	B	A

** Category A: 15 to 25 in developmental rubrics*

Category B: <15 in developmental rubrics

Phase III Developmental rubrics

Criteria	Ratings					Marks
Attendance in phase II	***Excellent*** Attendance is above 90% **(4 marks)**	***Good*** Attendance is between 75% to 89% **(3 marks)**	***Satisfactory*** Attendance is between 60% to 75% **(2 marks)**	***Unsatisfactory*** Attendance is between 40% to 59% **(2 marks)**	***Poor*** Attendance is less than 40% **(0 marks)**	4
Performance in other direct assessment(s)	Score converted on a scale of 4					6
Performance in IAT-I	Mark scored by the student is converted on a scale of 5 and will be taken for consideration to nearby round of value					5
Performance in IAT-II	Mark scored by the student is converted on a scale of 10 and will be taken for consideration to nearby round of value					10
					Total Marks	***25***

26/05/22

Faculty Member

HOD

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Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)
Students' Categorization - Phase II

Degree, Semester & Branch: VII Semester B.E. Mechanical Engineering
Course Code & Title: ME8072 Renewable Sources of Energy
Name of the faculty member: Mr.R.Arun Kumar, AP/Mechanical

Sl. No.	Register. No.	Name of the Student	% of Attendance during Phase I (23 hours)	Weightage based on Phase II rubrics (4 Marks)	Assignment I mark (20 Marks)	Weightage based on Phase II rubrics (6 Marks)	Score in IAT I (100 marks)	Weightage based on Phase II rubrics (10 Marks)	Overall Score (20 Marks) Rounded of	Category*	Category in Phase I
1.	953619114001	Anith Rajaseelan D	82.61	3	15	4.5	66	6.6	14	A	B
2.	953619114038	Syedthowfeek S	65.22	2	00	0.0	AB	0.0	02	B	B
3.	953619114039	Thanga Dinesh C	95.65	4	17	5.1	64	6.4	16	A	A
4.	953619114302	Kanagaraj A	100	4	13	3.9	62	6.2	14	A	A
5.	953619114012	Biju Danie S	100	4	19	5.7	70	7.0	17	A	A
6.	953619114015	Dineshkumar G	86.95	3	16	4.8	70	7.0	15	A	A
7.	953619114025	Manojkumar K	91.30	4	16	4.8	66	6.6	15	A	B
8.	953619114032	Ramkumar K	91.30	4	10	3.0	66	6.6	14	A	A
9.	953619114034	Saravanakumar S	91.30	4	19	5.7	62	6.2	16	A	B
10.	953619114041	Vijay Thirupathi M	78.26	3	17	5.1	28	2.8	11	B	B
11.	953619114305	Mohamed Arsath S	82.61	3	11	3.3	AB	0.0	06	B	A

** Category A: 14 to 20 in developmental rubrics* *Category B: <14- in developmental rubrics*

Phase II Developmental rubrics

Criteria	Ratings					Marks
Attendance from course entry till IAT I	***Excellent*** Attendance is above 90% **(4 marks)**	***Good*** Attendance is between 75% to 89% **(3 marks)**	***Satisfactory*** Attendance is between 60% to 75% **(2 marks)**	***Unsatisfactory*** Attendance is between 40% to 59% **(2 marks)**	***Poor*** Attendance is less than 40% **(0 marks)**	4
Performance in other direct assessment(s)	Score converted on a scale of 6					6
Performance in IAT-I	Mark scored by the student is converted on a scale of 10 and will be taken for consideration to nearby round of value					10
					Total Marks	***20***

Faculty Member

HOD

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

Degree, Semester & Branch: VI Semester B.E. Mechanical Engineering
Course Code & Title: GE8075 Intellectual Property Rights
Name of the faculty member: Mr.R.Arun Kumar, AP/Mechanical

PHASE I STUDENTS' CATEGORIZATION

Sl. No.	Register. No.	Name of the Student	Score in Pre-requisite quiz (out of 15)	Score based on Phase I rubrics	CGPA at end of IV Semester with HoA*	Score based on Phase I rubrics	Final score based on Phase I rubrics	Category**
1.	953619114001	Anith Rajaseelan D	7	2	7.93 (1)	2	4	B
2.	953619114038	Syedthowfeek S	8	3	7.19 (2)	2	5	B
3.	953619114039	Thanga Dinesh C	9	3	7.4 (0)	5	8	A
4.	953619114302	Kanagaraj A	6	2	8.64 (0)	6	8	A
5.	953619114012	Biju Danie S	9	3	8.10 (0)	5	8	A
6.	953619114015	Dineshkumar G	5	2	8.20 (0)	5	7	A
7.	953619114025	Manojkumar K	6	2	7.62 (4)	2	4	B
8.	953619114032	Ramkkumar K	6	2	8.00 (0)	5	7	A
9.	953619114034	Saravanakumar S	7	2	7.56 (1)	2	4	B
10.	953619114041	Vijay Thirupathi M	6	2	7.35 (3)	2	4	B
11.	953619114305	Mohamed Arsath S	4	2	8.20 (0)	5	7	A

*** HoA – History of Arrear**

**** Final score bases on Phase I rubrics is > 6 – Category A ; Score < 6 – Category B**

Phase 1 Developmental rubrics

Criteria	Ratings				Marks
Pre-Course Assessment performance	***Excellent*** Score ranges between 8 and 15 **(3 marks)**	***Good*** Score ranges between 4 and 7 **(2 marks)**	***Satisfactory*** Score ranges between 1 and 3 **(1 mark)**	***Unsatisfactory*** No score in questionnaire **(0 mark)**	3
Student's performance in previous semesters	***Distinction*** (8.5 and above CGPA without history of arrear) **(6 or 7 marks)**	***First Class without history of arrear*** (7 to 8.49 CGPA) **(4 or 5 marks)**	***First class with history of arrear*** (7 to 8.49 CGPA) **(2 or 3 marks)**	***Second class*** (Less than 7 CGPA with or without CGPA) **(1 mark)**	7
				Total Marks	***10***

***** Mark distribution to be followed as follows:**

CGPA 7.5 or more with less than or equal to 3 history of arrear – 4 marks

CGPA 7.5 or more with more than 3 history of arrear – 3 marks

CGPA 7 to 7.49 with less than or equal to 3 history of arrear – 3 marks

CGPA 7 to 7.49 with more than 3 history of arrear – 2 marks

18/08/22

Signature of the faculty member

HOD

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Department of Mechanical Engineering
Academic Year: 2021 – 2022 (Even Semester)

DEVELOPMENTAL RUBRICS FOR CATEGORIZING STUDENTS

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering
Course Code & Title : GE8075 Intellectual Property Rights
Name of the Faculty member : Mr.R.Arun Kumar, AP/Mechanical

The students will be categorized in two categories as slow learners (category B) and fast learners (category A) by using developmental rubrics at three phases as follows:

Phase	Period of consideration
I	Course entry to Internal Assessment Test I
II	Internal Assessment Test I to Internal Assessment Test II
III	Internal Assessment Test II to Internal Assessment Test III
IV	Internal Assessment Test III to Course exit

Phase I Developmental rubrics

Period of Consideration: Course entry to Internal Assessment Test I

Criteria	Ratings				Marks
Pre-Course Assessment performance	***Excellent*** Score ranges between 8 and 10 **(3 marks)**	***Good*** Score ranges between 5 and 7 **(2 marks)**	***Satisfactory*** Score ranges between 1 and 4 **(1 mark)**	***Unsatisfactory*** No score in questionnaire **(0 mark)**	3
Student's performance in previous semesters	***Distinction*** (8.5 and above CGPA with and without history of arrear) **(6 or 7 marks)**	***First Class without history of arrear*** (7 to 8.49 CGPA) **(4 or 5 marks)**	***First class with history of arrear*** (7 to 8.49 CGPA) **(2 or 3 marks)**	***Second class*** (Less than 7 CGPA with or without CGPA) **(1 mark)**	7
				Total Marks	***10***

Category A: 6 to 10 in developmental rubrics ***Category B: <6 in developmental rubrics***

Phase II Developmental rubrics

Period of Consideration: Internal Assessment Test I to Internal Assessment Test II

Criteria	Ratings					Marks
Attendance from course entry till IAT I	***Excellent*** Attendance is above 90% **(4 marks)**	***Good*** Attendance is between 75% to 89% **(3 marks)**	***Satisfactory*** Attendance is between 60% to 75% **(2 marks)**	***Unsatisfactory*** Attendance is between 40% to 59% **(2 marks)**	***Poor*** Attendance is less than 40% **(0 marks)**	4
Performance in class hour assessments	***Excellent*** Consolidated score is above 8 on a scale of 10 **(4 or 5 marks)**		***Good*** Consolidated score is between 5 and 7 on a scale of 10 **(2 or 3 marks)**		***Satisfactory*** Consolidated score is less than 5 on a scale of 10 **(0 or 1 mark)**	5
Performance in other direct assessment(s)	Score converted on a scale of 6					6
Performance in IAT-I	Mark scored by the student is converted on a scale of 10 and will be taken for consideration to nearby round of value					10
					Total Marks	***25***

Category A: 15 to 25 in developmental rubrics ***Category B: <15 in developmental rubrics***

Phase III Developmental rubrics

Period of Consideration: Internal Assessment Test II to Internal Assessment Test III

Criteria	Ratings					Marks
Attendance	***Excellent*** Attendance is above 90% **(4 marks)**	***Good*** Attendance is between 75% to 89% **(3 marks)**	***Satisfactory*** Attendance is between 60% to 75% **(2 marks)**	***Unsatisfactory*** Attendance is between 40% to 59% **(2 marks)**	***Poor*** Attendance is less than 40% **(0 marks)**	4
Performance in class hour assessments	***Excellent*** Consolidated score is above 8 on a scale of 10 **(4 or 5 marks)**		***Good*** Consolidated score is between 5 and 7 on a scale of 10 **(2 or 3 marks)**		***Satisfactory*** Consolidated score is less than 5 on a scale of 10 **(0 or 1 mark)**	5
Performance in other direct assessment(s)	Score converted on a scale of 6					6
Performance in IAT-I	Mark scored by the student is converted on a scale of 5 and will be taken for consideration to nearby round of value					5
Performance in IAT-II	Mark scored by the student is converted on a scale of 10 and will be taken for consideration to nearby round of value					10
					Total Marks	***30***

Category A: 18 to 30 in developmental rubrics ***Category B: <18 in developmental rubrics***

Phase IV Developmental rubrics

Period of Consideration: Internal Assessment Test III to Course Exit

Sl. No.	Phase	Weightage
01	Phase I	20% on a scale of 20
02	Phase II	40% on a scale of 20
03	Phase III	40% on a scale of 20

Category A: 12 and above in developmental rubrics
Category B: <12 in developmental rubrics

Signature of faculty member **HOD**

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Department of Mechanical Engineering
Academic Year: 2021- 2022 (Even Semester)
COURSE PLAN - THEORY

Degree, Semester & Branch:	VI Semester B.E. Mechanical
Regulation:	Anna University R-2017
Course Code & Title:	GE8075 Intellectual Property Rights
Name of the Faculty member:	Mr.R.Arun Kumar, AP/Mechanical

Contact Details:

- **Phone:** 9994706629
- **E-mail:** arunr@ritrjpm.ac.in
- **LMS Link:** https://canvas.instructure.com/courses/4533582

DEPARTMENT VISION, MISSION, PEO & PSO

VISION

- Recognized nationally for its quality education, research and extension programmes in Mechanical Engineering

MISSION

- Producing technically competent and socially responsible mechanical engineers by imparting knowledge of cutting-edge technologies and contemporary issues.
- Encouraging students for active participation in Co-curricular and Extra-curricular activities.
- Motivate students to pursue higher studies and research.
- Establish centers of excellence in promising fields of Mechanical Engineering.
- Develop linkages with industries, R&D organizations and leading educational institutions in India and abroad for achieving excellence in teaching, research and consultancy activities.

PEO

- Graduates will apply the concept of mathematics, science and engineering to solve problems in mechanical engineering/related fields and acquire professional competence
- Graduates will demonstrate professional development by pursing higher education and professional certification in the areas of mechanical engineering
- Graduates will function both independently and as a member of a team in accomplishment of project with social and ethical responsibility.

PSO

- Design components of products and develop systems using CAD/CAE tools.
- Provide manufacturing solutions, including material, process(es), process plans and inspect products and their components.
- Design and analyze heat power (thermal) devices/system.
- Develop simulation models of thermal and manufacturing systems using Computer aided analysis tools.

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Department of Mechanical Engineering
Academic Year: 2021- 2022 (Even Semester)
COURSE PLAN - THEORY

Degree, Semester & Branch:	VI Semester B.E. Mechanical
Regulation:	Anna University R-2017
Course Code & Title:	GE8075 Intellectual Property Rights
Name of the Faculty member:	Mr.R.Arun Kumar, AP/Mechanical

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- **Phone:** 9994706629
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PEO

- Graduates will apply the concept of mathematics, science and engineering to solve problems in mechanical engineering/related fields and acquire professional competence
- Graduates will demonstrate professional development by pursing higher education and professional certification in the areas of mechanical engineering
- Graduates will function both independently and as a member of a team in accomplishment of project with social and ethical responsibility.

PSO

- Design components of products and develop systems using CAD/CAE tools.
- Provide manufacturing solutions, including material, process(es), process plans and inspect products and their components.
- Design and analyze heat power (thermal) devices/system.
- Develop simulation models of thermal and manufacturing systems using Computer aided analysis tools.

Pre-requisites for the course:

- The course needs not to have any pre-requisite from other courses. Basic knowledge of IP rights will help the students to grab the concepts quickly.

A. Course Objectives and Outcomes

Course Objectives:

At the end of the course, the student is expected to:

1. Understand the basic concepts of Intellectual Property Rights.
2. Gain knowledge on the registration of Copy Rights, Trademarks, Patents, Geographical Indications, Trade Secrets and Industrial Design
3. Get familiar with International Treaties and Conventions on IPR.
4. Impart knowledge on digital products and laws in cyber space.
5. To study the infringement and enforcement measures in IPR.

Course Outcomes:

After completion of the course, it is expected that: The students will be able to:

CO	CO Statement	Unit	Performance Indicator	Level*
CO1	Describe the concepts of various intellectual property rights.	I	6.2.1, 8.2.1, 9.2.2, 9.2.3, 10.1.1, 10.1.2, 12.1.1, 12.3.1	L2 (Cog)
CO2	Illustrate the practical aspects of registration in India and abroad.	II	5.1.1, 6.2.1, 8.2.1, 10.1.1, 10.1.2, 12.1.1, 12.3.1	L3 (Cog)
CO3	Explain the implications of agreements and legislations.	III	6.2.1, 8.2.1, 12.1.1	L2 (Cog)
CO4	Interpret the methods used for digital content protection.	IV	6.2.1, 8.2.1	L2 (Cog)
CO5	Discuss the legal aspects governing IPR infringement.	V	6.2.1, 8.2.1	L2 (Cog)
CO6	Follow the procedure of Patent Landscape Analysis for a given set of patent journals	IV	5.1.1, 8.2.1, 9.2.2, 9.2.3, 10.1.1, 10.1.2, 12.1.1, 12.3.1	L3 (Psy)

* Cog - Cognitive domain; Psy - Psychomotor domain

Learning Outcomes: After completion of topic, it is expected that students will be able to

CO	Topic Learning Outcome (TLO)
CO1	1. Explain the basic concepts of different Intellectual Property Rights 2. Describe the transformation from WTO to WIPO 3. Summarize the components in a patent document.
CO2	4. Demonstrate the online copyright filing procedure in India 5. Illustrate the registration procedure of IPR in India and abroad 6. Construct a patent document for an invention / innovation
CO3	7. Discuss the different treaties and conventions on IP rights. 8. Detail the benefits of TRIPS agreement and PCT filing procedure. 9. Summarize the important aspects of different IP rights.
CO4	10. Explain the concepts of digital innovation and its role in knowledge assets 11. Describe the cyber laws to protect digital contents 12. Indicate the relationship between unfair competition and IP laws

CO	Topic Learning Outcome (TLO)
CO5	13. Elaborate the infringements happened related to various IP rights 14. Summarize the enforcement measures taken for different IP rights infringement 15. Indicate the emerging issues in IPR protection.
CO6	16. Follow the procedure of Patent Landscape Analysis for a given set of patent journals

Course Target:

Target: 2.438

Procedure for fixing Target:

Sl. No.	Academic Year	Course code	No. of Students attended (m)	No. of Students Passed	Pass Percentage	Average Grade Point (n)	Cumulative Grade Point (m X n)
1.	2020-2021	GE8075	25	25	100	8.68	217
2.	2019-2020	GE8075	22	22	100	7.50	165
	Total Students		47	**Total Grade Points**			382
	b = Average Grade Point on scale 3						382/47 = 8.128*0.3 = 2.438
	a = Target Attainment for Previous Academic Year						2.25
	Target Attainment for AY 2021-2022, Since b>a						2.438

- So, the target value is 2.438

CO – PO Matrices:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C319.1	-	-	-	-	-	2	-	3	2	3	-	2
C319.2	-	-	-	-	2	2	-	3	-	3	-	3
C319.3	-	-	-	-	-	2	-	1	-	-	-	1
C319.4	-	-	-	-	-	2	-	1	-	-	-	-
C319.5	-	-	-	-	-	2	-	1	-	-	-	-
C319.6	-	-	-	-	2	-	-	3	2	3	-	3
C319	-	-	-	-	**2**	**2**	-	**2**	**2**	**3**	-	**2.25**

CO – PSO Matrices:

CO	PSO1	PSO2	PSO3	PSO4
C319.1	-	-	-	-
C319.2	1	1	1	-
C319.3	-	-	-	-
C319.4	-	-	-	-
C319.5	-	-	-	-
C319.6	-	-	-	-
C319	**1**	**1**	**1**	-

Course Outcome	Justification for Relevance of COs with POs & PSOs
CO1	• **PO6:** Students will be able to explain the role of inventions in society uplifting. Hence, the level of PO mapping is at 2 • **PO8:** Students will submit an assignment in which they will acknowledge the source they referred, elimination of copying among students is also ensured and the same will be given weightage in marks. So, the CO is mapped PO at level 3. • **PO9:** Students are made to involve in Think Pair Share and Mind mapping activities, in which they will engage in team activity and maintain team spirit. So, PO is mapped at level 2. • **PO10:** Students will be submitting assignment in which they need to interpret the data and submit a well-structured document as assignment. So, the course outcome is mapped at level 3. • **PO12:** Students will source and refer few credible sources of information for preparing the assignment which impacts on the self-learning and hence the CO is mapped at level 2
CO2	• **PO5:** Students are exposed to advance patent search engines including Google Patent Search, e-space net, in PASS search & USPTO search engine which they will be using for patent drafting assignment. Hence it is mapped at level 2. • **PO6:** Students will be able to explain the registration process of various IPs and the role of IP protected inventions in society uplifting. Hence, the level of PO mapping is at 2 • **PO8:** Students will submit an assignment in which they will acknowledge the source they referred, elimination of copying among students is also ensured and the same will be given weightage in marks. So, the CO is mapped at level 3. • **PO10:** Students will be submitting assignment in which they need to interpret the data and submit a well-structured document as assignment. So, the course outcome is mapped at level 3. • **PO12:** Students will source and refer few credible sources of information for preparing the assignment and learn to draft a patent document which impacts on the self-learning and hence the CO is mapped at level 3 • **PSO1, 2, 3:** Students draft patent for their project through assignment in which they cover in design, manufacturing and thermal aspects. Hence the correlation is made at level 1
CO3	• **PO6:** Role of engineers in society and the provisions for protecting an invention / innovation is taught through the Acts of various IPs including patent, design registration, copyrights, GI. So, the course outcome is mapped at level 1. • **PO8:** Students will be given quiz as an assessment in which they follow basic ethical etiquettes and hence the PO is mapped at level 1. • **PO12:** Students will explain the requirement or need of amendments in various IP Acts and hence the PO is mapped at level 1.
CO4	• **PO6:** Students will be able to describe the engineering roles in protecting public interest in digital innovations and hence the PO mapping level is at 2. • **PO8:** Students will be given quiz as an assessment in which they follow basic ethical etiquettes and hence the PO is mapped at level 1.

Course Outcome	Justification for Relevance of COs with POs & PSOs
CO5	• **PO6:** Students will be able to describe the engineering roles in preventing infringements and hence the PO mapping level is at 2. • **PO8:** Students will be given quiz as an assessment in which they follow basic ethical etiquettes and hence the PO is mapped at level 1.
CO6	• **PO5:** Students will be using the IPC code in Patent Scope website for patent landscape analysis. Hence it is mapped at level 2. • **PO8:** Students will submit an assignment in which they will acknowledge the source they referred, elimination of copying among students is also ensured and the same will be given weightage in marks. So, the CO is mapped at level 3. • **PO9:** Students will prepare the assignment as a team in which they respect the values and opinion of each other and hence the PO is mapped at level 3. • **PO10:** Students will be submitting assignment in which they need to interpret the data and submit a well-structured document as assignment. So, the course outcome is mapped at level 3. • **PO12:** Students will source and refer few credible sources of information for preparing the assignment and learn to do a landscape analysis in a cluster of patent applications which impacts on the self-learning and hence the CO is mapped at level 3

B. Lecture Plan:

Lecture No.	Topic(s) to be taught	Instructional Methods	TLO Mapping	CO Mapping
	UNIT-I INTRODUCTION			
1.	Pre course Assessment and Introduction to IPRs	Lecture & Discussion	TLO1	CO1
2.	Basic concepts and need for Intellectual Property – Patent	Lecture & Discussion	TLO1	CO1
3.	Basic concepts and need for Intellectual Property – Copyrights, Geographical Indications	Lecture & Discussion	TLO1	CO1
4.	Identification of Intellectual Properties	Discussion & Think Pair Share	TLO1	CO1
5.	IPR in India and Abroad – Genesis and Development, **IP rights and its impact on country's growth**	Lecture & Statistical discussion	TLO2	CO1
6.	The way from WTO to WIPO – TRIPS	Lecture & Discussion	TLO2	CO1
7.	Nature of Intellectual Property, Industrial Property	Lecture & Discussion	TLO2	CO1
8.	Technological Research, Inventions & Innovations	Lecture & Discussion	TLO2	CO1
9.	Important examples of IPR, **Plant Varieties and Farmers rights**	Lecture, Blog & Case Study discussion	TLO2	CO1
10.	Reading a patent document & Revision on Unit I	Lecture & Discussion	TLO1, 2, 3	CO1

Lecture No.	Topic(s) to be taught	Instructional Methods	TLO Mapping	CO Mapping
	UNIT-II REGISTRATION OF IPRs			
11.	Meaning and practical aspects of registration of Copy Rights	Lecture & Discussion	TLO4	CO2
12.	Meaning and practical aspects of registration of Trademarks	Lecture & Quiz	TLO5	CO2
13.	Meaning and practical aspects of registration of Patents	Lecture & Discussion	TLO5	CO2
14.	Meaning and practical aspects of registration of Patents	Lecture & Discussion	TLO5	CO2
15.	Meaning and practical aspects of registration of Geographical Indications	Lecture & Discussion	TLO5	CO2
16.	Meaning and practical aspects of registration of Geographical Indications	Lecture & Discussion	TLO5	CO2
17.	Meaning and practical aspects of registration of Trade Secrets	Lecture & Discussion	TLO5	CO2
18.	Industrial Design registration in India and Abroad, **IC layout protection**	Lecture & Quiz	TLO5	CO2
19.	Meaning and practical aspects of registration of Copy Rights – Live demonstration	Demonstration	TLO4	CO2
20.	**Patent search sites, Fee structure, Patent registration forms, Patent Drafting &** Revision on Unit II	Demonstration	TLO4, 5, 6	CO2
	UNIT-III AGREEMENTS AND LEGISLATIONS			
21.	International Treaties and Conventions on IPRs	Lecture & Discussion	TLO7	CO3
22.	TRIPS Agreement	Lecture & Discussion	TLO8	CO3
23.	PCT Agreement	Lecture & Discussion	TLO8	CO3
24.	**International Patent Classification (IPC) and Cooperative Patent Classification (CPC)**	Demonstration using WIPO site	TLO16	CO6
25.	Patent Act of India	Lecture & Discussion	TLO9	CO3
26.	Patent Act of India	Lecture & Quiz	TLO9	CO3
27.	Patent Amendment Act	Lecture & Discussion	TLO9	CO3
28.	Design Act	Lecture & Discussion	TLO9	CO3
29.	Trademark Act	Lecture & Discussion	TLO9	CO3
30.	Geographical Indication Act, **Copyrights Act**	Lecture & Discussion	TLO9	CO3
31.	Revision on Unit III, **Patent Landscape Analysis, Procedure to obtain digital signature & Patent agent examination**	Demonstration & Revision	TLO7, 8, 9, 16	CO3 & CO6

Lecture No.	Topic(s) to be taught	Instructional Methods	TLO Mapping	CO Mapping
	UNIT IV – DIGITAL PRODUCTS AND LAW			
32.	Digital innovations & developments as knowledge assets	Lecture & Discussion	TLO10	CO4
33.	Digital innovations & developments as knowledge assets	Lecture & Discussion	TLO10	CO4
34.	IP Laws	Lecture & Discussion	TLO11	CO4
35.	Cyber Law	Lecture & Discussion	TLO11	CO4
36.	Digital Content Protection	Lecture & Discussion	TLO11	CO4
37.	Unfair Competition	Hobnob Group	TLO12	CO4
38.	Meaning and Relationship between Unfair Competition and IP Laws	Lecture & Mind mapping	TLO12	CO4
39.	Case Studies	Lecture & Case study discussion	TLO12	CO4
40.	**Safe search, Protection of data,** Revision on Unit IV	Lecture, Demonstration & Discussion	TLO10, 11, 12	CO4
	UNIT-V ENFORCEMENT OF IPRs			
41.	Infringement of IPRS – Patents	Lecture & Case Study discussion	TLO13	CO5
42.	Infringement of IPRs – Copyrights & GI	Lecture & Case Study discussion	TLO13	CO5
43.	Infringement of IPRs – Trademarks & Trade Secrets	Lecture & Case Study discussion	TLO13	CO5
44.	Infringement of IPRs – Industrial Design	Lecture & Online Quiz	TLO13	CO5
45.	Enforcement Measures	Lecture & Discussion	TLO14	CO5
46.	Emerging issues	Flipped Class	TLO15	CO5
47.	Case Studies, **IPR as career opportunity,** Revision on Unit V & Post Course Assessment	Lecture & Discussion	TLO13, 14, 15	CO5

Teaching Aids to be used:

- PowerPoint Presentation
- Demonstration using concern websites

C. Bridge Course Plan:

Sl. No.	Topic(s) to be taught	Instructional Methods	TLO/CO Mapping
	Nil		

D. Content Beyond Syllabus Plan:

Sl. No.	Topic(s) to be taught	Instructional Methods	TLO/CO Mapping	Relevance to POs & PSOs	Remarks
1.	IP rights and its impact on country's growth	Statistical discussion	TLO2 / CO1		-
2.	Plant Varieties and Farmer rights,	Blog & Case Study discussion	TLO2 / CO1		
3.	Integrated Circuit layout protection	Lecture and website exposure	TLO5 / CO2		
4.	Patent search sites, Fee structure, Patent registration forms, Patent Drafting	Demonstration	TLO6 / CO2	PO5	
5.	International Patent Classification (IPC) and Cooperative Patent Classification (CPC)	Demonstration using WIPO site	TLO16 / CO6		
6.	Copyrights Act	Discussion with Copyright Act	TLO9 / CO3		
7.	Patent Landscape Analysis, & Patent agent examination, Procedure to obtain digital signature	Demonstration	TLO16 / CO6		
8.	Safe search, Protection of data	Demonstration & Discussion	TLO11 / CO4		
9.	IPR as career opportunity	Lecture	TLO15 / CO5		

E. Tutorial Plan:

Tutorial No.	Topic(s)	TLO Mapping	CO Mapping
Nil			

F. Assignment Plan:

Assignment No.	Topic(s)	TLO Mapping	CO Mapping
1.	Reflective report on benchmark patents	TLO1	CO1
2.	Patent Drafting for Design & Fabrication Project	TLO6	CO2
3.	Reflective report on patent landscape analysis for a given set of documents	TLO16	CO6

G. Details of e-Learning Sources (Videos):

Sl. No.	Title of NPTEL / MIT/ Matlab/ Online Video & Link	Matching with the topic vide Lecture No.	TLO Mapping	CO Mapping
1.	Kinds of IPR and their duration (NPTEL-Managing IPs in Universities, Lecture No.:07 by Prof. Feroz Ali) (From Minutes 2 to 12)	Lecture No. 10	TLO1	CO1

H. Mini Project Plan:

Sl. No.	Title of the Project	Number of students/ Batch	Nature of the project	CO Mapping	Relevance to POs & PSOs
Nil					

I. Innovative Practice Plan

Sl. No.	Topic	TLO Mapping	CO Mapping	Relevance to POs & PSOs
1.	Mind Mapping	TLO1	CO1	PO9, PO10
2.	Think Pair Share	TLO1	CO1	PO9, PO10

Details of References:

Textbooks:

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.

2. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

References:

1. Unit I:

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.
2. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

2. Unit II:

1. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012
2. Deborah E. Bouchoux, "Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets", Cengage Learning, Third Edition, 2012.

3. Unit III:

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.
2. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

4. Unit IV:

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.
2. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

5. Unit V:

1. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012
2. Deborah E. Bouchoux, "Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets", Cengage Learning, Third Edition, 2012.

Session Plan: 1

- **Relevant Course Outcome (CO):** Describe the concepts of various intellectual property rights.
- **Unit (Topic) Number with Title:** Unit – I Introduction
- **Sub-Topic Title:** Identification of Intellectual Properties.
- **Session Duration:** 50 Minutes
- **Session Learning Outcomes:**
  - ❖ The students will be able to Identify the different types of Intellectual Properties
- **Equipment Required in Classroom:**
  - ❖ A system with internet connection
  - ❖ Projector for presenting the presentation and animation video
- **Instructional media required**
  - ❖ List of instructional media available
    - a) Power Point Presentation
  - ❖ List of instructional media to be prepared: Nil

Time Required	Teaching Points	Teacher's Activity	Student's Activity	Instructional Methods	Teaching Aid/Media
5 minutes	Glance on previous day's session **Introduction:** • a. Different forms of IP rights	Presenting GII rankings To narrate the discussed topic of previous class Ask the question on different forms of IP rights that the students know Present the different forms of IP rights	Student may join the discussion Students respond the question	Lecture & Discussion	PPT
10 minutes	**Development:** • a. Patents	Defining the term patent Asking question on span of patent grant Present the term of Patent Asking the difference between invention and an innovation Listing the eligibility criteria for patent and asking the students does their Design & Fabrication project is patentable Examples for patent Presenting the case studies on benefits of patenting	Students may respond Students may respond Students may respond	Lecture & Discussion	PPT
10 minutes	• b. Copyrights	Defining the term copyrights Asking question on span of registered copyright work Present term of Copyrights	Students may respond	Lecture & Discussion	PPT

Time Required	Teaching Points	Teacher's Activity	Student's Activity	Instructional Methods	Teaching Aid/Media
		Asking the question on proceeding of law in case of anticipation Listing the different works that can be copyrighted Presenting examples for copyrights Case study of copyright protection	Students may respond		
5 minutes	• c. Industrial Design	Defining the term industrial design Asking question on span of industrial design Discussing the term of industrial design Asking question "whether industrial design can be called as design patent?" Discussing the answer for same Explaining requirements to be met for industrial design registration Presenting various designs of product and asking questions to identify the brand name. Discussing the answer and explaining the importance of design registration. Presenting the case study for industrial design	Students may respond Students answer the question after discussion Students discuss among themselves and answer	E-mode	Animation Video
5 minutes	• d. Trade Mark and Trade Secret	Defining the terms trade mark and trade secret Discussion about the span of Trademark (TM) and Trade Secret (TS) Asking students, the difference between mark TM and ® near a brand name in a product / service company Explaining the difference. Presenting examples for TM and TS	Students may respond and explain the symbols used in various products	Active Learning	PPT

Time Required	Teaching Points	Teacher's Activity	Student's Activity	Instructional Methods	Teaching Aid/Media
10 minutes	**Consolidation** Activity on identifying types of IP rights	Grouping the students as two per team Giving the activity sheet for identifying the different IP rights Collecting the sheets from students Discussion on answers of the activity	Students brainstorm and answer the questions	Brainstorm activity through sheet	Activity sheet
5 minutes	Narration of 5 forms of IP rights seen in the session	List the types of IP rights presented Discuss the key features of different types of IP rights Giving a brief on other forms of IP to be discussed during next session	Students list the types discussed	-	Activity sheet

Session Plan: 1I

- **Relevant Course Outcome (CO):** Illustrate the practical aspects of registration in India and abroad.
- **Unit (Topic) Number with Title:** Unit – II REGISTRATION OF IPRs
- **Sub-Topic Title:** Practical aspects of Registration of Copyright.
- **Session Duration:** 50 Minutes
- **Session Learning Outcomes:**
  - ❖ The students will be able to practice the registration of Copyright
- **Equipment Required in Classroom:**
  - ❖ A system with internet connection
  - ❖ Projector for presenting the presentation and animation video
- **Instructional media required**
  - ❖ List of instructional media available: Power Point Presentation
  - ❖ List of instructional media to be prepared: Nil

Time Required	Teaching Points	Teacher's Activity	Student's Activity	Instructional Methods	Teaching Aid/Media
5 minutes	Glance on previous day's session **Introduction:** Registration of Copyright	Discussing various live examples of various IPRs Ask the question on different forms of IP rights that the students know Present the various stages and types of Copy right registration	Student may join the discussion Students respond the question	Lecture & Discussion	PPT
15 minutes	**Development:** Copyright types	Defining the term copyright Asking question on span of	Students may respond	Lecture & Discussion	PPT

Time Required	Teaching Points	Teacher's Activity	Student's Activity	Instructional Methods	Teaching Aid/Media
		copyright grant Present the term of copyright Examples for copyright Presenting the case studies on benefits of copyright	Students may respond Students may respond		
15 minutes	Copyright Law	Defining the term copyrights law and year of implementation Asking question on span of registered copyright work Asking the question on proceeding of law in case of anticipation Listing the different works that can be copyrighted Case study of copyright protection	Students may respond Students may respond	Lecture & Discussion	PPT
10 minutes	Detailed flow process of Copyright Registration	Explaining the flow of copyright registration Asking question on various flow process Explaining requirements to be met for copyright, creation of diary number, Mandatory waiting time Discussing the answer and explaining the various flows in registration. Presenting the case study for registering Copyright	Students may respond Students answer the question after discussion Students discuss among themselves and answer	E-mode	Online procedure for registration of copyright
5 minutes	**Consolidation** Activity on identifying flow process of Copyright	Grouping the students as two per team Giving the activity sheet for identifying the different IP rights Collecting the sheets from students Discussion on answers of the activity	Students brainstorm and answer the questions	Brainstorm activity through sheet	Activity sheet

Signature of the Faculty Member **Domain Coordinator** **HOD**

Vice Principal **Principal**

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering
Academic Year: 2021-2022 (Even Semester)

COURSE ASSESSMENT - THEORY

Degree, Semester & Branch: VI Semester B.E. Mechanical
Regulation: Anna University R-2017
Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty Member: Mr.R.Arun Kumar, AP/Mech
Contact Details:

- **Phone:** 9994706629
- **E-mail:** arunr@ritrjpm.ac.in
- **LMS Link:** https://canvas.instructure.com/courses/4533582

1. Pre-requisite Assessment details:

Sl. No.	Assessment methods	Marks	Evaluation methods
1.	Quiz	10	-

2. Assessment Methods:

Course Outcome	Direct methods
CO1	1. Direct assessment – IAT I & Assignment 2. Indirect assessment – Course Outcome End Survey
CO2	1. Direct assessment – IAT I, IAT II & Quiz 2. Indirect assessment – Course Outcome End Survey
CO3	1. Direct assessment – IAT II & Assignment 2. Indirect assessment – Course Outcome End Survey
CO4	1. Direct assessment – IAT III & Quiz 2. Indirect assessment – Course Outcome End Survey
CO5	1. Direct assessment – IAT III & Quiz 2. Indirect assessment – Course Outcome End Survey
CO6	1. Direct assessment – Landscape Analysis Assignment 2. Indirect assessment – Course Outcome End Survey

2. Course Assessment Plan (CAP)

Continuous Internal Assessment Methods (CIAM)	Weightage							
	CO1	CO2	CO3	CO4	CO5	CO6	CIAM	End Semester
IAT	60%	60%	70%	70%	70%	-	40%	60%
Assignment	30%	30%	-	-	-	90%		
Quiz	-	-	20%	20%	20%	-		
CO End Survey	10%	10%	10%	10%	10%	10%		
Total	100%	100%	100%	100%	100%	100%	100%	

3. Evaluation methods

Sl. No.	Assessment methods	Marks	Evaluation methods
1.	Internal Assessment Test I & II	50	Scheme of Evaluation
2.	Internal Assessment Test III	100	Scheme of Evaluation
3.	Assignments – I	20	Rubrics
4.	Assignments – II	20	Rubrics
5.	Assignments - III	20	Rubrics
6.	Quiz I	20	Canvas classroom Quiz
7.	Quiz II	20	Canvas classroom Quiz
8.	Quiz III	20	Canvas classroom Quiz

Sample Rubrics*:

Assessment Criteria	Evaluation Rating				Maximum Marks
	Excellent	Good	Satisfactory	Need Improvement	
Timely Submission	Submitting on or before time (3 Marks)	Submitting after 1 day from the deadline (2 Marks)	Submitting within 3 day from the deadline (1 Marks)	Submitting after 3 days from the deadline (0 Marks)	3
Presentation	Impressive presentation with legible hand writing (3 Marks)	Pleasing presentation with readable hand writing (2 Marks)	Presentation without title page containing assignment information (1 Marks)	presentation without title page and unreadable hand writing (0 Mark)	3
Content of the Assignment	Innovative and unique (14 Marks)	75% to 90% relevancy (12 Mark)	50% to 75% relevancy (8 Marks)	Less than 50% relevancy (4 Marks)	14

* Subjected to change based on the nature of assignment.

Signature of Faculty Member **Domain Coordinator** **HOD**

Vice Principal **Principal**

GE8075 **INTELLECTUAL PROPERTY RIGHTS** L T P C
3 0 0 3

OBJECTIVE:

- To give an idea about IPR, registration and its enforcement.

UNIT I INTRODUCTION 9

Introduction to IPRs, Basic concepts and need for Intellectual Property - Patents, Copyrights, Geographical Indications, IPR in India and Abroad – Genesis and Development – the way from WTO to WIPO –TRIPS, Nature of Intellectual Property, Industrial Property, technological Research, Inventions and Innovations – Important examples of IPR.

UNIT II REGISTRATION OF IPRs 10

Meaning and practical aspects of registration of Copy Rights, Trademarks, Patents, Geographical Indications, Trade Secrets and Industrial Design registration in India and Abroad

UNIT III AGREEMENTS AND LEGISLATIONS 10

International Treaties and Conventions on IPRs, TRIPS Agreement, PCT Agreement, Patent Act of India, Patent Amendment Act, Design Act, Trademark Act, Geographical Indication Act.

UNIT IV DIGITAL PRODUCTS AND LAW 9

Digital Innovations and Developments as Knowledge Assets – IP Laws, Cyber Law and Digital Content Protection – Unfair Competition – Meaning and Relationship between Unfair Competition and IP Laws – Case Studies.

UNIT V ENFORCEMENT OF IPRs 7

Infringement of IPRs, Enforcement Measures, Emerging issues – Case Studies.

TOTAL :45 PERIODS

OUTCOME:

- Ability to manage Intellectual Property portfolio to enhance the value of the firm.

TEXT BOOKS

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.

2. V. Sople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

REFERENCES

1. Deborah E. Bouchoux, "Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets", Cengage Learning, Third Edition, 2012.

2. Prabuddha Ganguli,"Intellectual Property Rights: Unleashing the Knowledge Economy", McGraw Hill Education, 2011.

3. Edited by Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, Edward Elgar Publishing Ltd., 2013.

RAMCO INSTITUTE OF TECHNOLOGY
Department of Mechanical Engineering
Academic Year: 2021 - 2022 (Even Semester)

INDIVIDUAL TIME TABLE
(With effect from: 07.03.2022)

Name of the Faculty Member: Mr.R.Arun Kumar, AP/Mechanical

Period & Time / Day	I	II	III	IV	V	VI	VII
	9:00-9:50	9:50-10:40	11:00-11:50	11:50-12:40	1:20-2:10	2:10-3:00	3:00 – 3:50
Monday	MG8591			MG8591			
Tuesday	MG8591			MG8591	MG8591		GE8075
Wednesday			GE8075	ME8811			
Thursday	GE8075			ME8811			
Friday	GE8075						

Course Code & Title	No. of Periods
1. MG8591 Principles of Management (IV Mech)	5
2. GE8075 Intellectual Property Rights (III Mech)	4
3. ME8811 Project Work (IV Mech B)	6

14/03/22

Signature of Faculty Member

14/3/22
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year: 2021-22 (Even Semester)

CLASS TIME TABLE

(With effect from: 07.03.2022)

Semester/Class: VI Semester B. E. Mechanical Engg. 'A' **CLASS ROOM: C2L02**

Period & Time / Day	I	II	10.40-11.00	III	IV	12.40-01.20	V	VI	VII
	09.00-09.50	09.50-10.40		11.00-11.50	11.50-12.40		01.20-02.10	02.10-03.00	03.00-03.50
Monday	ME8694 SVG	ME8651 GPR	Tea Break	ME8694/ ME8693 SVG/ MAK	ME8693 MAK	Lunch Break	ME8692 JJT		ME8691 PPR
Tuesday	ME8682 TSS,RPK,JJB&NLS			ME8682 TSS,RPK,JJB&NLS			ME8651 GPR	ME8693 MAK (T)	ME8091/ PR8592/ GE8075 LKK/SK/ RAK
Wednesday	ME8691 PPR	ME8692 JJT		ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8681 SVG,JJT& PPR		ME8681 SVG,JJT&PPR		
Thursday	ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8693 MAK		ME8651 GPR	ME8693 MAK (T)		ME8694 SVG	ME8691 PPR	ME8651 GPR
Friday	ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8691 PPR		ME8693 MAK	ME8692 JJT		ME8694 SVG	HS8581 RN	
Saturday	ME8692/ ME8694 JJT/SVG	Placement Training PPR		Placement Training PPR			Placement Training TSS		

T-Tutorial

	Course Code & Title	Name of the Faculty member	No. of periods
1.ME8651	Design of Transmission Systems	Mr.G.Praburam (GPR)	4
2.ME8691	Computer Aided Design and Manufacturing	Mr.P.Pavithran (PPR)	4
3.ME8693	Heat and Mass Transfer	Mr.M.Ashokkumar (MAK)	3½
	Heat and Mass Transfer - Tutorial		2
4.ME8692	Finite Elements Analysis	Dr.J.Jabinth(JJT)	4½
5.ME8694	Hydraulics and Pneumatics	Mr.S.Valai Ganesh (SVG)	4
6.ME8091	Automobile Engineering	Mr.L.Karthikeyan (LKK)	
PR8592	Welding Technology	Mr.S.Kathiravan (SK)	4
GE8075	Intellectual Property Rights	Mr.R.Arun Kumar (RAK)	
7.ME8681	CAD/CAM Laboratory	Mr.S.Valai Ganesh (SVG), Dr.J.Jabinth(JJT)&Mr.P.Pavithran(PPR)	4
8.ME8682	Design and Fabrication Project	Mr.T.Selvasundar (TSS), Mr.R.Prabhakaran(RPK), Mr.J.Jerold John Britto(JJB)&Mr.N.L.Sujin(NLS)	4
9.HS8581	Professional Communication	Dr.R.Naganathan (RN)	2
		Mr.P.Pavithran (PPR)	3
	Placement Training	Mr.T.S.Selvasundar (TSS)	3

2/3/22 **Class Advisor** 2/3/22 **HOD** **Time Table Co-ordinator** **Principal**

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year: 2021-22 (Even Semester)

CLASS TIME TABLE

(With effect from: 07.03.2022)

Semester/Class: VI Semester B. E. Mechanical Engg. 'B' **CLASS ROOM: C2L01**

Period & Time / Day	I	II	10.40-11.00	III	IV	12.40-01.20	V	VI	VII
	09.00-09.50	09.50-10.40		11.00-11.50	11.50-12.40		01.20-02.10	02.10-03.00	03.00-03.50
Monday	ME8692 RPK		Tea Break	ME8693 VSK	ME8682 RPK,TSS, SGB&MSB	Lunch Break	ME8682 RPK,TSS,SGB&MSB		
Tuesday	ME8651 CGR	ME8693 VSK		ME8651 CGR	ME8692 RPK		ME8691 SGB	ME8693 VSK (T)	ME8091/ PR8592/ GE8075 LKK/SK/ RAK
Wednesday	ME8651 CGR	ME8693 VSK		ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8691 SGB		ME8694 NLS	ME8692 RPK	ME8694 NLS
Thursday	ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8694/ ME8693 NLS/ VSK		ME8693 VSK (T)	ME8681 JJB,SMR& LKK		ME8681 JJB,SMR&LKK		
Friday	ME8091/ PR8592/ GE8075 LKK/SK/ RAK	ME8691 SGB		ME8694 NLS	ME8651 CGR		ME8691 SGB	HS8581 RN	
Saturday	ME8692/ ME8694 RPK/NLS	Placement Training RPK		Placement Training RPK			Placement Training LKK		

T-Tutorial

	Course Code & Title	Name of the Faculty member	No. of periods
1.ME8651	Design of Transmission Systems	Mr.C.Gururaj (CGR)	4
2.ME8691	Computer Aided Design and Manufacturing	Dr.S.Godwin Barnabas (SGB)	4
3.ME8693	Heat and Mass Transfer	Dr.V.Sivakumar (VSK)	3½
	Heat and Mass Transfer - Tutorial		2
4.ME8692	Finite Elements Analysis	Mr.R.Prabhakaran(RPK)	4½
5.ME8694	Hydraulics and Pneumatics	Mr.N.L.Sujin (NLS)	4
6.ME8091	Automobile Engineering	Mr.L.Karthikeyan (LKK)	
PR8592	Welding Technology	Mr.S.Kathiravan (SK)	4
GE8075	Intellectual Property Rights	Mr.R.Arun Kumar (RAK)	
7.ME8681	CAD/CAM Laboratory	Mr.J.Jerold John Britto(JJB), Mr.S.Maharajan(SMR)&Mr.L.Karthikeyan(LKK)	4
8.ME8682	Design and Fabrication Project	Mr.R.Prabhakaran(RPK), Mr.T.Selvasundar (TSS), Dr.S.Godwin Barnabas (SGB)& Mr.M.Sivagaminathan@Balaji(MSB)	4
9.HS8581	Professional Communication	Dr.R.Naganathan (RN)	2
	Placement Training	Mr.R.Prabhakaran(RPK)	3
		Mr.L.Karthikeyan (LKK)	3

02/03/22 — Class Advisor

2/3/22 — HOD

Time Table Co-ordinator

Principal

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Department of Mechanical Engineering

Academic Year: 2021 – 2022 (Even Semester)

Semester/Class: VI Semester B.E.Mechanical Engineering A & B

Course Code & Title: GE8075 Intellectual Property Rights

Name List

Sl. No.	Roll No.	Student Name
1.	953619114001	ANITH RAJASEELAN D
2.	953619114038	SYEDTHOWFEEK S
3.	953619114039	THANGA DINESH C
4.	953619114302	KANAGARAJ A
5.	953619114012	BIJU DANIE S
6.	953619114015	DINESHKUMAR G
7.	953619114025	MANOJKUMAR K
8.	953619114032	RAMKUMAR K
9.	953619114034	SARAVANAKUMAR S
10.	953619114041	VIJAY THIRUPATHI M
11.	953619114305	MOHAMED ARSATH S

11/3/22 11/03/22
Class Advisor

11/3/22
HOD

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Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering

Course Code & Title : GE8075 Intellectual Property Rights

Name of the Faculty member(s) : Mr.R.Arun Kumar, AP/Mech

Innovative Practice Description

Unit / Topic : Unit – I Introduction / Types of IPR

Course Outcome : Students will be able to describe the concepts of various IPR

Topic Learning Outcome : Explain the basic concepts of different IPR

Activity Chosen : Think Pair Share

Justification : Students need to collaborate with peers and identify the possible IP's that can be generated in a given product. This can help the faculty to assess how far the students have understood the concept.

Time Allotted for Activity : 20 minutes

Details of Implementation : Making the students to understand the difference between various forms of Intellectual Property Rights will help them in attaining the CO1. Through this activity, students are made into group of two each and three products are given to them in activity sheet. Students have to find all possible IPR that can protect the product and same has to be justified. This can help the faculty member to assess the understanding level of the student. After their completion, the process will be explained again to rectify the mistakes they have made.

PO / PSO mapping for the activity:

Innovative Practice	PO9	PO10	PO12
Level of mapping	2	1	1
Justification for correlation	Students are made to collaborate with peers and they will be maintaining the composure of team work and will be exhibiting the individualization in the activity and hence the activity is mapped at level 2	Students are made to communicate their learning through written as well as through oral communication. As the communication is for shorter period of time, it is mapped at level 1	Students are made to understand the filing types of IPR. This may intend them to learn deeper about the IP types and systems. Hence, the activity is mapped at level 1

(1 – Low 2 – Moderate 3 – High)

Images / Screenshot of the practice:

Sample sheets are annexed

Reflective Critique:

i. Feedback of practice from students and other stakeholders:

Available in the sample sheets

ii. Benefit of the practice:

Students were helped to understand the types of IPR through this activity which may help them in future for exploring more related to IP rights as well as in exam point of view.

iii. Whether the practice is adopted in any of the courses early:

Yes

- ✓ GE8075 Intellectual Property Rights – in early academic years
  https://www.ritrjpm.ac.in/images/mechanical/NBA/IPR_TPS.pdf
- ✓ MG6071 Entrepreneurship Development – AY 2018 – 19
  (https://www.ritrjpm.ac.in/images/mechanical/NBA/Types_business.pdf)

Challenges faced in implementation:

Students took excess time than the planned duration.

References: Nil

CO1: Student will be able to describe the concepts of various IPR

14/07/22

Signature of Faculty Member

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

THINK PAIR SHARE

CO	PO9	PO10	PO12
CO1	✓	✓	✓

Name & Reg. No. : 953619114025, 953619114302, K. Manesh kumar, A. Jeyaraj, 953619114028, Anbarajasekar

Branch and Year : VI Semester B.E. Mechanical Engineering

Subject Code & Title : GE8075 Intellectual Property Rights

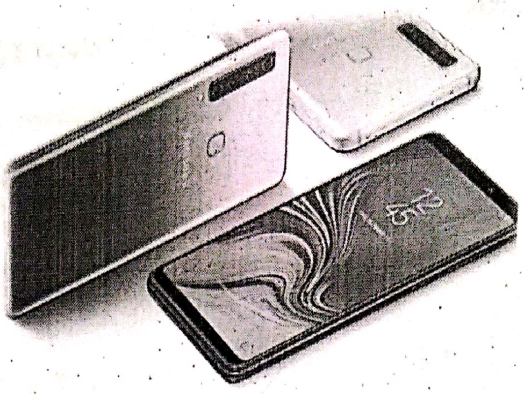
Name of the Faculty : Mr.R.Arun Kumar, AP/Mechanical

Date: 15.03.22

Identify all possible IPR and justify the same:

Source:
https://www.nicepng.com/maxp/u2q8r5e6e6u2i1r5/

Type of IPR	Justification
* Trade mask ↳ Trade Dress * industrial Design * Trade secret	* Trade Dress is a registered on that Trade mark * making Juice formula in Trade secret



Source:
https://www.mysmartprice.com/gear
msung-galaxy-a9/

Type of IPR	Justification
→ Industrial design → Trade mark → ~~Patent~~ Copyright	* The Design patent on first * Industrial design registered.

Possibility: Patent SICLDR

Source:
https://www.amazon.in/Cinthol-Origina
Soap-100gm/dp/B0041RQCXC

Type of IPR	Justification
→ Trade mark	* The shop name & logo on registered on Trade mark

Comments and Feedback of activity for future improvement:

Was the activity helped you to understand the IPR types in deep? (Yes / No)

Other comments and feedback on the activity:

Signature of the Student(s)

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

THINK PAIR SHARE

CO	PO9	PO10	PO12
CO1	✓	✓	✓

Name & Reg. No. : 953619114012, 953619114032, 953619114034

Branch and Year : VI Semester B.E. Mechanical Engineering.

Subject Code & Title : GE8075 Intellectual Property Rights

Name of the Faculty : Mr.R.Arun Kumar, AP/Mechanical

Date: 15.3.22

Identify all possible IPR and justify the same:

Source:
https://www.nicepng.com/maxp/u2q8r5e6e6u2i1r5/

Type of IPR

Industrial Design ✓

Trade Mark ✓

Trade secret ✓

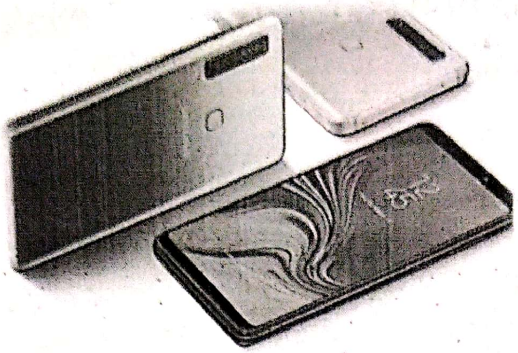
Justification

Industrial design:
we can indentify by the shape of this product

Trademark

we can identify this IPR by this product name

Trade Secret: Industry posses this product formulae



Source:
https://www.mysmartprice.com/gear/samsung-galaxy-a9/

Type of IPR

Industrial Design
~~Patent~~
Trade Mark

Patent & Other possibilities
Copyrights
SECRET

Justification

Design of the product
camera design, Software design,
Trade Mark :-
Brand name has registered

Source:
https://www.amazon.in/Cinthol-Original-Soap-100gm/dp/B0041RQCXC

Type of IPR

Industrial design
Trade mark
Trade secret

Justification

Industrial design - colour and shape of the product
Trademark:
Brand name
Tradesecret:
It have a formulae to create this product

Comments and Feedback of activity for future improvement:

Was the activity helped you to understand the IPR types in deep? (Yes / No)

Other comments and feedback on the activity:

K. Ramkumar, S. Bijin Daniel, Saravanakumar S

Signature of the Student(s)

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Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering

Course Code & Title : GE8075 Intellectual Property Rights

Name of the Faculty member(s) : Mr.R.Arun Kumar, AP/Mech

Innovative Practice Description

Unit / Topic : Unit – I Introduction / IP types and its features

Course Outcome : Students will be able to describe the concepts of various IPR

Topic Learning Outcome : Explain the basic concepts of different IPR

Activity Chosen : Mind mapping

Justification : Students need to collaborate with peers and brainstorm the features of any 5 IP rights that comes first to their mind. Grouping will help them to bring out the collective features of the different forms of IP rights.

Time Allotted for Activity : 15 minutes

Details of Implementation : Students were paired into groups with 2 members in each group. They were provided with the activity sheet to fill the mind mapping activity sheets. They were given 15 minutes of time to discuss with their fellow peers and fill the sheet. After their completion, the students were asked to fill, why they have filled only those 5 types among 8. This helps the faculty to understand which forms of IP right have reached the students deeper.

PO / PSO mapping for the activity:

Innovative Practice	PO9	PO10	PO12
Level of mapping	2	1	1
Justification for correlation	Students are made to collaborate with peers and they will be maintaining the composure of team work and will be exhibiting the individualization in the activity and hence the activity is mapped at level 2	Students are made to communicate their learning through written (flow chart) as well as through oral communication. As the communication is for shorter period of time, it is mapped at level 1	Students are made to understand the filing procedure on surface level. This may intend them to learn deeper about the patent process. Hence, the activity is mapped at level 1

(1 – Low 2 – Moderate 3 – High)

Images / Screenshot of the practice:

Sample sheets are annexed

Reflective Critique:

i. Feedback of practice from students and other stakeholders:

Available in the sample sheets

ii. Benefit of the practice:

Students were helped to understand the process of patent filing with hands on learning through this activity which may help them in future for patent filing as well as in exam point of view.

iii. Whether the practice is adopted in any of the courses early:

No

Challenges faced in implementation:

Students took excess time than the planned duration.

References: Nil

CO1: Student will be able to describe the concepts of various IPR

Signature of Faculty Member

HOD

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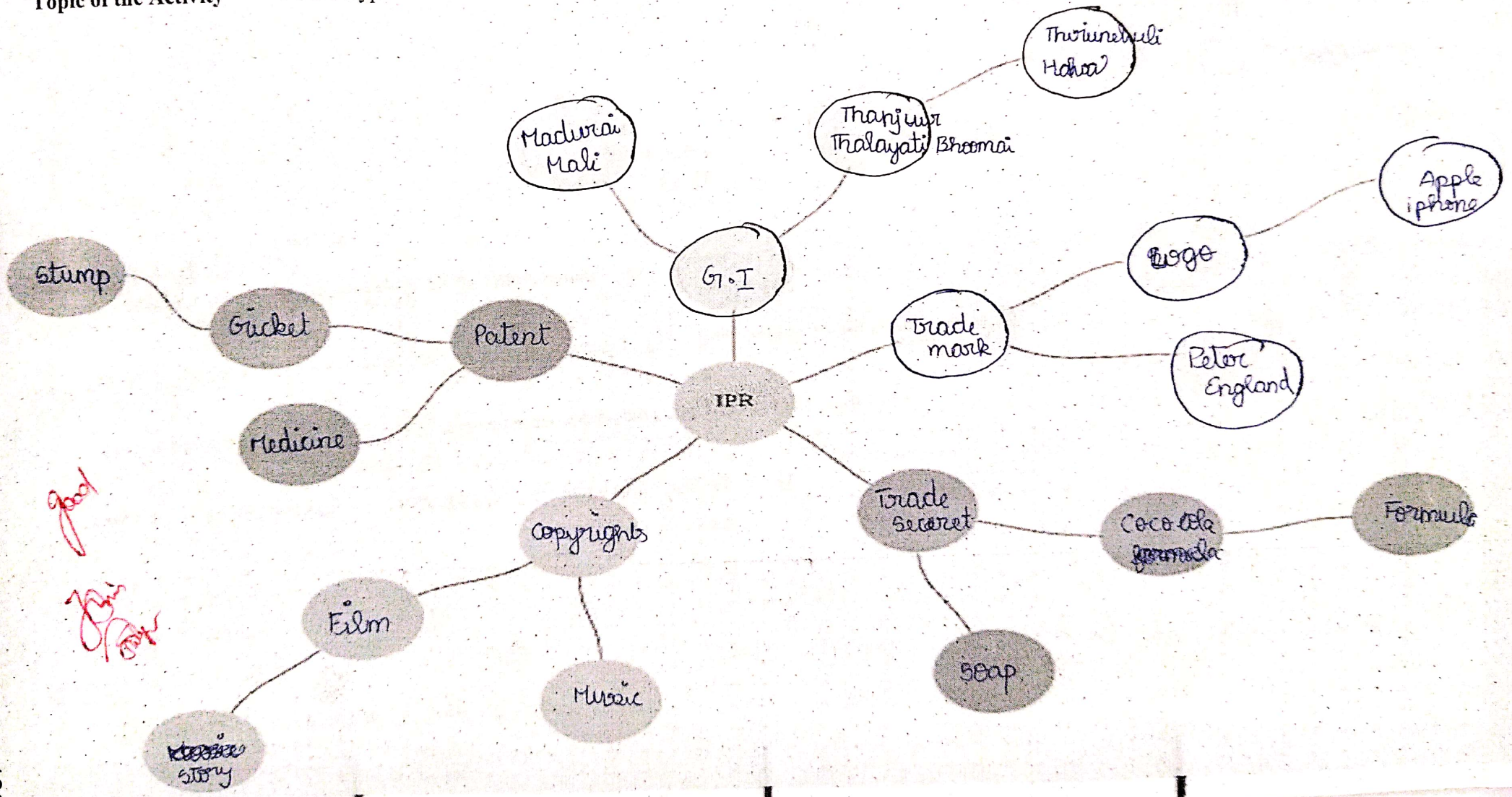
Department of Mechanical Engineering
Academic Year 2021 – 22 (Even Semester)

Course Code & Title : GE8075 Intellectual Property Rights
Active Learning Method : Mind mapping
Class & Semester : VI Semester B.E. Mechanical Engineering
Topic of the Activity : IPR types and its nature



good

What made you to focus only on the above 5 IPs alone?

These are the IPs of easily understand & Identified that ~~which~~ are general

How do you rate the activity on a scale of 5? (5 – Maximum & 1 – Minimum) 5

Do you agree the activity helped you to understand the topic better than before? (Yes / No)

If yes to what extent it helped to get deep learning on a scale of 5? (5 – Maximum & 1 – Minimum) 5

Suggest any improvements on the activity for improvement.

- None -

D. Abinaya (Anithrajaselan)

Saravanakumar. S

Signature of the Student(s)

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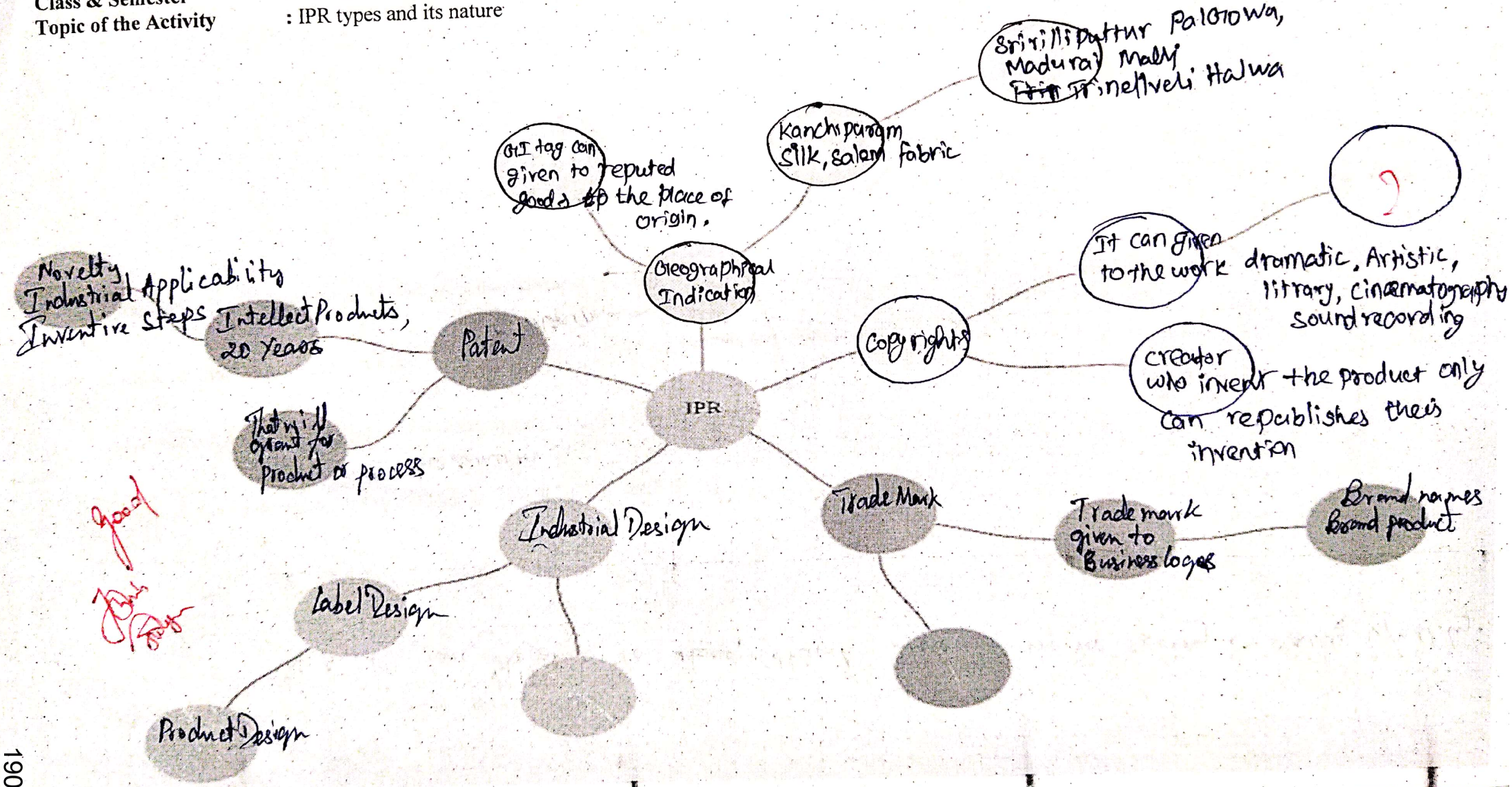
Department of Mechanical Engineering
Academic Year 2021 – 22 (Even Semester)

953619114012
953619114032
953619114039

Course Code & Title : GE8075 Intellectual Property Rights
Active Learning Method : Mind mapping
Class & Semester : VI Semester B.E. Mechanical Engineering
Topic of the Activity : IPR types and its nature



What made you to focus only on the above 5 IPs alone?

The 5 IP's have first ~~became~~ came to ~~thought~~ think. These IP are we seeing in daily lifestyle.

How do you rate the activity on a scale of 5? (5 – Maximum & 1 – Minimum)

5 - Maximum

Do you agree the activity helped you to understand the topic better than before? (~~Yes~~ / No)

If yes to what extent it helped to get deep learning on a scale of 5? (5 – Maximum & 1 – Minimum)

5 Maximum

Suggest any improvements on the activity for improvement. —

Signature of the Student(s)

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Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

Degree, Semester & Branch : VI Semester B.E. Mechanical Engineering

Course Code & Title : GE8075 Intellectual Property Rights

Name of the Faculty member(s) : Mr.R.Arun Kumar, AP/Mech

Innovative Practice Description

Unit / Topic : Unit – I Introduction / Patent filing process

Course Outcome : Students will be able to describe the concepts of various IPR

Topic Learning Outcome : Explain the basic concepts of different IPR

Activity Chosen : Pictorial learning

Justification : Students need to collaborate with peers and fill the flowchart related to patent filing procedure. This will help them to understand the process of patent filing and interact with the peer to get deep understanding

Time Allotted for Activity : 20 minutes

Details of Implementation : Students were paired into groups with 2 members in each group. They were provided with the activity sheet to fill the process of patent filing procedure. They were given 15 minutes of time to discuss with their fellow peers and fill the flow chart. After their completion, the process will be explained again to rectify the mistakes they have made.

PO / PSO mapping for the activity:

Innovative Practice	PO9	PO10	PO12
Level of mapping	2	1	1
Justification for correlation	Students are made to collaborate with peers and they will be maintaining the composure of team work and will be exhibiting the individualization in the activity and hence the activity is mapped at level 2	Students are made to communicate their learning through written (flow chart) as well as through oral communication. As the communication is for shorter period of time, it is mapped at level 1	Students are made to understand the filing procedure on surface level. This may intend them to learn deeper about the patent process. Hence, the activity is mapped at level 1

(1 – Low 2 – Moderate 3 – High)

Images / Screenshot of the practice:

Sample sheets are annexed

Reflective Critique:

i. Feedback of practice from students and other stakeholders:

Available in the sample sheets

ii. Benefit of the practice:

Students were helped to understand the process of patent filing with hands on learning through this activity which may help them in future for patent filing as well as in exam point of view.

iii. Whether the practice is adopted in any of the courses early:

No

Challenges faced in implementation:

Students took excess time than the planned duration.

References: Nil

CO1: Student will be able to describe the concepts of various IPR

14/07/22

Signature of Faculty Member

14/7/22

HOD

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Department of Mechanical Engineering

Academic Year 2021 – 2022 (Even Semester)

FLOW CHART BASED ACTIVITY – THINK PAIR SHARE

CO	PO9	PO10	PO12
CO1	✓	✓	✓

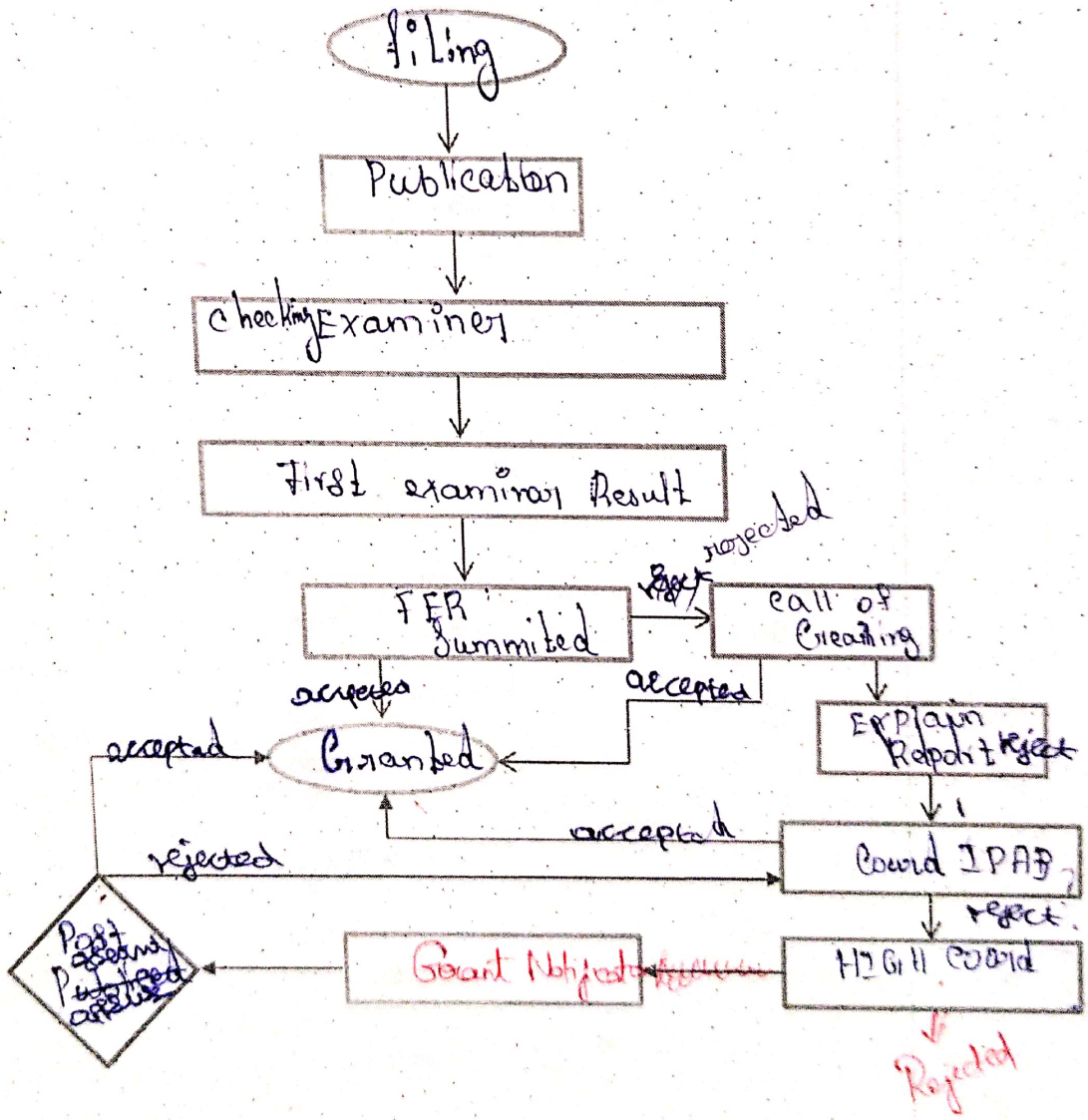
Name & Reg. No. : A. Kanagaraj (953619111030) & M. Manoj Kumar (953619111025)

Branch and Year : VI Semester B.E. Mechanical Engineering

Subject Code & Title : GE8075 Intellectual Property Rights

Name of the Faculty : Mr.R.Arun Kumar, AP/Mechanical

Date: 13/04/2022



Comments and Feedback of activity for future improvement:

Was the activity helped you to understand the IPR types in deep? (Yes / No)

Other comments and feedback on the activity:

K. Manoj Kumar.

Signature of the Student(s)

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Department of Mechanical Engineering

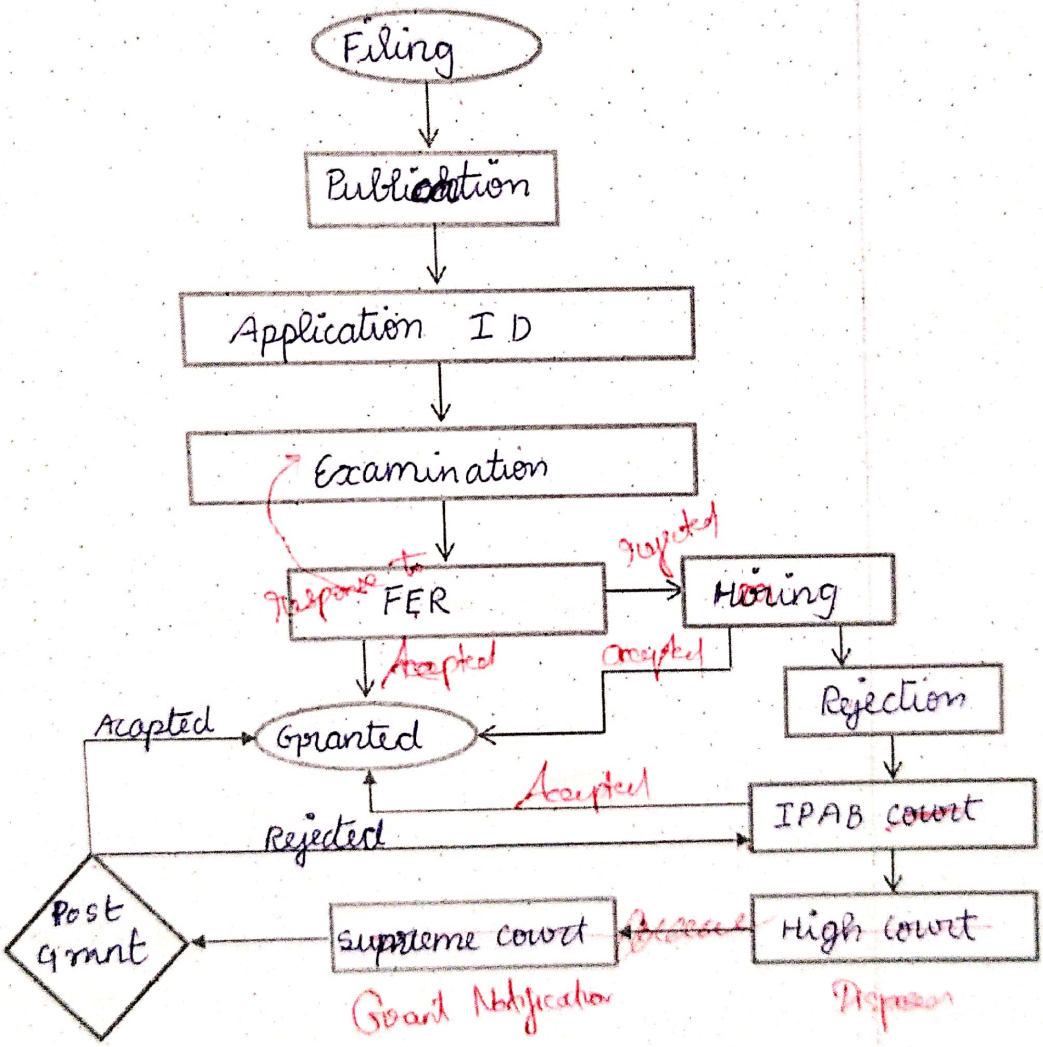
Academic Year 2021 – 2022 (Even Semester)

FLOW CHART BASED ACTIVITY – THINK PAIR SHARE

CO	PO9	PO10	PO12
CO1	✓	✓	✓

Name & Reg. No. : Anithrajaseelan, 953619114001 Saravana Kumar 953619114034
Branch and Year : VI Semester B.E. Mechanical Engineering
Subject Code & Title : GE8075 Intellectual Property Rights
Name of the Faculty : Mr.R.Arun Kumar, AP/Mechanical

Date: 13.04.2022



Comments and Feedback of activity for future improvement:

Was the activity helped you to understand the IPR types in deep? (Yes / No) Yes

Other comments and feedback on the activity: None

Saravanakumar. S
Signature of the Student(s)

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year 2021 – 2022

Assessment of pre-course knowledge & Student's Requisite from course

Course Code & Title : GE8075 Intellectual Property Rights

Course Instructor : Mr.R.Arun Kumar, AP/Mechanical

Register Number : 953619111039

Name of the student : C. Thiruga Dinesh.

Date : 16/3/22

Email ID : 953619111039@ritchpm.ac.in

9

Choose appropriate answer

1. **IPR stands for** Intellectual Property Rights [CO1]

2. **Which among the following is not a part of IPR?** [CO1]
   a. Patent b. Design c. Trade Mark d. Trade formula

3. **What is the term of a Patent in India?** [CO1]
   a. 5 years b. 10 years c. 15 years d. 20 years

4. **Which of the following does Patents aim to protect in India?** [CO2]
   a. Software b. Literary works c. Technological Inventions d. None of the above

5. **The Nike swoosh mark and Audi rings are protected by** [CO2]
   a. Copyrights b. Trade Marks c. Trade Secrets d. Patents

6. **Which among the following is not protected under Geographical Indications?** [CO2]
   a. Srivi Palkowa b. Madurai Malli c. Kodai Malaipoondu d. Panrutti Mundhiri

7. **The Geographical Indications of Goods (Registration and Protection) Act was passed in the year.** [CO3]
   a. 1999 b. 1970 c. 2000 d. 1957

8. **Madrid Agreement is meant for?** [CO3]
   a. Copyrights b. Trade Secret c. Trade Mark d. Geographical Indication

9. **The Hague Agreement was framed for?** **[CO3]**

(a.) Copyrights b. Trade Secret c. Trade Mark d. Geographical Indication

10. **Which among the following cannot be protected in India?** **[CO4]**

a. Software b. Literary works c. Technological Inventions (d.) None of the above

11. **Semiconductor Act was passed in the year?** **[CO4]**

a. 1999 (b.) 1970 c. 2000 d. 1957

12. **TRIMS stands for** _____ **[CO4]**

13. **Patent Infringement falls under?** **[CO5]**

(a.) Civil offence b. Criminal offence

14. **Trade Mark Infringement falls under?** **[CO5]**

a. Civil offence (b.) Criminal offence

15. **Legally the copyright of a tune stays with?** **[CO5]**

(a.) Music Composer b. Producer of the film c. Director of the film

16. Reason why you have chosen this course as elective

Interested in property rights

17. Your expectation from this course and course instructor

Nill

18. Your CGPA (till 4th semester) and history of arrear:

7.4

Signature of the Student

RAMCO INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

Academic Year 2021 – 2022

Assessment of pre-course knowledge & Student's Requisite from course

Course Code & Title	: GE8075 Intellectual Property Rights
Course Instructor	: Mr.R.Arun Kumar, AP/Mechanical
Register Number	: 953619114001
Name of the student	: Anithrajaselan
Date	: 15.03.22
Email ID	: 953619114001@ritrjpm.ac.in

8/15

Choose appropriate answer

1. **IPR stands for** Intellectual Property Rights **[CO1]**

2. **Which among the following is not a part of IPR?** **[CO1]**
   a. Patent b. Design c. Trade Mark d. Trade formula

3. **What is the term of a Patent in India?** **[CO1]**
   a. 5 years b. 10 years c. 15 years d. 20 years

4. **Which of the following does Patents aim to protect in India?** **[CO2]**
   a. Software b. Literary works c. Technological Inventions d. None of the above

5. **The Nike swoosh mark and Audi rings are protected by** **[CO2]**
   a. Copyrights b. Trade Marks c. Trade Secrets d. Patents

6. **Which among the following is not protected under Geographical Indications?** **[CO2]**
   a. Srivi Palkowa b. Madurai Malli c. Kodai Malaipoondu d. Panrutti Mundhiri

7. **The Geographical Indications of Goods (Registration and Protection) Act was passed in the year.** **[CO3]**
   a. 1999 b. 1970 c. 2000 d. 1957

8. **Madrid Agreement is meant for?** **[CO3]**
   a. Copyrights b. Trade Secret c. Trade Mark d. Geographical Indication

9. **The Hague Agreement was framed for?** [CO3]

a. Copyrights b. Trade Secret c. Trade Mark d. Geographical Indication

10. **Which among the following cannot be protected in India?** [CO4]

a. Software b. Literary works c. Technological Inventions d. None of the above

11. **Semiconductor Act was passed in the year?** [CO4]

a. 1999 b. 1970 c. 2000 d. 1957

12. **TRIMS stands for** _____ [CO4]

13. **Patent Infringement falls under?** [CO5]

a. Civil offence b. Criminal offence

14. **Trade Mark Infringement falls under?** [CO5]

a. Civil offence b. Criminal offence

15. **Legally the copyright of a tune stays with?** [CO5]

a. Music Composer b. Producer of the film c. Director of the film

16. Reason why you have chosen this course as elective

To know what about Patents and copyrights.

17. Your expectation from this course and course instructor

To know how and where we have to use the IPR

18. Your CGPA (till 4th semester) and history of arrear:

7.93 and 1

D. [signature]

Signature of the Student

RAMCO INSTITUTE OF TECHNOLOGY

ARUN KUMAR R <arunr@ritrjpm.ac.in>

Feedback and Suggestion for handling course GE8075 Intellectual Property Rights - reg.

ARUN KUMAR R <arunr@ritrjpm.ac.in> Fri, Nov 27, 2020 at 8:44 PM
To: "Dr. A. Balaji Ganesh" <abganesh@velammal.edu.in>
Cc: SANTHANA MARUTHU PANDIAN M <santhana@ritrjpm.ac.in>, PRABU RAM G <prabu@ritrjpm.ac.in>, Rajakarunakaran S <rajakarunakaran@ritrjpm.ac.in>

Dear Sir,

Based on our conversation through phone on 26.11.2020 (Thursday), herewith I have attache following documents for the course GE8075 Intellectual Property Rights.

1. ***Syllabus copy***
2. ***Content beyond syllabus plan*** of the previous academic year (2019 - 20)
3. ***Form of suggestion*** to improve the Teaching Learning process for current academic year 2020 - 21 .

Kindly give your valuable feedback and suggestions to improve the teaching learning process of the course .

--
With regards,
R.Arun Kumar
AP/Mechanical
Ramco Institute of Technology

Virus-free. www.avast.com

3 attachments

1. Syllabus.docx
16K

2. Content Beyond Syllabus Plan of AY 2019 - 2020.pdf
245K

3. Suggestion form from expert (Balaji Sir).doc
174K

GE8075

INTELLECTUAL PROPERTY RIGHTS

L T P C
3 0 0 3

OBJECTIVE:

- To give an idea about IPR, registration and its enforcement.

UNIT I INTRODUCTION

Introduction to IPRs, Basic concepts and need for Intellectual Property - Patents, Copyright, Geographical Indications, IPR in India and Abroad – Genesis and Development – the way from WTO to WIPO –TRIPS, Nature of Intellectual Property, Industrial Property, technological Research, Invention and Innovations – Important examples of IPR.

UNIT II REGISTRATION OF IPRs 10

Meaning and practical aspects of registration of Copy Rights, Trademarks, Patents, Geographical Indications, Trade Secrets and Industrial Design registration in India and Abroad

UNIT III AGREEMENTS AND LEGISLATIONS 10

International Treaties and Conventions on IPRs, TRIPS Agreement, PCT Agreement, Patent Act of India, Patent Amendment Act, Design Act, Trademark Act, Geographical Indication Act.

UNIT IV DIGITAL PRODUCTS AND LAW 9

Digital Innovations and Developments as Knowledge Assets – IP Laws, Cyber Law and Digital Content Protection – Unfair Competition – Meaning and Relationship between Unfair Competition and IP Laws – Case Studies.

UNIT V ENFORCEMENT OF IPRs

Infringement of IPRs, Enforcement Measures, Emerging issues – Case Studies. 7

OUTCOME: **TOTAL :45 PERIODS**

- Ability to manage Intellectual Property portfolio to enhance the value of the firm.

TEXT BOOKS

1. S.V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.

2. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, 2012

REFERENCES

1. Deborah E. Bouchoux, "Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets", Cengage Learning, Third Edition, 2012.

2. Prabuddha Ganguli,"Intellectual Property Rights: Unleashing the Knowledge Economy", McGraw Hill Education, 2011.

3. Edited by Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, Edward Elgar Publishing Ltd., 2013.

RAMCO INSTITUTE OF TECHNOLOGY

ARUN KUMAR R <arunr@ritrjpm.ac.in>

Feedback and Suggestion for handling course GE8075 Intellectual Property Rights - reg.

Dr. A. Balaji Ganesh <abganesh@velammal.edu.in> Thu, Dec 17, 2020 at 9:31 AM
To: ARUN KUMAR R <arunr@ritrjpm.ac.in>
Cc: SANTHANA MARUTHU PANDIAN M <santhana@ritrjpm.ac.in>, PRABU RAM G <prabu@ritrjpm.ac.in>, Rajakarunakaran S <rajakarunakaran@ritrjpm.ac.in>

Dear Mr. Arun Kumar R:

Sorry for my delayed response. Herewith attached the document as requested.

with best regards,

[Quoted text hidden]

--
A. Balaji Ganesh, Ph.D.,
Dean (Research),
Co-Coordinator, TIFAC-CORE,
Patent Agent India (IN/PA-3081) and IPR Consultant,
Velammal Engineering College, Chennai-600 066, INDIA.
Mail: abganesh@velammal.edu.in & abganesh@live.in
Phone Number: 044- 39666005 & GSM: 0 98427 91925
http://tifac.velammal.edu.in/pdf/faculty/Dr.A.BalajiGanesh.pdf
LinkedIn: linkedin.com/in/abganesh

3. Suggestion form from expert (Balaji Sir).doc
195K

RAMCO INSTITUTE OF TECHNOLOGY

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An ISO 9001: 2015 Certified Institution
NAAC Accredited Institution

Department of Mechanical Engineering
Academic Year: 2020 – 2021 (Even Semester)

SUGGESTION FROM EXPERTS TO IMPROVE TEACHING LEARNING PROCESS

Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty member: Mr.R.Arun Kumar, AP/Mechanical
Mr.M.Santhana Maruthu Pandian, AP/Mechanical
Name of the Expert: Prof.A.Balaji Ganesh, M.E., Ph.D., Patent Agent,
Professor & Dean, Research, Velammal Engineering College, Chennai.

Unit	Remarks / Feedback about existing plan	Suggestion for improvement
Unit I Introduction	Plant Varieties and Farmers' Rights – is planned as an additional topic – seems viable plan	Consider to make the students to identify the inventiveness in their own projects – Topics to be covered 'Patent Landscape Analysis'
Unit II Registration of IPRs	Patent registration forms – is planned and real time case studies with advent of already filed forms to be used	Prescribed fees to be included; norms to be followed to obtain digital signature may be included
Unit III Agreements and Legislation	Patent search in free databases and paid databases [1 month free subscription]	May consider to include, cooperative patent classification (CPC) and International patent classification (IPC)
Unit IV Digital Products Law	Patent reading is planned but not related to the specific unit.	Teach the students how they do perform safe search, how to handle/prevent data theft; and how to use the concern laws.
V Enforcement of IPRs	Patent Drafting – is planned; however, only interested students will get benefit.	Additional case studies relevant to individual sections of Indian Patents Act (1970) may be tried; to enable the students to familiarize with IP acts and rules.

Overall Feedback:
Faculty concerned requested to create an awareness on the opportunity [Patent agent, Patent examiner and IPR protection] to the engineering students when they learn about IPR.

(A. Balaji Ganesh)

RAMCO INSTITUTE OF TECHNOLOGY

ARUN KUMAR R <arunr@ritrjpm.ac.in>

Feedback and Suggestion for handling course GE8075 Intellectual Property Rights - reg.

ARUN KUMAR R <arunr@ritrjpm.ac.in> Fri, Nov 27, 2020 at 8:43 PM
To: Thiyagaraja Guptha <gupt7@yahoo.co.in>
Cc: SANTHANA MARUTHU PANDIAN M <santhana@ritrjpm.ac.in>, PRABU RAM G <prabu@ritrjpm.ac.in>, Rajakarunakaran S <rajakarunakaran@ritrjpm.ac.in>

Dear Sir,

Based on our conversation through phone on 26.11.2020 (Thursday), herewith I have attached the following documents for the course GE8075 Intellectual Property Rights.

1. ***Syllabus copy***
2. ***Content beyond syllabus plan*** of the previous academic year (2019 - 20)
3. ***Form of suggestion*** to improve the Teaching Learning process for current academic year 2020 - 21 .

Kindly give your valuable feedback and suggestions to improve the teaching learning process of the course.

With regards,
R.Arun Kumar
AP/Mechanical
Ramco Institute of Technology

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174K

RAMCO INSTITUTE OF TECHNOLOGY

ARUN KUMAR R <arunr@ritrjpm.ac.in>

Feedback and Suggestion for handling course GE8075 Intellectual Property Rights - reg.

Tue, Dec 1, 2020 at 11:41 AM

Thiyagaraja Guptha <gupt7@yahoo.co.in>
To: ARUN KUMAR R <arunr@ritrjpm.ac.in>

Dear Arun,
I have attached the suggestion copy.

Regards
Thiyagaraja Guptha.D
Dy. Controller of Patents and Designs
Patent Office
Kolkata
91-9444231236

[Quoted text hidden]

Suggestion form from expert (Thiyagaraja Gupta Sir).pdf
135K

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NAAC Accredited Institution

Department of Mechanical Engineering
Academic Year: 2020 – 2021 (Even Semester)

SUGGESTION FROM EXPERTS TO IMPROVE TEACHING LEARNING PROCESS

Course Code & Title: GE8075 Intellectual Property Rights
Name of the Faculty member: Mr.R.Arun Kumar, AP/Mechanical
Mr.M.Santhana Maruthu Pandian, AP/Mechanical
Name of the Expert: Mr.Thiyagaraja Gupta, M.Tech.,
Deputy Controller of Patents and Design,
Intellectual Property Office, Kolkata.

Unit	Remarks / Feedback about existing plan	Suggestion for improvement
Unit I Introduction	IPR in India and abroad to be made specific to one of a developing country and one of a developed country.	Take one developed country like US or UK and see how the IP has helped the economy, R&D in the country in becoming a developed nation.
Unit II Registration of IPRs	Protection of Integrated Circuit layout Protection shall also be included.	Since the engineers are studying the subject, IC protection may also be of help to them.
Unit III Agreements and Legislation	Copyright act may also be covered	The research thesis, lab manuals are all protected by copyright. Hence the copyright law and filing procedures may also be covered
Unit IV Digital Products Law	fine	No comments
V Enforcement of IPRs	Maximum real time case studies will help to better understand the concepts	IPR as a career tool may be emphasized for students. IPR career is available as IP attorney, IP engineer at R&D organization, IP facilitation centers of DST, CII, TIFAC and board members of copyright (salary of 2L per month)

Overall Feedback:

(Mr.Thiyagaraja Gupta)

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NBA Accredited UG Programs: CSE, EEE, ECE and Mechanical
Rajapalayam - 626 117.

THEORY RECORD

ATTENDANCE / ASSESSMENT RECORD

ACADEMIC YEAR 2021 - 2022

Name of the Faculty Member : MR. R. ARUN KUMAR

Programme : B.E.

Branch / Section : MECHANICAL ENGINEERING 'B'

Semester : V

Course Code / Course Name : GE8075 & INTELLECTUAL PROPERTY RIGHTS

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NBA Accredited UG Programs: CSE, EEE, ECE and Mechanical
Rajapalayam - 626 117.

THEORY RECORD

ACADEMIC YEAR : 2021 - 2022

Name of the Faculty Member : MR. R. ARUN KUMAR

Department : MECHANICAL ENGINEERING

Course Name : INTELLECTUAL PROPERTY RIGHTS

Course Code : GE8075

Semester : VI

Date of Commencement : 07.03.2022

Date of Completion : 18.06.2022

Unit	I	II	III	IV	V
No.of Hours Planned	10	10	10	09	07
No.of Hours Conducted	10	10	10	09	07
Unit Completed on (Date)	24.03.22	19.04.22	13.05.22	03.06.22	13.06.22
Signature of the Faculty Member					
Head of the Department	21/4/22	21/4/22	13/5/22	07/6/22	07/6/22
Principal					

13522

CO Statements

COs	Statement	Level
CO1	Describe the concepts of various intellectual property rights.	L2 (Cog)
CO2	Illustrate the practical aspects of registration in India & abroad.	L3 (Cog)
CO3	Explain the implications of agreements and the legislations.	L2 (Cog)
CO4	Interpret the methods used for digital content protection	L2 (Cog)
CO5	Discuss the legal aspects governing the IPR infringement	L2 (Cog)
CO6	Follow the procedure of Patent Landscape Analysis for a given set of patent journals	L3 (Psy)

CO-PO-PSO Mapping

COs / PO No.	Programme Outcome												PSO			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO1						2		3	2	3		2				
CO2					2	2		3		3		3	1	1	1	
CO3						2		1				1				
CO4						2		1								
CO5					2	2		1								
CO6					2			3	2	3		3				
Avg					2	2		2	2	3		2.25	1	1	1	

Course Outcome Target (Based on previous academic year)

Academic Year	Students Appeared	Students Passed	Pass %	Grade						GPA (10)	AGPA (3)
				O	A+	A	B+	B	U		
2019-20	22	22	100	3	2	5	5	7	0	7.5	2.25
2020-21	25	25	100	0	18	6	1	0	0	8.68	2.60

Target Procedure :

2019-2020: Cumulative Grade Point - 165

Total strength - 22

2020-2021 : Cumulative Grade Point - 217

Total strength - 25

Total grade point of two AY - 382

Total strength of two AY - 47

AGP on scale of 3 - $(382/47) \times 0.3 = 2.438$

Previous target (ie) of 2020-21 - 2.25

∴ AGP of both batches are high.

CO Target : 2.438

Month MARCH '2022 / APRIL 2022

COURSE GE8075 INTELLECTUAL PROPERTY RIGHTS

S. No.	Roll / Reg. No.	Name	Date	08	09	10	15	16	17	18	22	23	24	25	29	30
			Period	04	03	01	07	03	01	01	01	03	01	01	01	03
			Cumulative Periods	01	02	03	04	05	06	07	08	09	10	11	12	15
01.	952618 114001	ANITH RAJASEELAN D		/	/	/	/	/	/	/	/	/	/	/	/	/
02.	038	SYED THOWFEEK S		/	/	/	/	a	/	/	/	/	/	/	/	a
03.	039	THANGIA DINESH C		/	/	/	/	/	/	/	/	/	/	/	a	/
04.	302	KANAGARAJ A		/	/	/	/	/	/	/	/	/	/	/	/	/
05.	012	BIJU DANIE S		/	/	/	/	/	/	/	/	/	/	/	/	/
06.	015	DINESHKUMAR G		/	/	/	/	/	/	a	/	/	/	/	/	/
07.	025	MANOJKUMAR K		/	/	/	/	/	/	/	/	a	/	/	/	/
08.	032	RAMKUMAR K		/	/	/	/	/	/	/	/	a	/	/	/	/
09.	034	SARAVANAKUMAR S		/	/	/	/	/	/	a	/	a	/	/	/	/
10.	041	VIJAY THIRUPATHI M		/	/	/	/	/	/	/	a	/	/	/	/	/
11.	305	MOHAMMED ARSATH S		/	/	/	/	/	/	/	/	a	/	/	/	/
		No. of absentess		-	-	-	-	01	-	02	01	04	-	-	1	1
		Initial of the Faculty Member														

Month APRIL 2022 / MAY 2022

CLASS VI SEM BE. MECHANICAL 'A' & 'B'

21	01	05	06	12	13	19	20	21	29	04	05	06	10
01	01	01	03	03	03	01	03	01	01	03	01	01	07
14	15	16	17	18	19	20	21	22	23	24	25	26	29
/	/	a	/	a	/	/	a	/	/	/	∞	/	/
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a	a	/	/	a	a	/	/	/	/	/	/	/	/
/	/	/	/	a	a	/	/	/	a	a	/	/	/
1	2	2	-	5	5	1	3	-	2	2	2	-	-

Internal Test Marks						Internal Marks (20)	Univ Exam Grade
I	RT	II	RT	III	RT		
66		64		70			A
AB		80		20			B
64		64		70			B+
62		62		62			B+
70		62		62			B+
AB	70	84		61			B+
66		64		69			B+
76		80		82			A
AB	62	54		68			B
AB	28	30		36			B
AB		24		21			B

RECORD OF CLASS WORK

Date	Period	Cumulative Hours	Topics Covered	Instructional Methods	Initial
			UNIT - I INTRODUCTION		
08.03.22	07	01	Pre-course assessment and Introduction to IPR	L&D	
09.03.22	03	02	Basic concepts & need for IP- Patent	L&D	
10.03.22	01	03	Basic concepts & need for IP- GI, Copyrights	L&D	
15.03.22	07	04	Identification of Intellectual Properties	TPS	
16.03.22	03	05	IPR in India & Abroad - Genesis & Development, IP rights and its impact on country's growth	L & Stories -tical D.	
17.03.22	01	06	The way from WTO to WIPO - TRIPS	L&D	
18.03.22	01	07	Nature of IP, Indus prop.	L&D	
22.03.22	07	08	Technological research, Inventions & innovations	L&D	
23.03.22	03	09	Importance of IPR, PVP	Blog, CSD	
24.03.22	01	10	Reading a patent, Revision	L&D.	

RECORD OF CLASS WORK

Date	Period	Cumulative Hours	Topics Covered	Instructional Methods	Initial
			UNIT - II REGISTRATION OF IPR		
26.03.22	01	11	Meaning & practical aspects of registration of Copyrights	L&D	
29.03.22	07	12	Meaning & practical aspects of registration of Trademark	L&D, Quiz	
30.03.22	03	13	Meaning & practical aspects of registration of Patents	L&D	
31.03.22	01	14	Meaning & practical aspects of registration of Patents	L&D	
01.04.22	01	15	Meaning & practical aspects of registration of GIs	L&D	
05.04.22	07	16	Meaning & practical aspects of registration of GIs	L&D.	
06.04.22	03	17	Meaning & practical aspects of registration of TS	L&D.	
12.04.22	07	18	Industrial Design registration in India & abroad, IC layout protection	L&D	
13.04.22	03	19	Patent search, fee, forms, drafting, Revision	Demonstration	
19.04.22	07	20	Revision on Unit - II	L&D	

RECORD OF CLASS WORK

Date	Period	Cumulative Hours	Topics Covered	Instructional Methods	Initial
			UNIT - III AGREEMENTS & LEGISLATIONS		
20.04.22	03	21	International Treaties and Conventions on IPRs	L&D	
21.04.22	01	22	TRIPS Agreement	L&D	
29.04.22	01	23	PCT Agreement	L&D	
04.05.22	03	24	Patents Act of India	L&D	
05.05.22	01	25	Patents Act of India	L&D	
06.05.22	01	26	Patents Amendment Act	L&D	
10.05.22	07	27	Designs Act	L&D	
11.05.22	03	28	Trademark Act	L&D	
12.05.22	01	29	Geographical Indications Act, Copyrights Act	L&D	
13.05.22	01	30	Revision on Unit - III		
17.05.22	07	31	Patent landscape Analysis, Procedure to obtain digital Signature & Patent Agent examination	L&D	

RECORD OF CLASS WORK

Date	Period	Cumulative Hours	Topics Covered	Instructional Methods	Initial
			UNIT - IV		
			DIGITAL PRODUCTS & LAW		
18.05.22	03	32	Digital innovations & the developments as knowledge assets	L&D	
24.05.22	07	33	Digital innovations & the developments as knowledge assets	L&D	
25.05.22	03	34	IP Laws	L&D	
26.05.22	01	35	Cyber laws	L&D	
27.05.22	01	36	Digital Content Protection	L&D	
31.05.22	07	37	Meaning & relationship between Unfair Competition & IP Laws	L&D	
01.06.22	03	38	Unfair Competition	L&D	
02.06.22	01	39	Case Studies	L&D	
03.06.22	01	40	Safe Search, Protection of data, Revision on Unit IV	L&D	

RECORD OF CLASS WORK

Date	Period	Cumulative Hours	Topics Covered	Instructional Methods	Initial
			UNIT - V		
			ENFORCEMENTS OF IPRs	L	
04.06.22	01	41	Infringements of IPRs - Patents	L & CS	
07.06.22	01	42	Infringement of IPRs - Copyright & GI	L & CS	
08.06.22	03	43	Infringement of IPRs - Trade Mark & Trade Secrets	L & CS	
13.06.22	01	44	Infringement of IPRs - Industrial Design	L & CS	
13.06.22	02	45	Enforcement Measures	L & D	
13.06.22	03	46	Emerging Issues	L & D	
13.06.22	04	47	Case Studies, IPR as corporate opportunity. Revision on Unit - V & Post Course Assessment	L & D	

Course Assesment Plan :

Continuous Internal Assessment Methods (CIAM) (Direct / Indirect)	Weightage							
	CO1	CO2	CO3	CO4	CO5	CO6	CIAM	End Semester
IAT	60%	60%	70%	70%	70%	-	40%	60%
Assignment	30%	30%	-	-	-	90%		
Quiz	-	-	20%	20%	20%	-		
CO End Survey	10%	10%	10%	10%	10%	10%		
Total	100%	100%	100%	100%	100%	100%	100%	

Course Outcome Attainment :

Continuous Internal Assessment Methods (CIAM) (Direct / Indirect)	Weightage							
	CO1	CO2	CO3	CO4	CO5	CO6	CIAM	End Semester
Percentage of Students scored ≥ (%)								
Direct AM ( )								
CO End Survey ( )								
Direct ( ) + Indirect ( )								
Overall Attainment (..... CIAM + ...University)								

ALTERNATE CLASS ARRANGEMENTS

Date	Period / Time	CL / CCL / OD and reason for leave	Name of the Subject	Substitute Name	Signature and Date	Signature of the HOD
08.03.22	07	OD (FDP)	GE 8075 - IPR	Mr. G. Prabu ram, AP(SG)/Mech		
09.03.22	03	OD (FDP)	GE 8075 - IPR	Mr. G. Prabu ram, AP(SG)/Mech		
10.03.22	01	OD (FDP)	GE 8075 - IPR	Mr. G. Prabu ram, AP(SG)/Mech		
25.03.22	01	OD (Guest Lecture)	GE 8075 - IPR	Mr. M. Santhana Moorthy Ram, AP/Mech		
18.03.22	01	OD (Guest Lecture)	GE 8075 - IPR	Mr. G. Prabu ram, AP(SG)/Mech		
10.05.22	07	OD	GE 8075 - IPR	Mr. M. Santhana Moorthy Ram, AP/Mech		

Class / Semester : VI SEMESTER B.E. MECHANICAL 'A' & 'B'

Total No. of Students : 11

Test	No. of Students appeared	No. of Students Passed	Pass %	Highest Mark	Lowest Mark	No. of Absentees
IT - I	06 09	06 08	100 88.89	70 70	62 28	05 02
IT- II	11	08	72.73	84	24	NIL
IT - III	11	08	72.73	82	21	NIL
End Semester Exam	11	11	100%	A	B	NIL

CO Target	CO Attainment	Status (Attained / Not Attained)
2.438		

Reasons : (If not Attained)

Proposed Corrective Actions :

.....

.....

.....

Signature of the Faculty Member Domain Co-ordinator HOD

CS8481 - DATABASE MANAGEMENT SYSTEMS LABORATORY

COURSE FILE

B.E. Computer Science and Engineering

II Year / IV Semester

Regulation-2017

Prepared by,

Mr. K.Vignesh Saravanan, Assistant Professor

Ms. G.Sakthi Priya, Assistant Professor

Department of Computer Science and Engineering

RAMCO INSTITUTE OF TECHNOLOGY

Rajapalayam – 626 117,

Tamil Nadu.

March 2022

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

COURSE OUTCOME END SURVEY

Department of Computer Science and Engineering

Academic Year: 2021-2022 (Even Semester)

Course Code & Title	: CS8481 & Database Management Systems Laboratory
Course Index & Year of Study	: C216 & 2021-2022
Degree, Semester & Branch	: IV Semester B.E. Computer Science and Engineering
Name of the Faculty member	: Mr. K.Vignesh Saravanan, AP/CSE

Course Objectives and Outcomes

Course Objectives:

1. To enable the students to understand data definitions and data manipulation commands.
2. To make the students to learn the use of nested and join queries, views.
3. To emphasis the students to understand functions, triggers, procedures and procedural extensions of databases.
4. To familiarize the students with the use of a front end tool.
5. To cultivate the students to understand design and implementation of typical database applications.

Course Outcomes:

After completion of the course, it is expected that:

CO	CO Statement	Unit	Level
CO 1	Use typical data definitions and manipulation commands.	-	L3
CO 2	Design, implement and test Nested and Join Queries and views.	-	L3
CO 3	Analyze the use of Tables, Functions, triggers and Procedures.	-	L3
CO 4	Create applications with a Front-end Tool	-	L3
CO 5	Design and implement typical database applications	-	L3

Course Outcome End survey:

Q. No.	Question	5 (High)	4	3	2	1 (Low)
1.	I can write data definitions and manipulation commands.	41	-	8	-	-
2.	The course improved my ability to design and implement Nested and Join Queries	35	-	13	-	-
3.	I can explain the use of Functions, Triggers and Procedures	36	-	12	-	-
4.	My ability to create applications with a Front-end Tool has improved	34	-	14	-	-
5.	I am confident to design and implement any database application	32	-	16	-	-

lab

Edit

Course end survey

5 Jul at 9:41

Vignesh Saravanan K

All sections

Dear Students,

I request you all to complete the course end survey in the below link.

https://canvas.instructure.com/courses/4439761/quizzes/10500138

Search entries or author | Unread

Write a reply...

ⓘ Students have either already taken or started taking this quiz, so take care when editing it. If you change any quiz questions in a significant way, you might want to consider re-grading students' quizzes who took the old version of the quiz.

Published

Details | Questions

☑ Show question details

Question-1

1 pts

I can write data definitions and manipulation commands.

Scale:

Very Strong-05

Strong -03

Satisfied-01

- ○ 5
- ○ 3
- ○ 1

Question-2

1 pts

The course improved my ability to design and implement Nested and Join Queries

Scale:

Very Strong-05

Strong -03

Satisfied-01

- 5
- 3
- 1

Question-3

1 pts

I can explain the use of Functions, Triggers and Procedures

Scale:

Very Strong-05

Strong -03

Satisfied-01

- 5
- 3
- 1

Question-4

1 pts

My ability to create applications with a Front-end Tool has improved

Scale:

Very Strong-05

Strong -03

Satisfied-01

- 5
- 3
- 1

Question-5 1 pts

I am confident to design and implement any database application

Scale:

Very Strong-05

Strong -03

Satisfied-01

- 5
- 3
- 1

+ New question + New question group Find questions

Notify users this quiz has changed

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User: **VIGNESH SARAVANAN K**

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

PORTAL4 - 2021-2022/EVEN SECOND YEAR-CSE
CS8481-Database Management Systems Laboratory

Verify the Marks that you have Entered
-1 Indicates Absent

S.No.	Reg. No.	Name of the Student	Attendance		Total(100)
			Maximum	Attended	
1	953620104001	AANANDA GANESAN R	60	48	86
2	953620104002	ABINAYA M	60	56	93
3	953620104003	AKHASH ARAVIND P	60	48	88
4	953620104004	BALAMURALIKRISHNA R N	60	60	95
5	953620104005	BHUVANESHWARI S	60	60	94
6	953620104006	BOWYAA L	60	56	94
7	953620104007	DHARANI RAJ V	60	60	89
8	953620104008	DHIRAJ N	60	60	98
9	953620104009	DIVYA M K	60	60	99
10	953620104010	GAYATHRI DEVI S	60	60	94
11	953620104011	GNANAGURU VIGNESH J	60	60	99
12	953620104012	GOPIY K J	60	52	95
13	953620104013	GOWTHAM KARTHIKEYAN M	60	60	91
14	953620104014	HARINISRIVALLI V	60	56	96
15	953620104015	HARSHA R	60	60	100
16	953620104016	IJAAS AHAMAD M	60	60	86
17	953620104017	JEGADESH B	60	44	84
18	953620104018	JELENA JOPHIN J	60	60	89
19	953620104019	JOE ALAN R S	60	48	86
20	953620104021	JOTHI LINGAPANDIAN M	60	60	95
21	953620104022	KAMINI K	60	60	98
22	953620104023	KARTHIKEYAN B	60	56	89
23	953620104024	KARUNYA V	60	60	93
24	953620104025	KEERTHANA V	60	56	91
25	953620104026	SYED ASLAM K	60	56	90
26	953620104027	KUMAR M	60	60	84
27	953620104028	LAKSHMI PRIYA G	60	60	95
28	953620104029	MUGESH M	60	56	90
29	953620104030	MUTHU BRIJESH R	60	60	98
30	953620104031	MUTHU KUMAR K	60	52	100
31	953620104032	NISHASHREE M	60	60	94
32	953620104033	PARANTHAMAN J	60	60	96

S.No.	Reg. No.	Name of the Student	Attendance		Total(100)
			Maximum	Attended	
33	953620104034	PAVITHRA K	60	60	96
34	953620104035	POOJALAKSHMI T	60	60	92
35	953620104036	PREETHA P	60	56	96
36	953620104037	PRAVEEN S	60	52	85
37	953620104038	RAGAVI V G	60	52	97
38	953620104039	RAJADHARSHINI S	60	60	97
39	953620104040	RAJALAKSHMI R U	60	56	99
40	953620104041	RAJASEKARAN T	60	60	87
41	953620104042	SARAVANA JOTHI G	60	56	99
42	953620104043	SARUMATHI M	60	60	94
43	953620104044	SATHISH KANNAN M	60	56	85
44	953620104045	SATHISHKUMAR K	60	56	94
45	953620104046	SHAKTHEE SARAVANA M	60	60	85
46	953620104047	SHAKTHI S	60	60	96
47	953620104048	SHRI DHEIVA R	60	60	98
48	953620104049	SIVAGURUNATHAN G	60	60	90
49	953620104050	SIVAKUMAR M	60	60	94
50	953620104051	SIVAKUMAR P	60	60	100
51	953620104052	SOWMIYA V	60	52	89
52	953620104053	SRINIDHI R	60	60	92
53	953620104054	SHANMUGAPRIYA S	60	60	94
54	953620104055	SUBHIKSHA G	60	60	90
55	953620104056	SUKUMARAN G	60	60	88
56	953620104057	THARANI M N	60	56	99
57	953620104058	VENESHA L	60	56	97
58	953620104059	VINO A	60	60	94
59	953620104060	VISHNUPRIYA S	60	60	93
60	953620104301	BALAMURUGAN K	60	60	99
61	953620104302	ILAYABHARATHI S	60	60	84
62	953620104303	RAAMAKRISHNAN V R	60	52	83
63	953620104304	SATHYANARAYANAN B	60	60	93
64	953620104305	SHANKAR S K	60	60	85
65	953620104306	SUBRAMANI LOKESH	60	60	90

Signature of Faculty

HoD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Practical Marks (100)				
			CA (100)	MT (100)	CA (75)	MT (25)	Total (100)
1	953620104001	AANANDA GANESAN R	91	65	68	16	84
2	953620104002	ABINAYA M	95	84	71	21	92
3	953620104003	AKHASH ARAVIND P	92	74	69	19	88
4	953620104004	BALAMURALIKRISHNA R N	97	86	73	22	95
5	953620104005	BHUVANESHWARI S	96	87	72	22	94
6	953620104006	BOWYAA L	96	87	72	22	94
7	953620104007	DHARANI RAJ V	93	75	70	19	89
8	953620104008	DHIRAJ N	97	98	73	25	98
9	953620104009	DIVYA M K	99	95	74	24	98
10	953620104010	GAYATHRI DEVI S	95	87	71	22	93
11	953620104011	GNANAGURU VIGNESH J	97	97	72	24	96
12	953620104012	GOPIY K J	93	95	70	24	94
13	953620104013	GOWTHAM KARTHIKEYAN M	94	76	71	19	90
14	953620104014	HARINISRIVALLI V	98	85	73	21	94
15	953620104015	HARSHA R	99	99	75	25	100
16	953620104016	IJAAS AHAMAD M	92	65	69	16	85
17	953620104017	JEGADESH B	88	70	66	18	84
18	953620104018	JELENA JOPHIN J	92	75	69	19	88
19	953620104019	JOE ALAN R S	89	70	67	18	85
20	953620104021	JOTHI LINGAPANDIAN M	97	88	72	22	94
21	953620104022	KAMINI K	97	93	73	23	96
22	953620104023	KARTHIKEYAN B	94	70	70	18	88
23	953620104024	KARUNYA V	96	80	72	20	92
24	953620104025	KEERTHANA V	96	74	72	19	91
25	953620104026	K SYED ASLAM	95	70	71	18	89
26	953620104027	KUMAR M	92	60	69	15	84
27	953620104028	LAKSHMI PRIYA G	97	87	73	22	95
28	953620104029	MUGESH M	94	70	71	18	89
29	953620104030	MUTHU BRIJESH R	97	98	73	25	98
30	953620104031	MUTHU KUMAR K	98	98	74	25	99
31	953620104032	NISHASHREE M	94	87	71	22	93
32	953620104033	PARANTHAMAN J	95	93	72	23	95
33	953620104034	PAVITHRA K	97	87	73	22	95
34	953620104035	POOJALAKSHMI T	94	82	70	21	91
35	953620104036	P PREETHA	94	96	71	24	95
36	953620104037	PRAVEEN S	89	65	67	16	83
37	953620104038	RAGAVI V G	97	90	73	23	96

Sl.No	Register No.	Name of Student	Practical Marks (100)				
			CA (100)	MT (100)	CA (75)	MT (25)	Total (100)
38	953620104039	RAJA DHARSHINI .S	97	91	73	23	96
39	953620104040	RAJALAKSHMI R U	97	98	73	25	98
40	953620104041	RAJASEKARAN T	90	70	68	18	86
41	953620104042	SARAVANA JOTHI G	98	94	74	24	98
42	953620104043	SARUMATHI M	96	85	72	21	93
43	953620104044	SATHISH KANNAN M	90	68	67	17	84
44	953620104045	SATHISHKUMAR K	94	85	71	21	92
45	953620104046	SHAKTHEE SARAVANA M	90	65	67	16	83
46	953620104047	SHAKTHI S	97	92	72	23	95
47	953620104048	SHRI DHEIVA R	97	98	73	25	98
48	953620104049	SIVAGURUNATHAN G	93	80	70	20	90
49	953620104050	SIVAKUMAR M	92	95	69	24	93
50	953620104051	SIVAKUMAR P	98	97	74	24	98
51	953620104052	SOWMIYA V	94	70	71	18	89
52	953620104053	SRINIDHI R	95	80	71	20	91
53	953620104054	S SHANMUGAPRIYA	96	87	72	22	94
54	953620104055	SUBHIKSHA G	94	70	71	18	89
55	953620104056	SUKUMARAN G	92	73	69	18	87
56	953620104057	THARANI M N	98	98	73	25	98
57	953620104058	VENESHA L	98	92	73	23	96
58	953620104059	VINO A	94	90	71	23	94
59	953620104060	VISHNUPRIYA S	94	82	71	21	92
60	953620104301	BALAMURUGAN K	99	95	74	24	98
61	953620104302	ILAYA BHARATHI S	89	65	67	16	83
62	953620104303	RAAMAKRISHNAN V R	89	63	67	16	83
63	953620104304	SATHYA NARAYANAN B	93	90	70	23	93
64	953620104305	SHANKAR S K	90	65	67	16	83
65	953620104306	SUBRAMANI LOKESH	93	78	70	20	90

CA: Continuous Assessment; MT: Model Test

10/6/22

Signature of the valuer with date:

10/6/2022

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Practical Marks (100)										Average
			Expt.1	Expt.2	Expt.3	Expt.4	Expt.5	Expt.6	Expt.7	Expt.8	Expt.9	Expt.10	
1	953620104001	AANANDA GANESAN R	84	88	92	94	94	92	92	92	92	92	91
2	953620104002	ABINAYA M	96	90	92	94	94	96	96	96	96	96	95
3	953620104003	AKHASH ARAVIND P	90	90	92	92	94	94	94	90	90	90	92
4	953620104004	BALAMURALIKRISHNA R N	96	100	96	98	98	98	96	96	96	96	97
5	953620104005	BHUVANESHWARI S	96	92	96	96	96	98	96	96	96	96	96
6	953620104006	BOWYAA L	96	96	96	94	96	94	96	96	96	96	96
7	953620104007	DHARANI RAJ V	96	92	92	94	94	94	92	92	92	92	93
8	953620104008	DHIRAJ N	96	98	98	100	98	100	98	94	94	94	97
9	953620104009	DIVYA M K	100	100	98	96	96	98	100	100	100	100	99
10	953620104010	GAYATHRI DEVI S	96	94	92	94	96	96	96	96	96	96	95
11	953620104011	GNANAGURU VIGNESH J	96	98	98	98	98	98	98	94	94	94	97
12	953620104012	GOPIY K J	96	96	92	92	94	94	94	92	92	92	93
13	953620104013	GOWTHAM KARTHIKEYAN M	96	90	92	92	94	94	96	96	96	96	94
14	953620104014	HARINISRIVALLI V	96	98	96	100	98	100	100	96	96	96	98
15	953620104015	HARSHA R	96	100	100	98	100	100	100	100	100	100	99
16	953620104016	IJAAS AHAMAD M	96	90	90	90	92	94	96	90	90	90	92
17	953620104017	JEGADESH B	96	80	84	84	86	88	90	90	90	90	88
18	953620104018	JELENA JOPHIN J	96	90	92	92	94	94	96	90	90	90	92
19	953620104019	JOE ALAN R S	94	84	86	88	90	90	90	90	90	90	89
20	953620104021	JOTHI LINGAPANDIAN M	96	92	94	94	96	96	98	100	100	100	97
21	953620104022	KAMINI K	96	96	96	96	98	100	98	98	98	98	97
22	953620104023	KARTHIKEYAN B	96	90	92	92	94	96	96	94	94	94	94

Sl.No	Register No.	Name of Student	Practical Marks (100)										Average
			Expt.1	Expt.2	Expt.3	Expt.4	Expt.5	Expt.6	Expt.7	Expt.8	Expt.9	Expt.10	
23	953620104024	KARUNYA V	96	96	96	96	96	98	98	96	96	96	96
24	953620104025	KEERTHANA V	96	98	94	98	96	98	96	94	94	94	96
25	953620104026	K SYED ASLAM	96	90	94	96	96	98	98	94	94	94	95
26	953620104027	KUMAR M	96	92	88	90	92	94	92	92	92	92	92
27	953620104028	LAKSHMI PRIYA G	96	90	96	98	98	98	100	98	98	98	97
28	953620104029	MUGESH M	94	94	92	92	92	94	96	96	96	96	94
29	953620104030	MUTHU BRIJESH R	92	94	94	100	94	96	100	100	100	100	97
30	953620104031	MUTHU KUMAR K	96	100	98	100	98	98	100	98	98	98	98
31	953620104032	NISHASHREE M	96	90	92	92	94	96	96	96	96	96	94
32	953620104033	PARANTHAMAN J	96	100	96	92	94	96	98	94	94	94	95
33	953620104034	PAVITHRA K	96	94	94	98	98	100	100	98	98	98	97
34	953620104035	POOJALAKSHMI T	92	92	92	94	94	94	96	94	94	94	94
35	953620104036	P PREETHA	92	92	94	94	96	96	96	94	94	94	94
36	953620104037	PRAVEEN S	84	88	90	90	90	90	90	90	90	90	89
37	953620104038	RAGAVI V G	96	96	96	96	98	98	98	98	98	98	97
38	953620104039	RAJA DHARSHINI .S	96	96	96	96	98	98	98	98	98	98	97
39	953620104040	RAJALAKSHMI R U	96	96	96	96	98	98	98	98	98	98	97
40	953620104041	RAJASEKARAN T	86	90	90	90	92	92	94	90	90	90	90
41	953620104042	SARAVANA JOTHI G	98	98	98	98	98	98	100	98	98	98	98
42	953620104043	SARUMATHI M	94	94	94	96	96	96	98	96	96	96	96
43	953620104044	SATHISH KANNAN M	84	88	90	90	92	92	90	90	90	90	90
44	953620104045	SATHISHKUMAR K	94	94	94	96	96	96	92	94	94	94	94
45	953620104046	SHAKTHEE SARAVANA M	84	88	90	90	92	92	90	90	90	90	90
46	953620104047	SHAKTHI S	96	96	98	98	96	96	98	96	96	96	97
47	953620104048	SHRI DHEIVA R	96	96	98	98	98	98	98	96	96	96	97
48	953620104049	SIVAGURUNATHAN G	90	90	90	90	96	96	94	94	94	94	93
49	953620104050	SIVAKUMAR M	90	90	90	90	94	94	94	94	94	94	92
50	953620104051	SIVAKUMAR P	98	98	98	98	98	98	98	100	98	98	98
51	953620104052	SOWMIYA V	94	94	94	94	94	94	94	94	94	94	94

Sl.No	Register No.	Name of Student	Practical Marks (100)										Average
			Expt.1	Expt.2	Expt.3	Expt.4	Expt.5	Expt.6	Expt.7	Expt.8	Expt.9	Expt.10	
52	953620104053	SRINIDHI R	94	94	96	96	96	96	98	94	94	94	95
53	953620104054	S SHANMUGAPRIYA	96	96	96	96	96	96	98	94	94	94	96
54	953620104055	SUBHIKSHA G	96	94	94	96	94	96	96	92	92	92	94
55	953620104056	SUKUMARAN G	88	90	92	92	94	92	94	92	92	92	92
56	953620104057	THARANI M N	96	98	98	98	98	98	98	98	98	98	98
57	953620104058	VENESHA L	96	98	98	98	98	98	98	98	98	98	98
58	953620104059	VINO A	92	94	92	94	94	96	96	94	94	94	94
59	953620104060	VISHNUPRIYA S	94	94	94	94	94	96	94	94	94	94	94
60	953620104301	BALAMURUGAN K	98	98	98	98	98	98	98	100	100	100	99
61	953620104302	ILAYA BHARATHI S	80	84	90	90	92	92	90	90	90	90	89
62	953620104303	RAAMAKRISHNAN V R	80	84	90	90	92	92	90	90	90	90	89
63	953620104304	SATHYA NARAYANAN B	90	90	92	92	94	94	94	94	94	94	93
64	953620104305	SHANKAR S K	84	88	90	90	92	92	90	90	90	90	90
65	953620104306	SUBRAMANI LOKESH	90	90	92	92	94	94	94	94	94	94	93

10/6/22

Signature of the Faculty member

10/6

HOD-CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Record Marks (50)																							
			Expt.1				Expt.2				Expt.3				Expt.4				Expt.5				Expt.6			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
1	953620104035	POOJALAKSHMI T	25	6	15	46	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47	25	7	15	47
2	953620104036	P PREETHA	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47	25	8	15	48	25	8	15	48
3	953620104037	PRAVEEN S	22	5	15	42	23	6	15	44	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
4	953620104038	RAGAVI V G	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	9	15	49	25	9	15	49
5	953620104039	RAJA DHARSHINI .S	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	9	15	49	25	9	15	49
6	953620104040	RAJALAKSHMI R U	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	9	15	49	25	9	15	49
7	953620104041	RAJASEKARAN T	24	5	14	43	25	5	15	45	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
8	953620104042	SARAVANA JOTHI G	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
9	953620104043	SARUMATHI M	25	7	15	47	25	7	15	47	25	7	15	47	25	8	15	48	25	8	15	48	25	8	15	48
10	953620104044	SATHISH KANNAN M	23	5	14	42	24	5	15	44	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
11	953620104045	SATHISHKUMAR K	25	7	15	47	25	7	15	47	25	7	15	47	25	8	15	48	25	8	15	48	25	8	15	48
12	953620104046	SHAKTHEE SARAVANA M	23	5	14	42	24	5	15	44	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
13	953620104047	SHAKTHI S	25	8	15	48	25	8	15	48	25	9	15	49	25	9	15	49	25	8	15	48	25	8	15	48
14	953620104048	SHRI DHEIVA R	25	8	15	48	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
15	953620104049	SIVAGURUNATHAN G	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45	25	8	15	48	25	8	15	48
16	953620104050	SIVAKUMAR M	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45	25	7	15	47	25	7	15	47
17	953620104051	SIVAKUMAR P	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
18	953620104052	SOWMIYA V	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47
19	953620104053	SRINIDHI R	25	7	15	47	25	7	15	47	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
20	953620104054	S SHANMUGAPRIYA	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
21	953620104055	SUBHIKSHA G	25	8	15	48	25	7	15	47	25	7	15	47	25	8	15	48	25	7	15	47	25	8	15	48
22	953620104056	SUKUMARAN G	23	7	14	44	24	7	14	45	25	7	14	46	25	7	14	46	25	7	15	47	25	6	15	46

Sl.No	Register No.	Name of Student	Record Marks (50)																							
			Expt.1				Expt.2				Expt.3				Expt.4				Expt.5				Expt.6			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
23	953620104057	THARANI M N	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
24	953620104058	VENESHA L	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
25	953620104059	VINO A	24	8	14	46	25	7	15	47	25	6	15	46	25	7	15	47	25	7	15	47	25	8	15	48
26	953620104060	VISHNUPRIYA S	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47	25	8	15	48
27	953620104301	BALAMURUGAN K	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
28	953620104302	ILAYA BHARATHI S	22	5	13	40	23	5	14	42	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
29	953620104303	RAAMAKRISHNAN V R	22	5	13	40	23	5	14	42	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
30	953620104304	SATHYA NARAYANAN B	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47
31	953620104305	SHANKAR S K	23	5	14	42	24	5	15	44	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46
32	953620104306	SUBRAMANI LOKESH	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47

6/6/22

Signature of the Faculty member

6/6/2022

HOD-CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE
Course Code & Title: CS8481 & Database Management Systems Laboratory
Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Record Marks (50)															
			Expt.7				Expt.8				Expt.9				Expt.10			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
1	953620104035	POOJALAKSHMI T	25	8	15	48	25	7	15	47	25	7	15	47	25	7	15	47
2	953620104036	P PREETHA	25	8	15	48	25	7	15	47	25	7	15	47	25	7	15	47
3	953620104037	PRAVEEN S	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
4	953620104038	RAGAVI V G	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
5	953620104039	RAJA DHARSHINI .S	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
6	953620104040	RAJALAKSHMI R U	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
7	953620104041	RAJASEKARAN T	25	7	15	47	25	5	15	45	25	5	15	45	25	5	15	45
8	953620104042	SARAVANA JOTHI G	25	10	15	50	25	9	15	49	25	9	15	49	25	9	15	49
9	953620104043	SARUMATHI M	25	9	15	49	25	8	15	48	25	8	15	48	25	8	15	48
10	953620104044	SATHISH KANNAN M	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
11	953620104045	SATHISHKUMAR K	25	6	15	46	25	7	15	47	25	7	15	47	25	7	15	47
12	953620104046	SHAKTHEE SARAVANA M	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
13	953620104047	SHAKTHI S	25	9	15	49	25	8	15	48	25	8	15	48	25	8	15	48
14	953620104048	SHRI DHEIVA R	25	9	15	49	25	8	15	48	25	8	15	48	25	8	15	48
15	953620104049	SIVAGURUNATHAN G	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47
16	953620104050	SIVAKUMAR M	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47
17	953620104051	SIVAKUMAR P	25	9	15	49	25	10	15	50	25	9	15	49	25	9	15	49
18	953620104052	SOWMIYA V	25	7	15	47	25	7	15	47	25	7	15	47	25	7	15	47
19	953620104053	SRINIDHI R	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
20	953620104054	S SHANMUGAPRIYA	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
21	953620104055	SUBHIKSHA G	25	8	15	48	25	6	15	46	25	6	15	46	25	6	15	46
22	953620104056	SUKUMARAN G	25	7	15	47	25	6	15	46	25	6	15	46	25	6	15	46

Sl.No	Register No.	Name of Student	Expt.7		
			P	V	R
23	953620104057	THARANI M N	25	9	15
24	953620104058	VENESHA L	25	9	15
25	953620104059	VINO A	25	8	15
26	953620104060	VISHNUPRIYA S	25	7	15
27	953620104301	BALAMURUGAN K	25	9	15
28	953620104302	ILAYA BHARATHI S	25	5	15
29	953620104303	RAAMAKRISHNAN V R	25	5	15
30	953620104304	SATHYA NARAYANAN B	25	7	15
31	953620104305	SHANKAR S K	25	5	15
32	953620104306	SUBRAMANI LOKESH	25	7	15

6/6/22

Signature of the Faculty member

Record Marks (50)												
	Expt.8				Expt.9				Expt.10			
Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
49	25	9	15	49	25	9	15	49	25	9	15	49
49	25	9	15	49	25	9	15	49	25	9	15	49
48	25	7	15	47	25	7	15	47	25	7	15	47
47	25	7	15	47	25	7	15	47	25	7	15	47
49	25	10	15	50	25	10	15	50	25	10	15	50
45	25	5	15	45	25	5	15	45	25	5	15	45
45	25	5	15	45	25	5	15	45	25	5	15	45
47	25	7	15	47	25	7	15	47	25	7	15	47
45	25	5	15	45	25	5	15	45	25	5	15	45
47	25	7	15	47	25	7	15	47	25	7	15	47

6/6/2022

HOD-CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Record Marks (50)																							
			Expt.1				Expt.2				Expt.3				Expt.4				Expt.5				Expt.6			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
1	953620104001	AANANDA GANESAN R	23	7	12	42	24	7	13	44	24	8	14	46	25	7	15	47	25	7	15	47	25	6	15	46
2	953620104002	ABINAYA M	25	8	15	48	25	5	15	45	25	6	15	46	25	7	15	47	25	7	15	47	25	8	15	48
3	953620104003	AKHASH ARAVIND P	25	5	15	45	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47
4	953620104004	BALAMURALIKRISHNA R N	25	8	15	48	25	10	15	50	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49
5	953620104005	BHUVANESHWARI S	25	8	15	48	25	7	14	46	25	8	15	48	25	8	15	48	25	9	14	48	25	9	15	49
6	953620104006	BOWYAA L	25	8	15	48	25	8	15	48	25	8	15	48	25	7	15	47	25	8	15	48	25	8	14	47
7	953620104007	DHARANI RAJ V	25	8	15	48	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47	25	7	15	47
8	953620104008	DHIRAJ N	25	8	15	48	25	9	15	49	25	9	15	49	25	10	15	50	25	9	15	49	25	10	15	50
9	953620104009	DIVYA M K	25	10	15	50	25	10	15	50	25	9	15	49	25	8	15	48	25	8	15	48	25	9	15	49
10	953620104010	GAYATHRI DEVI S	25	8	15	48	25	7	15	47	25	7	14	46	25	7	15	47	25	8	15	48	25	8	15	48
11	953620104011	GNANAGURU VIGNESH J	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49
12	953620104012	GOPIY K J	25	8	15	48	25	8	15	48	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47
13	953620104013	GOWTHAM KARTHIKEYAN M	25	8	15	48	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47
14	953620104014	HARINISRIVALLI V	25	8	15	48	25	9	15	49	25	8	15	48	25	10	15	50	25	9	15	49	25	10	15	50
15	953620104015	HARSHA R	25	8	15	48	25	10	15	50	25	10	15	50	25	9	15	49	25	10	15	50	25	10	15	50
16	953620104016	IJAAS AHAMAD M	25	8	15	48	25	5	15	45	25	5	15	45	25	5	15	45	25	6	15	46	25	7	15	47
17	953620104017	JEGADESH B	25	8	15	48	25	5	10	40	25	5	12	42	25	5	12	42	25	5	13	43	25	4	15	44
18	953620104018	JELENA JOPHIN J	25	8	15	48	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	7	15	47
19	953620104019	JOE ALAN R S	25	7	15	47	25	5	12	42	25	5	13	43	25	5	14	44	25	6	14	45	25	5	15	45
20	953620104021	JOTHI LINGAPANDIAN M	25	8	15	48	25	6	15	46	25	7	15	47	25	7	15	47	25	8	15	48	25	8	15	48
21	953620104022	KAMINI K	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	9	15	49	25	10	15	50
22	953620104023	KARTHIKEYAN B	25	8	15	48	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	8	15	48

Sl.No	Register No.	Name of Student	Record Marks (50)																							
			Expt.1				Expt.2				Expt.3				Expt.4				Expt.5				Expt.6			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
23	953620104024	KARUNYA V	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48	25	9	15	49
24	953620104025	KEERTHANA V	25	8	15	48	25	9	15	49	25	7	15	47	25	9	15	49	25	8	15	48	25	9	15	49
25	953620104026	K SYED ASLAM	25	8	15	48	25	5	15	45	25	7	15	47	25	8	15	48	25	8	15	48	25	9	15	49
26	953620104027	KUMAR M	25	8	15	48	25	6	15	46	24	6	14	44	24	6	15	45	25	6	15	46	25	7	15	47
27	953620104028	LAKSHMI PRIYA G	25	8	15	48	25	5	15	45	25	8	15	48	25	9	15	49	25	9	15	49	25	9	15	49
28	953620104029	MUGESH M	25	7	15	47	25	7	15	47	25	6	15	46	25	6	15	46	25	6	15	46	25	7	15	47
29	953620104030	MUTHU BRIJESH R	25	6	15	46	25	7	15	47	25	7	15	47	25	10	15	50	25	7	15	47	25	8	15	48
30	953620104031	MUTHU KUMAR K	25	8	15	48	25	10	15	50	25	9	15	49	25	10	15	50	25	9	15	49	25	9	15	49
31	953620104032	NISHASHREE M	25	8	15	48	25	5	15	45	25	6	15	46	25	6	15	46	25	7	15	47	25	8	15	48
32	953620104033	PARANTHAMAN J	25	8	15	48	25	10	15	50	25	8	15	48	25	6	15	46	25	7	15	47	25	8	15	48
33	953620104034	PAVITHRA K	25	8	15	48	24	8	15	47	25	7	15	47	25	9	15	49	25	9	15	49	25	10	15	50

6/6/22

Signature of the Faculty member

6/6/22

HOD-CSE

RAMCO INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Even Semester)

Degree, Semester & Branch: IV Semester B.E. CSE
Course Code & Title: CS8481 & Database Management Systems Laboratory
Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Sl.No	Register No.	Name of Student	Record Marks (50)															
			Expt.7				Expt.8				Expt.9				Expt.10			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
1	953620104001	AANANDA GANESAN R	25	7	14	46	25	7	14	46	25	7	14	46	25	7	14	46
2	953620104002	ABINAYA M	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
3	953620104003	AKHASH ARAVIND P	25	7	15	47	25	5	15	45	25	5	15	45	25	5	15	45
4	953620104004	BALAMURALIKRISHNA R N	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
5	953620104005	BHUVANESHWARI S	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
6	953620104006	BOWYAA L	25	9	14	48	25	8	15	48	25	8	15	48	25	8	15	48
7	953620104007	DHARANI RAJ V	25	6	15	46	25	6	15	46	25	6	15	46	25	6	15	46
8	953620104008	DHIRAJ N	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
9	953620104009	DIVYA M K	25	10	15	50	25	10	15	50	25	10	15	50	25	10	15	50
10	953620104010	GAYATHRI DEVI S	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
11	953620104011	GNANAGURU VIGNESH J	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
12	953620104012	GOPIY K J	25	7	15	47	25	6	15	46	25	6	15	46	25	6	15	46
13	953620104013	GOWTHAM KARTHIKEYAN M	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
14	953620104014	HARINISRIVALLI V	25	10	15	50	25	8	15	48	25	8	15	48	25	8	15	48
15	953620104015	HARSHA R	25	10	15	50	25	10	15	50	25	10	15	50	25	10	15	50
16	953620104016	IJAAS AHAMAD M	25	8	15	48	25	5	15	45	25	5	15	45	25	5	15	45
17	953620104017	JEGADESH B	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
18	953620104018	JELENA JOPHIN J	25	8	15	48	25	5	15	45	25	5	15	45	25	5	15	45
19	953620104019	JOE ALAN R S	25	5	15	45	25	5	15	45	25	5	15	45	25	5	15	45
20	953620104021	JOTHI LINGAPANDIAN M	25	9	15	49	25	10	15	50	25	10	15	50	25	10	15	50
21	953620104022	KAMINI K	25	9	15	49	25	9	15	49	25	9	15	49	25	9	15	49

Sl.No	Register No.	Name of Student	Record Marks (50)															
			Expt.7				Expt.8				Expt.9				Expt.10			
			P	V	R	Total	P	V	R	Total	P	V	R	Total	P	V	R	Total
22	953620104023	KARTHIKEYAN B	25	8	15	48	25	7	15	47	25	7	15	47	25	7	15	47
23	953620104024	KARUNYA V	25	9	15	49	25	8	15	48	25	8	15	48	25	8	15	48
24	953620104025	KEERTHANA V	25	8	15	48	25	7	15	47	25	7	15	47	25	7	15	47
25	953620104026	K SYED ASLAM	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
26	953620104027	KUMAR M	25	6	15	46	25	6	15	46	25	6	15	46	25	6	15	46
27	953620104028	LAKSHMI PRIYA G	25	10	15	50	25	9	15	49	25	9	15	49	25	9	15	49
28	953620104029	MUGESH M	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
29	953620104030	MUTHU BRIJESH R	25	10	15	50	25	10	15	50	25	10	15	50	25	10	15	50
30	953620104031	MUTHU KUMAR K	25	10	15	50	25	9	15	49	25	9	15	49	25	9	15	49
31	953620104032	NISHASHREE M	25	8	15	48	25	8	15	48	25	8	15	48	25	8	15	48
32	953620104033	PARANTHAMAN J	25	9	15	49	25	7	15	47	25	7	15	47	25	7	15	47
33	953620104034	PAVITHRA K	25	10	15	50	25	9	15	49	25	9	15	49	25	9	15	49

6/6/22

Signature of the Faculty member

6/6/2022

HOD-CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Even Semester)

Marks Statement for Model Practical Examination

Degree, Semester & Branch: IV Semester B.E. CSE

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

Max.Marks:100

Sl.No	Register No.	Name of Student	Marks Scored
1	953620104001	AANANDA GANESAN R	65
2	953620104002	ABINAYA M	84
3	953620104003	AKHASH ARAVIND P	74
4	953620104004	BALAMURALIKRISHNA R N	86
5	953620104005	BHUVANESHWARI S	87
6	953620104006	BOWYAA L	87
7	953620104007	DHARANI RAJ V	75
8	953620104008	DHIRAJ N	98
9	953620104009	DIVYA M K	95
10	953620104010	GAYATHRI DEVI S	87
11	953620104011	GNANAGURU VIGNESH J	97
12	953620104012	GOPIY K J	95
13	953620104013	GOWTHAM KARTHIKEYAN M	76
14	953620104014	HARINISRIVALLI V	85
15	953620104015	HARSHA R	99
16	953620104016	IJAAS AHAMAD M	65
17	953620104017	JEGADESH B	70
18	953620104018	JELENA JOPHIN J	75
19	953620104019	JOE ALAN R S	70
20	953620104021	JOTHI LINGAPANDIAN M	88
21	953620104022	KAMINI K	93
22	953620104023	KARTHIKEYAN B	70
23	953620104024	KARUNYA V	80
24	953620104025	KEERTHANA V	74
25	953620104026	K SYED ASLAM	70
26	953620104027	KUMAR M	60
27	953620104028	LAKSHMI PRIYA G	87
28	953620104029	MUGESH M	70
29	953620104030	MUTHU BRIJESH R	98
30	953620104031	MUTHU KUMAR K	98
31	953620104032	NISHASHREE M	87
32	953620104033	PARANTHAMAN J	93
33	953620104034	PAVITHRA K	87
34	953620104035	POOJALAKSHMI T	82
35	953620104036	P PREETHA	96

Sl.No	Register No.	Name of Student	Marks Scored
36	953620104037	PRAVEEN S	65
37	953620104038	RAGAVI V G	90
38	953620104039	RAJA DHARSHINI .S	91
39	953620104040	RAJALAKSHMI R U	98
40	953620104041	RAJASEKARAN T	70
41	953620104042	SARAVANA JOTHI G	94
42	953620104043	SARUMATHI M	85
43	953620104044	SATHISH KANNAN M	68
44	953620104045	SATHISHKUMAR K	85
45	953620104046	SHAKTHEE SARAVANA M	65
46	953620104047	SHAKTHI S	92
47	953620104048	SHRI DHEIVA R	98
48	953620104049	SIVAGURUNATHAN G	80
49	953620104050	SIVAKUMAR M	95
50	953620104051	SIVAKUMAR P	97
51	953620104052	SOWMIYA V	70
52	953620104053	SRINIDHI R	80
53	953620104054	S SHANMUGAPRIYA	87
54	953620104055	SUBHIKSHA G	70
55	953620104056	SUKUMARAN G	73
56	953620104057	THARANI M N	98
57	953620104058	VENESHA L	92
58	953620104059	VINO A	90
59	953620104060	VISHNUPRIYA S	82
60	953620104301	BALAMURUGAN K	95
61	953620104302	ILAYA BHARATHI S	65
62	953620104303	RAAMAKRISHNAN V R	63
63	953620104304	SATHYA NARAYANAN B	90
64	953620104305	SHANKAR S K	65
65	953620104306	SUBRAMANI LOKESH	78
No. of Students appeared (w)			65
No. of Students absent (x)			0
No. of Students passed (scored marks ≥ 60 out of 100) (y)			65
Pass (%) with 60% as pass mark = (y/w)*100			100
No. of Students scored marks < 60 and > 50 out of 100 (z)			0
Pass (%) with 50% as pass mark = ((y+z)/w)*100			100
No. of Students failed (scored marks < 50 out of 100) / Percentage			0 / 0%
Number of Students Scored Marks in Various Ranges: <50: 0; 50-60: 1; 61-70: 16; 71-80: 10; 81-90: 18; 91-100: 20			

10/6/22

Signature of the valuer with date:

10/6/2022

HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Even Semester)
Model Laboratory Examination

Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering
Course Code &Title: CS8481 Database Management Systems Laboratory
Name(s) of the Faculty member(s): Mr. K.Vignesh Saravanan & Ms. G.Sakthi Priya

Viva Marks **Date: 02.06.2022**

Sl. No.	Reg. No.	Name of the Student	Marks
1.	953620104035	POOJALAKSHMI T	7
2.	953620104036	P PREETHA	6
3.	953620104037	PRAVEEN S	5
4.	953620104038	RAGAVI V G	8
5.	953620104039	RAJA DHARSHINI .S	6
6.	953620104040	RAJALAKSHMI R U	8
7.	953620104041	RAJASEKARAN T	5
8.	953620104042	SARAVANA JOTHI G	9
9.	953620104043	SARUMATHI M	7
10.	953620104044	SATHISH KANNAN M	5
11.	953620104045	SATHISHKUMAR K	5
12.	953620104046	SHAKTHEE SARAVANA M	5
13.	953620104047	SHAKTHI S	7
14.	953620104048	SHRI DHEIVA R	8
15.	953620104049	SIVAGURUNATHAN G	5
16.	953620104050	SIVAKUMAR M	7
17.	953620104051	SIVAKUMAR P	7
18.	953620104052	SOWMIYA V	7
19.	953620104053	SRINIDHI R	7
20.	953620104054	S SHANMUGAPRIYA	7
21.	953620104055	SUBHIKSHA G	7
22.	953620104056	SUKUMARAN G	5
23.	953620104057	THARANI M N	8
24.	953620104058	VENESHA L	7
25.	953620104059	VINO A	7
26.	953620104060	VISHNUPRIYA S	7
27.	953620104301	BALAMURUGAN K	7
28.	953620104302	ILAYA BHARATHI S	5
29.	953620104303	RAAMAKRISHNAN V R	6
30.	953620104304	SATHYA NARAYANAN B	7
31.	953620104305	SHANKAR S K	5
32.	953620104306	SUBRAMANI LOKESH	5

2/6/22
Faculty In-charge

2/6/22
HOD/CSE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Even Semester)
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Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering
Course Code &Title: CS8481 Database Management Systems Laboratory
Name(s) of the Faculty member(s): Mr. K.Vignesh Saravanan & Ms. G.Sakthi Priya

Attendance Sheet **Date: 02.06.2022**

Sl. No.	Reg. No.	Name of the Student	Signature
1.	953620104035	POOJALAKSHMI T	
2.	953620104036	P PREETHA	
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RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
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Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering
Course Code &Title: CS8481 Database Management Systems Laboratory
Name(s) of the Faculty member(s): Mr. K.Vignesh Saravanan & Ms. G.Sakthi Priya

Viva Marks **Date: 06.06.2022**

Sl. No.	Reg. No.	Name of the Student	Marks
1.	953620104001	AANANDA GANESAN R	5
2.	953620104002	ABINAYA M	5
3.	953620104003	AKHASH ARAVIND P	6
4.	953620104004	BALAMURALIKRISHNA R N	6
5.	953620104005	BHUVANESHWARI S	7
6.	953620104006	BOWYAA L	7
7.	953620104007	DHARANI RAJ V	6
8.	953620104008	DHIRAJ N	8
9.	953620104009	DIVYA M K	7
10.	953620104010	GAYATHRI DEVI S	7
11.	953620104011	GNANAGURU VIGNESH J	8
12.	953620104012	GOPIY K J	6
13.	953620104013	GOWTHAM KARTHIKEYAN M	6
14.	953620104014	HARINISRIVALLI V	7
15.	953620104015	HARSHA R	9
16.	953620104016	IJAAS AHAMAD M	5
17.	953620104017	JEGADESH B	5
18.	953620104018	JELENA JOPHIN J	7
19.	953620104019	JOE ALAN R S	5
20.	953620104021	JOTHI LINGAPANDIAN M	8
21.	953620104022	KAMINI K	8
22.	953620104023	KARTHIKEYAN B	5
23.	953620104024	KARUNYA V	6
24.	953620104025	KEERTHANA V	5
25.	953620104026	K SYED ASLAM	5
26.	953620104027	KUMAR M	5
27.	953620104028	LAKSHMI PRIYA G	7
28.	953620104029	MUGESH M	5
29.	953620104030	MUTHU BRIJESH R	8
30.	953620104031	MUTHU KUMAR K	8
31.	953620104032	NISHASHREE M	7
32.	953620104033	PARANTHAMAN J	8
33.	953620104034	PAVITHRA K	7

Faculty In-charge 6/6/22

HOD/CSE 6/6/2022

RAMCO INSTITUTE OF TECHNOLOGY

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Attendance Sheet **Date: 06.06.2022**

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30.	953620104031	MUTHU KUMAR K	
31.	953620104032	NISHASHREE M	
32.	953620104033	PARANTHAMAN J	
33.	953620104034	PAVITHRA K	

Faculty In-charge **HOD/CSE**

B.E / B.Tech./B.Arch. PRACTICAL END SEMESTER EXAMINATIONS, APRIL / MAY 2019

Fourth Semester

CS8481 & DATABASE MANAGEMENT SYSTEMS LABORATORY

(Regulations 2017)

Time : 3 Hours Answer any one Question Max. Marks 100

(To be filled by the question paper setter)

Aim & Procedure	Queries & Program	Output & Result	Viva-Voce	Record	Total
20	30	30	10	10	100

1. Consider the following relations for an order processing application:
   CUSTOMER (CID, NAME)
   PRODUCT (PCODE, PNAME, UNIT_PRICE)
   CUST_ORDER (OCODE, ODATE, CID)
   ORDER_PRODUCT (OCODE, PCODE, NOU)
   NOU – Number of Units. An order can contain many products.
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. Develop a SQL query to list the details of products whose unit price is greater than the average price of all products
   d. List the customer name who have the highest orders
   e. Create a view that displays the PCODE, PNAME and NOU of the product ordered
   f. Create a function that accepts PCODE, Unit_Price and NOU. Calculate the total_cost of the ordered product. Return the total_cost.
   g. Create a sequence named Product_Sequence that will get incremented by 1. Use the created sequence while inserting PCODE into Product table.
   VIVO VOCE

2. Consider the following relations for a transport management system application:
   BUS (ROUTENO, SOURCE, DESTINATION)
   DRIVER (DID, DNAME, DOB, GENDER)
   ASSIGN_ROUTE (DID, ROUTENO, JOURNEY_DATE)
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. Include constraints that the routeNo starts with letter 'R' and gender of driver is always 'Male'
   d. Develop a SQL query to list the details of drivers who have traveled more than three times on the same route 'R3'
   e. Create a sequence named Driver_Sequence that will get incremented by 1. Use the created sequence while inserting DID into Driver table.
   f. Create a view that displays the DID, DNAME assigned for RouteNo 'R5' on 02-NOV-2018
   g. Create a procedure that displays the details of all drivers.
   VIVO VOCE

3. Consider the following relational schema for a Product Sales database application:
   Product (Prodid, Prodesc, Price, Stock)

Purchase (Purid, Proid, qty, supplierName)
Sales (Saleid, Proid, qty, custname)

a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
   Note: Read all questions and populate values accordingly.
c. Include the constraint on Saleid that it starts with letter 'S'.
d. Display the ProdID and the sum of quantity purchased for each product.
e. Create a view that keeps track of Prodid, price, Purid, qty and customerName who made the purchase.
f. Create a sequence named Product_Sequence that gets incremented by 10 and use it for inserting Prodid values in Product table.
g. Include exception in the procedure that will display a message "No such Product ID" if the given product id does not exist in the product table.
   VIVO VOCE

4. Consider the following relational schema for a Product Sales database application:
Product (Prodid, Prodesc, Price, Stock)
Purchase (Purid, Proid, qty, supplierName)
Sales (Saleid, Proid, qty, custname)

a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
   Note: Read all questions and populate values accordingly.
c. Include the constraint on Saleid that it starts with letter 'S'.
d. Display the ProdIDs of the product which are purchased more than 5 times
e. Create a view that keeps track of Prodid, price, Purid, qty and customerName who made the purchase.
f. Create a sequence named Product_Sequence that gets incremented by 2 and use it for inserting Prodid values in Product table.
g. Develop a procedure named Product_Purchase which accepts a purchase id and displays all products that are purchased, qty and price of the product
   VIVO VOCE

5. Consider the following relational schema for a Loan database application:
Customer (Custid, Custname, Age, phno)
Loan (Loanid, Amount, Custid)

a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
   Note: Read all questions and populate values accordingly.
c. Include the constraint on Loanid that it starts with letter 'L'
d. Display the list of the customerids and total Loan amount taken
e. Create a view that keeps track of Custid, Custname, loanid and loan amount.
f. Create a sequence named Customer_Sequence that gets incremented by 3 and use it for inserting Custid values in Customer table
g. Develop a function named Customer_Loan which accepts Loanid as input and displays Custid, CustName and loan_amount.
   VIVO VOCE

6. Consider the following relational schema for a Loan database application:
Customer (Custid, Custname, Age, phno)
HLoan (HLoanid, Amount, Custid)
VLoan (VLoanid, Amount, Custid)
Where HLoan is Housing loan and VLoan is a Vechile loan.

a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.

Note: Read all questions and populate values accordingly.

c. Include the constraint on HLoanid that it starts with letter 'H' and VLoanid starts with letter 'V'.
d. Display the number of VLoan taken by a particular customer id
e. Create a view that keeps track of customer details who have taken both HLoan and VLoan.
f. Develop a procedure named Customer_Loan which accepts HLoanid as input and displays Custid, CustName and loan_amount of HLoan.
g. In the above procedure include exceptions to display "No such HLoanid" when incorrect Hloanid is given.
VIVO VOCE

7. Consider the following relational schema for a Loan database application:
Customer (Custid, Custname, Addr, phno,pan_no)
Loan (Loanid, Amount, Interest,Custid)
Account (Accid, Accbal, Custid)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. Include the constraint on Custid that it starts with letter 'C'
d. Display the customer id, name and account balance. Sort the output using custid
e. Display the accounts of custids 'C01','C02','C03'
f. Create an index on Accid of Account table.
g. Develop a procedure named Customer_Loan that displays all the loan details
h. In the above procedure include exceptions to display "No such Loanid" when incorrect loanid is given.
VIVO VOCE

8. Consider the following relational schema for a Sales database application:
Product (Prodid, Prodesc, Price, Stock)
Purchase (Purid, Proid, qty, supplierName)
Sales (Saleid, Proid, qty, custname)
i. The primary keys are underlined. Identify the foreign keys and draw schema diagram
a. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
b. Create a sequence named Seq1 and use it for proid field.
c. Display the product details whose stock is <15
d. Update the stock of all products by 10
e. List all products which start with either S or T.
f. Display the amount (price * qty) of Products in each Sales.
g. List minimum, maximum, average price of product
VIVO VOCE

9. Consider the following relational schema for a Loan database application:
Customer (Custid, Custname, Age, phno)
Loan (Loanid, Amount, Custid, Emi)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. Update the loan amount by increase in 2 % for all customers
d. Display the custid and Custname whose loan amount lies in the range of 30,000 to 50,000
e. Create a view that keeps track of Custid, Custname, loanid and loan amount.
f. Create a sequence named Customer_Sequence that gets incremented by 3 and use it for inserting Custid values in Customer table.

g. Develop a function named Customer_Loan which accepts Loanid as input and displays Custid, CustName and loan_amount.
VIVO VOCE

10. Consider the following employee and department tables.
EMPLOYEE(empno, ename, designation, manager, hiredate, salary, commission, deptno)
DEPARTMENT(deptno, dname, location)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. List the names of employees whose name contain substring 'LA'.
d. List the details of employees of salary are greater than or equal to the average salary of employee table.
e. Create a view which consists of details of all 'SALESMAN'
f. Write a PL/SQL to display the empno,job,salary of all employees in employee table
g. Write a trigger to ensure that empno in employee table is maintained as primary key.
VIVO VOCE

11. Consider the following tables.
SAILOR(sid, sname, rating, age)
BOATS(bid, bname, colour)
RESERVES(sid, bid, day)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. List the sailors in the descending order of their rating.
d. List the sailors whose youngest sailor for each rating and who can vote.
e. List the sailors who have reserved for both 'RED' and 'GREEN' boats.
f. Write a PL/SQL to find the factorial of a number.
VIVO VOCE

12. Consider the following employee and department tables.
EMPLOYEE(empno, ename, designation, manager, salary, commission, deptno)
DEPARTMENT(deptno, dname, location)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. List the different job titles of employee table.
d. List the details of employees of with minimum salary of employee table.
e. Write a PL/SQL program to find the sum of digits in a given number
f. Write a pl/sql program to generate numbers from 0 to 25 in step of 5
VIVO VOCE

13. Consider the following employee and department tables.
EMPLOYEE(empno, ename, designation, manager, hiredate, salary, commission, deptno)
DEPARTMENT(deptno, dname, location)
a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
b. Create the above mentioned tables and populate the tables.
Note: Read all questions and populate values accordingly.
c. List the details of highest paid employee in 'SALES' department.
d. List the employees of employee table in descending order of their salaries.
e. List the maximum, minimum, average salaries of each department.
f. List the details of employee who are working as manager and getting salary >50000
g. Count the different job titles in employee table.
VIVO VOCE

14. Consider the employee databases.
EMPLOYEE(empno, empname, street, city)
WORKS(empno, empname, companyid, salary)
COMPANY(companyid, companyname, city)
Manages(empno, empname, managername)
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. Find the names of all employees work for 'First bank corporation'
   d. Find the names,street addresses and cities of residence of all employees who work for 'First bank corporation' and earn more than 200000 per annum.
   e. Write a PL/SQL to calculate Electricity bill using function.
      VIVO VOCE

15. Consider the following company database.
EMPLOYEE(eno, name, dob, doj, designation, basicpay, deptno)
DEPARTMENT(deptno, name)
PROJECT(proino, name, deptno)
WORKSFOR(eno, projno, hours)
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. List the department number and the number of employees in each department.
   d. Write a PL/SQL to handle 'Too many rows' predefined exception.
   e. Write a PL/SQL to check whether the given number is Armstrong number or not.
      VIVO VOCE

16. Create the following tables with the mapping given below.
Customer (Cust_id, Cust_name, Addr, ph_no,pan_no)
Loan (Loan_id, Amount, Interest, Cust_id)
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. Display the Cust_name having both Loan and Account
   d. Add a column nol (number of loans)
   e. Display number of Loans, the sum of Loan Amount of a Particular Customer named "LEENA"
      VIVO VOCE

17. Create the following table with the mapping given below.
Customer (Cust_id, Cust_name, Addr, ph_no,pan_no)
   a. The primary keys are underlined. Identify the foreign keys and draw schema diagram
   b. Create the above mentioned tables and populate the tables.
      Note: Read all questions and populate values accordingly.
   c. Delete the row where cust_name='NANCY'.
   d. Update the addr where cust_name='MATHIK'
   e. Display the details of a customer named 'LITHUANA'.
   f. Write a pl/sql program to find the summation of odd numbers using for loop.
   g. Write a pl/sql program to swap two numbers.
      VIVO VOCE

Department of Computer Science and Engineering
Academic Year: 2021-2022 (Even Semester)

COURSE PLAN - LABORATORY

Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering

Regulation: Anna University R 2017

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member(s) with Designation & Department:

Mr.K.Vignesh Saravanan, AP/CSE, Ms.G.SakthiPriya, AP/CSE, Mrs.S.Manjula, AP/CSE

Contact Details:

- **Phone:** +91 9655228156;
- **E-mail:** vigneshk@ritrjpm.ac.in; sakthipriya@ritrjpm.ac.in;
- **LMS Link:** https://canvas.instructure.com/courses/4439761

DEPARTMENT VISION, MISSION, PEO & PSO

VISION

Excellence in Computer Science and Engineering by offering quality technical education catering to research and development.

MISSION

- Equip the department with modern infrastructure for high quality education and carrying out research in emerging technologies in Computer Science and Engineering.
- Expose the students, faculty and staff to a globally competitive learning experience.
- Motivate students to realize the responsibility of being professionally competent computer technocrats to serve the society by inculcating Ethical and Environmental aspects.

PEO

- Graduates will have successful career in IT and related industries or pursue higher education and research or evolve as entrepreneurs.
- Graduates will have the ability and attitude to adapt to emerging technological changes.
- Graduates will excel as socially committed engineers with high ethical values, leadership qualities and empathy for the needs of society

PSO

After successful completion of the degree, the students will be able to:

- Excel in software development including mobile technologies to solve complex computation task with soft skills.
- Apply appreciable knowledge of IoT, Cloud Computing and Cyber Security to develop reliable IT solutions.
- Exhibit proficiency in Artificial Intelligence and Big Data Analytics for providing solutions to real world problems in Industry and Research establishments.

A. Course Objectives and Outcomes

Course Objectives:

1. To enable the students to understand data definitions and data manipulation commands.
2. To make the students to learn the use of nested and join queries, views.
3. To emphasis the students to understand functions, triggers, procedures and procedural extensions of databases.
4. To familiarize the students with the use of a front end tool.
5. To cultivate the students to understand design and implementation of typical database applications.

Course Outcomes:

After completion of the course, it is expected that the students will be able to:

CO	CO Statement	Unit	Performance Indicator	Level
CO1	Use typical data definitions and manipulation commands.	-	1.7.1, 2.7.1, 3.5.2, 3.5.6, 7.3.1, 8.4.2, 9.5, 10.4.2, 10.5.2, 11.6.1, 12.5.2	L3
CO2	Design, implement and test Nested and Join Queries and views.	-	1.7.1, 2.6.3, 3.6.3, 5.4.1, 8.4.2, 9.5, 10.4.2, 10.5.2, 11.6.1, 12.5.2	L3
CO3	Analyze the use of Tables, Functions, triggers and Procedures.	-	1.7.1, 2.7.1, 3.8.1, 7.3.1, 8.4.2, 9.5, 10.4.2, 10.5.2, 11.6.1, 12.5.2	L3
CO4	Create applications with a Front-end Tool	-	1.7.1, 2.7.1, 3.8.2, 5.4.1, 7.3.1, 8.4.2, 9.5, 10.4.2, 10.5.2, 11.6.1, 12.5.2	L3
CO5	Design and implement typical database applications	-	1.7.1, 2.7.1, 2.6.4, 5.4.1, 8.4.2, 9.5, 10.4.2, 10.5.2, 11.6.1, 12.5.2	L3

Course Target:

Target: **2.76**

Procedure for fixing Target:

S. No	Academic Year	Course code	No. of Students attended (m)	No. of Students Passed	Pass Percentage	Average Grade Point (n)	Cumulative Grade Point (m X n)
1.	2020-2021	CS8481	57	57	100 %	9.04	515
2.	2019-2020	CS8481	49	49	100 %	9.84	482
3.	2018-2019	CS8481	54	54	100 %	8.63	466
Total Students			**160**	**Total Grade Points**			**1463**
b=Average Grade Point in scale 3						**(1463/160)*3/10 = 2.74**	
a=Target Attainment for Previous Academic Year						**2.76**	
Target Attainment for AY 2021-2022, Since b<a						**2.76**	

CO-PO Matrices:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C216.1	3	2	3	1	2	-	-	2	2	2	-	2
C216.2	3	2	3	1	2	-	-	2	2	2	-	1
C216.3	3	2	3	1	2	-	-	2	2	2	-	1
C216.4	3	3	3	1	2	-	-	2	2	2	-	2
C216.5	3	2	3	1	2	-	-	2	2	2	-	2
C216	**3**	**2.2**	**3**	**1**	2	-	-	**2**	**2**	**2**	-	**1.6**

CO-PSO Matrices:

CO	PSO1	PSO2	PSO3
C216.1	3	2	3
C216.2	3	2	3
C216.3	3	2	3
C216.4	3	2	3
C216.5	3	2	3
C216	**3**	**2**	**3**

Course Outcome	Justification for Relevance of COs with POs & PSOs
CO1	• **PO1:** Apply basic Knowledge and fundamentals of SQL data definitions and manipulation commands for developing applications • **PO2:** Identify the typical SQL definitions, commands and formulate specifications for developing applications • **PO3:** Design and develop solutions using data definitions and manipulation commands. • **PO4:** Identify risks/impacts in developing definitions and manipulation commands of an application/activity. • **PO5:** Use research-based knowledge including design of experiments with fundamental SQL commands to provide valid conclusions. • **PO8:** Examine and apply moral & ethical principles as per SQL defined syntax to design the commands with own knowledge. • **PO9:** Do Individual or teamwork to develop the SQL data definitions and manipulation commands. • **PO10:** Deliver effective document/ presentations, mini-projects reports and interpret technical instructions

	• **PO12:** Engage SQL data definition and manipulation commands in real-time applications in future projects • **PSO1:** Exhibit knowledge in SQL commands to develop any software application • **PSO2:** Exhibit knowledge of SQL commands to develop Cloud or IOT based applications • **PSO3:** Exhibit knowledge of SQL commands for providing solutions to industry projects in the field of AI and Data Analytics.
CO2	• **PO1:** Apply basic Knowledge and fundamentals of Nested and Join Queries for developing applications • **PO2:** Identify the typical Nested and Join Queries and formulate specifications for developing applications • **PO3:** Design and develop solutions using Nested and Join Queries and create views. • **PO4:** Identify risks/impacts in developing complex queries and views of an application/activity. • **PO5:** Use research-based knowledge including design of experiments with Nested and Join Queries and views to provide valid conclusions. • **PO8:** Examine and apply moral & ethical principles as per SQL defined syntax to design the Nested and Join Queries with own knowledge. • **PO9:** Do Individual or teamwork to develop the Nested and Join Queries and views. • **PO10:** Deliver effective document/ presentations, mini-projects reports and interpret technical instructions • **PO12:** Engage Nested and Join Queries and views in real-time applications in future projects • **PSO1:** Exhibit knowledge in Nested and Join Queries and views to develop any software application • **PSO2:** Exhibit knowledge of Nested and Join Queries and views to develop Cloud or IOT based applications • **PSO3:** Exhibit knowledge of Nested and Join Queries and views for providing solutions to industry projects in the field of AI and Data Analytics.
CO3	• **PO1:** Apply basic Knowledge and fundamentals of SQL Functions, triggers and Procedures for developing applications • **PO2:** Identify the typical Functions, triggers and Procedures and formulate specifications for developing applications • **PO3:** Design and develop solutions using Functions, triggers and Procedures. • **PO4:** Identify risks/impacts in developing Functions, triggers and Procedures of an application/activity.

	• **PO5:** Use research-based knowledge including design of experiments with Functions, triggers and Procedures to provide valid conclusions. • **PO8:** Examine and apply moral & ethical principles as per SQL defined syntax to design the Functions, triggers and Procedures with own knowledge. • **PO9:** Do Individual or teamwork to develop the Functions, triggers and Procedures. • **PO10:** Deliver effective document/ presentations, mini-projects reports and interpret technical instructions • **PO12:** Engage SQL Functions, triggers and Procedures in real-time applications in future projects • **PSO1:** Exhibit knowledge in SQL Functions, triggers and Procedures to develop any software application • **PSO2:** Exhibit knowledge of SQL Functions, triggers and Procedures to develop Cloud or IOT based applications • **PSO3:** Exhibit knowledge of SQL Functions, triggers and Procedures for providing solutions to industry projects in the field of AI and Data Analytics.
CO4	• **PO1:** Apply basic Knowledge and fundamentals of SQL for developing applications • **PO2:** Identify the typical idea of creating applications with front-end tools for developing applications • **PO3:** Design and develop solutions using front-end tools for an applications. • **PO4:** Identify risks/impacts in developing applications with front-end tools of an application/activity. • **PO5:** Use research-based knowledge including design of applications with front-end tools to provide valid conclusions. • **PO8:** Examine and apply moral & ethical principles as per SQL defined syntax to design applications with own knowledge. • **PO9:** Do Individual or teamwork to develop the applications with front-end tools. • **PO10:** Deliver effective document/ presentations, mini-projects reports and interpret technical instructions • **PO12:** Engage the knowledge of front-end tools in real-time applications in future projects • **PSO1:** Exhibit knowledge of front-end tools to develop any software application • **PSO2:** Exhibit knowledge of front-end tools to develop Cloud or IOT based applications • **PSO3:** Exhibit knowledge of front-end tools for providing solutions to industry projects in the field of AI and Data Analytics.

CO5	• **PO1:** Apply basic Knowledge and fundamentals of designing a typical database applications • **PO2:** Identify the typical database models and formulate specifications for developing applications • **PO3:** Design and develop solutions for typical database applications. • **PO4:** Identify risks/impacts in developing typical database applications using suitable databases • **PO5:** Use research-based knowledge including design of applications using suitable databases to provide valid conclusions. • **PO8:** Examine and apply moral & ethical principles as per SQL defined syntax to design the typical database applications with own knowledge. • **PO9:** Do Individual or teamwork to develop the typical database applications. • **PO10:** Deliver effective document/ presentations, mini-projects reports and interpret technical instructions • **PO12:** Engage database concepts in developing typical database applications in future projects • **PSO1:** Exhibit knowledge in designing and implementing database to develop any software application • **PSO2:** Exhibit knowledge in designing and implementing database to develop Cloud or IOT based applications • **PSO3:** Exhibit knowledge in designing and implementing database for providing solutions to industry projects in the field of AI and Data Analytics.

B. Practical Plan:

Batch No.: I (Reg No. 953620104001 to 953620104019 and 953620104020 to 953620104033)

Cycle 1

Sl.No.	Name of the Experiment	Batch I						
		Week 1 (10.3.22)	Week 2 (17.3.22)	Week 3 (24.3.22)	Week 4 (31.3.22)	Week 5 (07.4.22)	Week 6 (10.4.22)	Week 7 (21.4.22)
1.	Introduction to DBMS and basic queries	B1						

2.	Data Definition Commands, Data Manipulation Commands for inserting, deleting, updating and retrieving Tables and Transaction Control statements		B1	B1				
3.	Ex.No: 8(a) Database Design using ER modelling and normalization				B1			
4.	Database Querying – Simple queries, Nested queries, Sub queries and Joins					B1	B1	
5.	Views, Sequences, Synonyms							B1

Cycle 2

Sl.No.	Name of the Experiment	Batch I						
		Week 8 (28.4.22)	Week 9 (5.5.22)	Week 10 (8.5.22)	Week 11 (12.5.22)	Week 12 (19.5.22)	Week 13 (26.5.22)	Week 14 (2.6.22)
6.	Procedures and Functions	B1						
7.	Database Programming: Implicit and Explicit Cursors		B1					
8.	Triggers			B1				
9.	Exception Handling				B1			
10.	Ex.No: 8(b) Implementation for any application					B1		
11.	Database Connectivity with Front End Tools						B1	
12.	Case Study using real life database applications							B1

Note: B1 is Batch 1 consisting of 33 students

Batch No.: II (Reg No. 953620104034 to 953620104060 and 953620104301 to 953620104306)

Cycle 1

Sl.No.	Name of the Experiment	Batch II						
		Week 1 (14.3.22)	Week 2 (21.3.22)	Week 3 (28.3.22)	Week 4 (4.4.22)	Week 5 (10.4.22)	Week 6 (11.4.22)	Week 7 (18.4.22)
1.	Introduction to DBMS and basic queries	B2						
2.	Data Definition Commands, Data Manipulation Commands for inserting, deleting, updating and retrieving Tables and Transaction Control statements		B2	B2				
3.	Ex.No: 8(a) Database Design using ER modelling and normalization				B2			
4.	Database Querying – Simple queries, Nested queries, Sub queries and Joins					B2	B2	
5.	Views, Sequences, Synonyms							B2

Cycle 2

Sl.No.	Name of the Experiment	Batch II						
		Week 8 (25.4.22)	Week 9 (2.5.22)	Week 10 (8.5.22)	Week 11 (9.5.22)	Week 12 (16.5.22)	Week 13 (23.5.22)	Week 14 (30.5.22)
6.	Procedures and Functions	B2						
7.	Database Programming: Implicit and Explicit Cursors		B2					
8.	Triggers			B2				
9.	Exception Handling				B2			

Books / Website/ Journal/e-books/ Videos/ NPTEL/ Matlab Online/ Online Course etc.

1. C.J.Date, A.Kannan and S.Swamynathan, "An Introduction to Database Systems", Eighth Edition, Pearson Education, 2006.
2. Raghu Ramakrishnan, "Database Management Systems", Fourth Edition, McGraw-Hill College Publications, 2015.
3. G.K.Gupta, "Database Management Systems", Tata Mc Graw Hill, 2011.
4. Rob Cornell, "Database Systems Design and Implementation", Cengage Learning, 2011
5. Atul Kahate, "Introduction to Database Management Systems", Pearson Education, New Delhi, 2006.
6. Alexis Leon and Mathews Leon, "Database Management Systems", Vikas Publishing House Private Limited, New Delhi, 2003.
7. https://www.brainkart.com/subject/Database-Management-Systems_380/
8. https://getsetproject.com/projects.php?navSend=Mini-Dbms
9. https://itsourcecode.com/free-projects/database-design-projects/dbms-mini-project-topics-2019/
10. https://www.freeprojectz.com/project-source-code-database-download/dbms-project
11. http://vlabs.iitb.ac.in/vlabs-dev/labs/dblab/index.php
12. http://vlabs.iitb.ac.in/bootcamp/labs/dbms/exp8/index.php

Master Record Prepared and Submitted: Yes / ~~No~~

Guideline: Attach as separate note or document depending on the nature of the laboratory.

Laboratory Manual Link:

https://canvas.instructure.com/courses/4439761/files/172232309?module_item_id=62919754

Signature of the Faculty Member(s) **Domain Coordinator** **HOD**

Vice Principal **Principal**

RAMCO INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering
Academic Year: 2021- 2022 (Even Semester)

Degree, Semester& Branch : **IV Semester B.E. CSE**
Course Code & Title : **CS8481- Database Management Systems Laboratory**
Name of the Faculty member(s) : **Mr. K.Vignesh Saravanan, AP / CSE**
Ms. G.Sakthi Priya, AP/CSE
Mrs. S.Manjula, AP/CSE

MINI PROJECTS REVIEW SCHEDULE

Title	Tentative Dates	Project Assessment criteria
Review-1	Batch-1 07.04.2022 Batch-2 10.04.2022	***Project Outline and design*** ✓ Problem statement ✓ ER modelling ✓ Relations(tables) to be used with primary keys, foreign keys
Review-2	Batch-1 19.05.2022 Batch-2 16.05.2022	***Implementation of the Database*** ✓ Implementation of all the relations in DB ✓ All the queries to fetch required data – joins, nested, subqueries
Review-3	Batch-1 02.06.2022 Batch-2 30.05.2022	***Connecting Database with front-end tools*** ✓ Implementation – 100% with all tables connected ✓ Front-end design and connected with DB ✓ Output screenshots of all possible data

Technologies to be used:

Front-end:

- **ASP.NET** based applications using tools such as **Microsoft Visual Studio**
- **PHP** using any IDE
- **JAVA** using Eclipse IDE or NetBeans

Back-end:

- **Microsoft SQL Server** - relational database management system

07/3/22

Prepared by:
Mr. K.Vignesh Saravanan

7/3/2022

Approved by:
Dr. K.Vijayalakshmi

Department of Computer Science and Engineering
Academic Year: 2021-2022 (Even Semester)

COURSE PLAN - LABORATORY

Degree, Semester & Branch: IV Semester B.E. Computer Science and Engineering

Regulation: Anna University R 2017

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member(s) with Designation & Department:

Mr.K.Vignesh Saravanan, AP/CSE, Ms.G.SakthiPriya, AP/CSE, Mrs.S.Manjula, AP/CSE

Contact Details:

- **Phone:** +91 9655228156;
- **E-mail:** vigneshk@ritrjpm.ac.in; sakthipriya@ritrjpm.ac.in;
- **LMS Link:** https://canvas.instructure.com/courses/4439761

1. Assessment Methods:

Course Outcome	Direct methods
CO1	1. Continuous Assessment 2. Model Test
CO2	1. Continuous Assessment 2. Model Test
CO3	1. Continuous Assessment 2. Model Test
CO4	1. Continuous Assessment 2. Model Test 3. Mini Project
CO5	1. Continuous Assessment 2. Model Test

2. Course Assessment Plan (CAP)

Continuous Internal Assessment Methods (CIAM) *(Direct / Indirect)*	Weightage						
	CO1	CO2	CO3	CO4	CO5	CIAM	End Semester
Continuous Assessment	60%	60%	60%	60%	60%	40%	60%
Model Test	30%	30%	30%	30%	10%		
Mini Project					20%		
CO End Survey	10%	10%	10%	10%	10%		
Total	100 %	100 %	100 %	100 %	100 %	100%	

3. Evaluation methods

Sl. No.	Assessment methods	Marks	Evaluation methods
1.	Continuous Assessment	50	Rubrics
2.	Model Test	100	Scheme of evaluation
3.	Mini Project	50	Rubrics

Rubrics for Continuous Assessment:

Category	Excellent	Good	Average	Below Average	Poor
Performance	Completion of Exercise / Experiment with own understanding **25.0 to >23.0 Marks**	Completion of Exercise / Experiment with help from manual / self-reference **23.0 to >22.0 Marks**	Completion of Exercise / Experiment with compilation errors **22.0 to >18.0 Marks**	Completion of Exercise / Experiment with help from faculty **18.0 to >15.0 Marks**	Completion of Exercise / Experiment without exact logic **15.0 to >0 Marks**
Viva voce	Answering for 100% of Questions **10.0 to >9.0 Marks**	Answering for 80% of Questions **9.0 to >7.0 Marks**	Answering for 60% of Questions **7.0 to >5.0 Marks**	Answering for 40% of Questions **5.0 to >3.0 Marks**	Answering for 20% of Question **3.0 to >0 Marks**
Record	Completion of Record on or before the next Scheduled Lab **15.0 to >14.0 Marks**	Completion of Record before the next 2nd Scheduled Lab **14.0 to >12.0 Marks**	Completion of Record on the next 2nd Scheduled Lab **12.0 to >10.0 Marks**	Completion of Record after the next 2nd Scheduled Lab **10.0 to >6.0 Marks**	Completion of Record on the next 3rd Scheduled Lab **6.0 to >0 Marks**
					Total : 50 Marks

Rubrics for Mini projects:

Mini project:

Assessment Criteria	Evaluation Rating			Maximum Marks
	Excellent 10 to 8 marks	Good 7 to 6 marks	Satisfactory 5 to 0 marks	
Application of engineering principles and concepts	Excellent in applying engineering and/or scientific principles correctly to design Systems.	Good in applying engineering and/or scientific principles correctly to design Systems.	Fair in applying engineering and/or scientific principles correctly to design Systems.	**10**
Problem Solving approach	Identifies multiple approaches for solving the problem statements that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context.	Identifies one or more approaches for solving the problem that do not apply within a specific context.	**5**
Progress of work	Excellent in completing all the module/task within the timelines or next review	Good in completing all the module/task within the timelines or next review	Fair in completing all the module/task within the timelines or next review	**10**
Modern Tool usage	Excellent selection of tools/software is based on an emerging technology or relevant industry software for simulation, emulators for carrying out specific context.	Good selection of tools/software is based on an emerging technology or relevant industry software for simulation, emulators for carrying out specific context.	Fair selection of tools/software is based on an emerging technology for carrying out specific context.	**5**
Team work – Team morale and cohesiveness	Team members are excellently committed to the team and show a sense of bonding and clearly expressed ideas directly related to the group's purpose and individually.	Team members are good committed to the team and show a sense of bonding and clearly expressed ideas directly related to the group's purpose and individually.	Team members are fairly committed to the team and show a sense of bonding and clearly expressed ideas directly related to the group's purpose and individually.	**5**
Oral and Written Communica	Clear and varied sentence structure/wording	Clear sentence structure/wording with little error in	Somehow clear and structure/ wording with no	**5**

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021- 2022 (Even Semester)

Degree, Semester& Branch: IV Semester B.E. Computer Science and Engineering

Course Code & Title: CS8481 & Database Management Systems Laboratory

Name of the Faculty member: Mr.K.Vignesh Saravanan & Ms.G.Sakthi Priya

PVR Rubric

Category	Excellent	Good	Average	Below Average	Poor
Performance	Completion of Exercise / Experiment with own understanding **25 Marks**	Completion of Exercise / Experiment with help from manual / self-reference **22-24 Marks**	Completion of Exercise / Experiment with compilation errors **18-21 Marks**	Completion of Exercise / Experiment with help from faculty **14-17 Marks**	Completion of Exercise / Experiment without exact logic **<14 Marks**
Viva voce	Answering for 100% of Questions **10 Marks**	Answering for 80% of Questions **8-9 Marks**	Answering for 60% of Questions **6-7 Marks**	Answering for 40% of Questions **4-5 Marks**	Answering for 20% of Question **2-3 Marks**
Record	Completion of Record on or before the next Scheduled Lab **15 Marks**	Completion of Record before the next 2nd Scheduled Lab **13-14 Marks**	Completion of Record on the next 2nd Scheduled Lab **11-12 Marks**	Completion of Record after the next 2nd Scheduled Lab **6-10 Marks**	Completion of Record on the next 3rd Scheduled Lab **<5 Marks**

CS8481 - DATABASE MANAGEMENT SYSTEMS LABORATORY

L	T	P	C
0	0	4	2

AIM:

The aim of this laboratory is to inculcate the abilities of applying the principles of the database management systems. This course aims to prepare the students for projects where a proper implementation of databases will be required.

OBJECTIVES:

- To understand data definitions and data manipulation commands
- To learn the use of nested and join queries, views
- To understand functions, triggers, procedures and procedural extensions of databases
- To be familiar with the use of a front end tool
- To understand design and implementation of typical database applications

LIST OF PRACTICAL EXERCISES:

1. Data Definition Commands, Data Manipulation Commands for inserting, deleting, updating and retrieving Tables and Transaction Control statements.
2. Database Querying – Simple queries, Nested queries, Sub queries and Joins.
3. Views, Sequences, Synonyms.
4. Database Programming: Implicit and Explicit Cursors.
5. Procedures and Functions.
6. Triggers.
7. Exception Handling.
8. Database Design using ER modeling, normalization and Implementation for any application.
9. Database Connectivity with Front End Tools.
10. Case Study using real life database applications.

TOTAL: 60 PERIODS

OUTCOMES:

Upon completion of the course, the students will be able to:

- Use typical data definitions and manipulation commands.
- Design applications to test Nested and Join Queries
- Implement simple applications that use Views
- Critically analyze the use of Tables, Functions and Procedures
- Implement applications that require a Front-end Tool

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021 - 2022 (Even Semester)

INDIVIDUAL FACULTY TIME TABLE

(With effect from: 07.03.2022)

Name of Faculty member: Mr. K.Vignesh Saravanan AP/CSE

Period & Time / Day	I	II	III	IV	V	VI	VII
Monday				CS8481			
Tuesday		CS8492					
Wednesday	CS8492				CS8492		
Thursday				CS8481			
Friday							CS8492
Saturday	As per Academic Schedule						

Course Code & Title	No. of Periods
1. CS8492 – Database Management Systems (II/IV CSE)	4
2. CS8481 - Database Management Systems Laboratory (II/IV CSE)	4+4

7/3/22
Signature of the Faculty member

7/3/2022
HOD

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021-2022(Even Semester)

CLASS TIME TABLE

(with effect from:07.03.2022)

Semester/Class: IV Semester B.E. CSE **CLASS ROOM – C2R04**

Period & Time / Day	I	II	10.40-11.00	III	IV	12.40-01.20	V	VI	VII
	09.00-09.50	09.50-10.40		11.00-11.50	11.50-12.40		01.20-02.10	02.10-03.00	03.00-03.50
Monday	MA8402 UKM	CS8493 IG	Tea Break	CS8491 KV&CAY	CS8481/ CS8461 KVS&GSP /IG&RV	Lunch Break	CS8481/ CS8461 KVS&GSP /IG&RV	CS8481/ CS8461 KVS, GSP&SM/ IG&RV	
Tuesday	CS8451 PJ	CS8492 KVS		CS8494 RV	CS8493 IG		MA8402/ CS8494 UKM/RV	CS8493 IG	CS8491 KV&CAY
Wednesday	CS8492 KVS	MA8402 UKM		CS8491 KV&CAY	MA8402 UKM		CS8492 KVS	CS8451 PJ	CS8494 RV
Thursday	CS8491 KV&CAY	CS8451 PJ		MA8402 UKM	CS8481/ CS8461 KVS&GSP/ IG&RV		CS8481/ CS8461 KVS&GSP /IG&RV	CS8481/ CS8461 KVS, GSP&SM/ IG&RV	
Friday	HS8461 MA			CS8493 IG	CS8451 PJ		CS8494 RV	MA8402 (T) UKM,KBK & TMM	CS8492 KVS
Saturday	CS8494 RV	Training Program MSS		Training Program MSS			Training Program MSS		

T-Tutorial

	Course Code & Title	Name of the Faculty member	No. of Periods
1. MA8402	Probability and Queueing Theory	Dr.U.Kumaran (UKM)	$4\frac{1}{2}$
	Probability and Queueing Theory-Tutorial	Dr.U.Kumaran (UKM), Dr.K.Basari Kodi(KBK)& Dr.T.Manimaran(TMM)	1
2.CS8491	Computer Architecture	Dr.K.Vijayalakshmi (KV) & Mr.C.A.Yogaraja(CAY)	4
3.CS8492	Database Management Systems	Mr.K.Vignesh Saravanan(KVS)	4
4. CS8451	Design and Analysis of Algorithms	Ms.P.Jothi Thilaga(PJ)	4
5. CS8493	Operating Systems	Dr.I.Gethzi Ahila Poornima(IG)	4
6. CS8494	Software Engineering	Dr.R.Venkatesh(RV)	$4\frac{1}{2}$
7. CS8481	Database Management Systems Laboratory	Mr.K.Vignesh Saravanan(KVS), Ms.G.Sakthi Priya (GSP) & Mrs.S.Manjula (SM)	4
8. CS8461	Operating Systems Laboratory	Dr.I.Gethzi Ahila Poornima(IG) & Dr.R.Venkatesh (RV)	4
9. HS8461	Advanced Reading and Writing Training Program	Dr.M.Anand(MA) Mrs.M.Swarna Sudha (MSS)	2 6

03/03/2022 3/3/2022 3/3/22 3/3/22

Class Adviser **HOD** **Timetable Coordinator** **Principal**

Form No. AC 03b Rev.No.00 Effective Date: 18.01.2016

RAMCO INSTITUTE OF TECHNOLOGY

Academic Year : 2021 – 2022 (Even Semester)

IV Semester B.E computer Science and Engineering

07/03/2022

SI.NO	Register Number	Name of the student
1	953620104001	AANANDA GANESAN R
2	953620104002	ABINAYA M
3	953620104003	AKHASH ARAVIND P
4	953620104004	BALAMURALIKRISHNA R N
5	953620104005	BHUVANESHWARI S
6	953620104006	BOWYAA L
7	953620104007	DHARANI RAJ V
8	953620104008	DHIRAJ N
9	953620104009	DIVYA M K
10	953620104010	GAYATHRI DEVI S
11	953620104011	GNANAGURU VIGNESH J
12	953620104012	GOPIY K J
13	953620104013	GOWTHAM KARTHIKEYAN M
14	953620104014	HARINISRIVALLI V
15	953620104015	HARSHA R
16	953620104016	IJAAS AHAMAD M
17	953620104017	JEGADESH B
18	953620104018	JELENA JOPHIN J
19	953620104019	JOE ALAN R S
20	953620104021	JOTHI LINGAPANDIAN M
21	953620104022	KAMINI K
22	953620104023	KARTHIKEYAN B
23	953620104024	KARUNYA V
24	953620104025	KEERTHANA V
25	953620104026	K SYED ASLAM
26	953620104027	KUMAR M
27	953620104028	LAKSHMI PRIYA G
28	953620104029	MUGESH M
29	953620104030	MUTHU BRIJESH R
30	953620104031	MUTHU KUMAR K
31	953620104032	NISHASHREE M
32	953620104033	PARANTHAMAN J
33	953620104034	PAVITHRA K
34	953620104035	POOJALAKSHMI T

35	953620104036	P PREETHA
36	953620104037	PRAVEEN S
37	953620104038	RAGAVI V G
38	953620104039	RAJA DHARSHINI .S
39	953620104040	RAJALAKSHMI R U
40	953620104041	RAJASEKARAN T
41	953620104042	SARAVANA JOTHI G
42	953620104043	SARUMATHI M
43	953620104044	SATHISH KANNAN M
44	953620104045	SATHISHKUMAR K
45	953620104046	SHAKTHEE SARAVANA M
46	953620104047	SHAKTHI S
47	953620104048	SHRI DHEIVA R
48	953620104049	SIVAGURUNATHAN G
49	953620104050	SIVAKUMAR M
50	953620104051	SIVAKUMAR P
51	953620104052	SOWMIYA V
52	953620104053	SRINIDHI R
53	953620104054	S SHANMUGAPRIYA
54	953620104055	SUBHIKSHA G
55	953620104056	SUKUMARAN G
56	953620104057	THARANI M N
57	953620104058	VENESHA L
58	953620104059	VINO A
59	953620104060	VISHNUPRIYA S
60	9536201040301	BALAMURUGAN K
61	953620104302	ILAYA BHARATHI S
62	953620104303	RAAMAKRISHNAN V R
63	953620104304	SATHYA NARAYANAN B
64	953620104305	SUBRAMANI LOKESH
65	953620104306	SHANKAR S K

7/3/2022

Class Adviser

7/3/2022

HOD, CSE

CS8481 - DATABASE MANAGEMENT SYSTEMS LABORATORY

MASTER RECORD

B.E. Computer Science and Engineering

II Year / IV Semester

Regulation-2017

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VISION AND MISSION

Vision of the Institute

To evolve as an Institute of international repute in offering high-quality technical education, Research and extension programmes in order to create knowledgeable, professionally competent and skilled Engineers and Technologists capable of working in multi-disciplinary environment to cater to the societal needs.

Mission of the Institute

To accomplish its unique vision, the Institute has a far-reaching mission that aims:

- To offer higher education in Engineering and Technology with highest level of quality, Professionalism and ethical standards
- To equip the students with up-to-date knowledge in cutting-edge technologies, wisdom, creativity and passion for innovation, and life-long learning skills
- To constantly motivate and involve the students and faculty members in the education process for continuously improving their performance to achieve excellence.

Vision of the Department

Excellence in Computer Science and Engineering by offering quality technical education catering to research and development.

Mission of the Department

- Equip the department with modern infrastructure for high quality education and carrying out research in emerging technologies in Computer Science and Engineering.
- Expose the students, faculty and staff to a globally competitive learning experience.
- Motivate students to realize the responsibility of being professionally competent computer technocrats to serve the society by inculcating Ethical and Environmental aspects.

Program Educational Objectives (PEOs)

- Graduates will have successful career in IT and related industries or pursue higher education and research or evolve as entrepreneurs.
- Graduates will have the ability and attitude to adapt to emerging technological changes.
- Graduates will excel as socially committed engineers with high ethical values, leadership qualities and empathy for the needs of society.

Program Outcomes (POs)

Engineering Graduates will be able to:

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

After successful completion of the degree, the students will be able to:

PSO1: Excel in software development including mobile technologies to solve complex computation task with soft skills.

PSO2: Apply appreciable knowledge of IoT, Cloud Computing and Cyber Security to develop reliable IT solutions.

PSO3: Exhibit proficiency in Artificial Intelligence and Big Data Analytics for providing solutions to real world problems in Industry and Research establishments.

INSTRUCTIONS TO STUDENTS

- Students should wear Uniforms and Coats neatly during the lab session
- Students should maintain silence during lab hours; roaming around the lab during lab session is not permitted
- Programs should be written in the manual and well prepared for the current exercise before coming to the session
- Experiments should be completed within the Specified Lab Session
- Before Every Session, Last Session lab exercise & record should be completed and get it verified by the faculty
- In the Record Note, Flow Chart and Outputs should be written on the left side, while Aim, Algorithm & Result should be written on the right side.
- Programs (Printed) should be placed on the right side
- Marks for each lab exercise is awarded as follows :

Performance	25 Marks
Viva	10 Marks
Record	15 Marks
Total	**50 Marks**

PREFACE

The current year's manual (2021 - 2022) differs from the previous year's manual in numerous ways. To start with the environment of the Microsoft SQL server and installation procedure is fully explained. Then the classification of SQL commands and the general guidelines for writing SQL commands are added in the beginning. Course objectives and outcomes and mapping the lab exercises to the outcomes are included in this manual.

All the lab exercises are revised and updated in many places. New exercises are added besides university syllabus.

Viva questions related to the exercise is included at the end of all the lab exercises along with besides university syllabus exercises.

A number of people helped me with this revision. I would like to thank the Head of the Department and all friendly faculty members for providing valuable suggestions in preparing this students' centric manual. I would also like to the Lab technicians and other people who helped me in many ways.

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SYLLABUS

CS8481	DATABASE MANAGEMENT SYSTEMS LABORATORY	L	T	P	C
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AIM:

The aim of this laboratory is to inculcate the abilities of applying the principles of the database management systems. This course aims to prepare the students for projects where a proper implementation of databases will be required.

OBJECTIVES:

- To understand data definitions and data manipulation commands
- To learn the use of nested and join queries, views
- To understand functions, triggers, procedures and procedural extensions of databases
- To be familiar with the use of a front end tool
- To understand design and implementation of typical database applications

LIST OF PRACTICAL EXERCISES:

1. Data Definition Commands, Data Manipulation Commands for inserting, deleting, updating and retrieving Tables and Transaction Control statements.
2. Database Querying – Simple queries, Nested queries, Sub queries and Joins.
3. Views, Sequences, Synonyms.
4. Database Programming: Implicit and Explicit Cursors.
5. Procedures and Functions.
6. Triggers.
7. Exception Handling.
8. Database Design using ER modeling, normalization and Implementation for any application.
9. Database Connectivity with Front End Tools.
10. Case Study using real life database applications.

TOTAL: 60 PERIODS

OUTCOMES:

Upon completion of the course, the students will be able to:

- Use typical data definitions and manipulation commands.
- Design applications to test Nested and Join Queries
- Implement simple applications that use Views
- Critically analyze the use of Tables, Functions and Procedures
- Implement applications that require a Front-end Tool

CO - MAPPING

S No	Name of the Lab Exercises	COs
1	Data Definition Language(DDL), Data Manipulation Language(DML), Transaction Control Language (TCL)	CO1
2	Database Querying – Simple queries, Nested queries, Sub queries and Joins	CO2
3	Views, Sequences, Synonyms	CO3
4	Procedures and Functions	CO4
5	Database Programming: Implicit and Explicit Cursors	CO4
6	Triggers	CO4
7	Exception Handling	CO4
8	Database Design using ER modeling, normalization and Implementation for any application	CO5
9	Database Connectivity with Front End Tools	CO5
10	Case Study using real life database applications	CO5

Ex.No: 1	Data Definition Language(DDL), Data Manipulation Language(DML), Transaction Control Language (TCL)
Date:	

Data Definition Language Commands in SQL

Data Definition Language

DDL (Data Definition Language) statements are used to create, delete, or change the objects of a data base. Typically a database administrator is responsible for using DDL statements or production databases in a large database system. The commands used are:

- **Create:** It is used to create a table.
- **Alter:** This command is used to add a new column, modify the existing column definition and to include or drop integrity constraint.
- **Drop:** It will delete the table structure provided the table should be empty.
- **Truncate:** If there is no further use of records stored in a table and the structure has to be retained, then the records alone can be deleted.
- **Desc:** This is used to view the structure of the table.

Creating a Table

Table

A relational database stores data in tables. Tables typically contain data about a single subject. Each table has a unique name that signifies the contents of the data.

Table Creation Rules:

1. Reserved words cannot be used.
2. The first character of the name must be a letter between A and Z, the remaining characters can be letters or the symbols _, #, $, and @.
3. Underscore, numerals, letters are allowed but not blank space.
4. Maximum length for the table name is 30 characters.
5. 2 different tables should not have same name.
6. We should specify a unique column name.
7. We should specify proper data type along with width.
8. We can include "not null" condition when needed. By default it is 'null'.

The Field's Data Type

Data Type	Comments
CHAR	Alphanumeric data with a length between 1 and 255 characters. Spaces are padded to the right of the value to supplement the total allocated length of the column.
DATE	Included as part of the date as century, year, month, day, hour, minute, and second.
LONG	Variable-length alphanumeric strings up to 2 gigabytes.
LONG RAW	Binary data up to 2 gigabytes.
NUMBER	Numeric 0, positive or negative fixed or floating-point data.
RAW	Binary data up to 255 bytes.
ROWID	Hexadecimal string representing the unique address of a row in a table.
VARCHAR2	Alphanumeric data that is variable length; this field must be between 1 and 2,000 characters long.

The CREATE Syntax

CREATE TABLE <table name>
{
fieldname-1datatype constraints if any,
fieldname-2 datatype constraints if any,
.....
fieldname-n datatype constraints if any,
};

Example

SQL> CREATE TABLE Customer (Customer_id int, Customer_name varchar2(20), Address varchar2(30), City varchar2(15));

Creating a Table from an Existing Table

Some database management systems provide an alternative method of creating tables, using the format and data of an existing table. This method is useful when you want to select the data out of a table for temporary modification. It can also be useful when you have to create a table similar to the existing table and fill it with similar data.

Syntax

CREATE TABLE <table_name>
{
field1, field2, field3
}as select field1, field2, field3 from old_table <where...>

This syntax allows you to create a new table with the same data types as those of the fields that are selected from the old table. It also allows you to rename the fields in the new table by giving them new names.

Example

Sql> CREATE TABLE new_ Customer (Customer_id , Customer_name, Address, City, as (Select * from Customer where City='Chennai');

Primary Key

This is the purpose of the *primary key*; it uniquely identifies a row within a table, which means that you find one and only one row in the table by looking for the primary key value.

A table may have only one primary key, which consists of one or more columns. If the primary key contains multiple columns it is referred to as a *composite primary key* or *concatenated primary key*.

Syntax

CREATE TABLE <tableName> (<attribute_name> <type> PRIMARY KEY,);
CREATE TABLE <tableName> (<attrs and their types>, PRIMARY KEY (<attribute1>, <attribute2>));

Example

CREATE TABLE Customer (Customer_id int primary key, Customer_name varchar2(20), Address varchar2(30), City varchar2(15));

Foreign Keys

A foreign key in one table points to a primary key in another table.

Example

The "Customer" table:

Customer_Id	Customer_Name	Address	City
1	Hardc	Timotcivn 10	Sandnes
2	Maria	Borgvn 23	Sandnes
3	Pettersen	Storgt 20	Stavanger

The "Orders" table:

O_Id	OrderNo	Customer _Id
1	77895	3
2	44678	3
3	22456	2
4	24562	1

Note that the "Customer _Id" column in the "Orders" table points to the "Customer _Id" column in the "Customers" table. The "Customer _Id" column in the "Customer" table is the PRIMARY KEY in the "Customer" table. The "Customer _Id" column in the "Orders" table is a FOREIGN KEY in the "Orders" table.

The FOREIGN KEY constraint is used to prevent actions that would destroy links between tables. The FOREIGN KEY constraint also prevents invalid data from being inserted into the foreign key column, because it has to be one of the values contained in the table it points to.

Syntax

```
CREATE TABLE table_name
(
        field1 datatype [ CONSTRAINT constraint-name] REFERENCES Parent-
           table(column of parent-table),
        field2 datatype [CONSTRAINT],

        .....
        fieldn datatype [CONSTRAINT]...)
}
```

Example

CREATE TABLE Orders (Customer_Id INT References Customer (Customer_ID), Customer_ordeno number);

Using check constraint to restrict a column's input values

Example

CREATE TABLE Customer (Customer_id int, Customer_name varchar2(20), Address varchar2(30), City varchar2(15) CHECK(city IN('Sandnes', 'Stavanger')));

This query restricts the city of the employer to take values Sandnes and Stavanger.

Describing the structure of the table

After a table has been created, it may be necessary to determine the name, data type and some of the constraints of the attributes that compose the table. The command used is DESC. The syntax of this command is

DESC table-name;

```
SQL> desc Customer;

Name                    Type
-----------------------------------
Customer_id             int
```

Customer_name	varchar2(20)
Address	varchar2(30)
City	varchar2(15)

The CREATE Index Statement

Index

Indexes are also database design and SQL programming tools. Indexes are physical database objects stored by your database management system that can be used to retrieve data already sorted from the database. Adding indexes to your database enables SQL to use the Direct Access Method of retrieving data.

Syntax

CREATE INDEX index_name on table_name(column_name1, [column_name2], ...);

The ALTER TABLE Statement

Many times your database design does not account for everything it should. Also, requirements for applications and databases are always subject to change. The ALTER TABLE statement enables the database administrator or designer to change the structure of a table after it has been created.

The ALTER TABLE command enables you to do two things:

- Add a column to an existing table
- Modify a column that already exists
- Add constraints to an existing table
- Removing constraints from a table

The syntax for adding and modifying columns:

ALTER TABLE table_name <ADD column_name data_type; | MODIFY column_name data_type ;>

Example:

ALTER TABLE Customer ADD DateOfBirth year

Customer_Id	Customer_Name	Address	City	DateOfBirth
1	Harde	Timoteivn 10	Sandnes	
2	Maria	Borgvn 23	Sandnes	
3	Pettersen	Storgt 20	Stavanger	

Change Data Type Example

Now we want to change the data type of the column named "DateOfBirth" in the "Customers" table. We use the following SQL statement:

Syntax

ALTER TABLE Customers ALTER COLUMN DateOfBirth year;

Syntax for adding foreign key and primary key constraints:

Primary Key

ALTER TABLE tablename add [CONSTRAINT constraint-name] Primary key (col1 [col2,[col3]]...]);

Foreign Key

ALTER TABLE tablename add [CONSTRAINT constraint-name] Foreign key (col name) REFERENCES parent-table (parent-table column);

Syntax for removing constraints from a table is as follows:
ALTER TABLE table-name DROP PRIMARY KEY [cascade];
ALTER TABLE table-name DROP CONSTRAINT constraint-name [cascade];

Example

ALTER TABLE Persons DROP COLUMN DateOfBirth
To change a column from NOT NULL to NULL, use the following syntax:

Syntax

ALTER TABLE table_name MODIFY (column_name data_type NULL);

To change a column from NULL to NOT NULL, you might have to take several steps:

1. Determine whether the column has any NULL values.
2. Deal with any NULL values that you find. (Delete those records, update the column's value, and so on.)
3. Issue the ALTER TABLE command.

Syntax for adding check constraints:
ALTER TABLE tablename ADD CONSTRAINT constraint name CHECK(condition);

Ex: alter table employee add constraint chkcnst check(ecity in ('Madurai','chen

nai','Trichy','Coimbatore'));

The DROP TABLE Statement

SQL provides a command to completely remove a table from a database. The DROP TABLE command deletes a table along with all its associated views and indexes. After this command has been issued, there is no turning back. The most common use of the DROP TABLE statement is when you have created a table for temporary use. When you have completed all operations on the table that you planned to do, issue the DROP TABLE statement with the following syntax:

SYNTAX:
DROP TABLE table_name;

Example:

DROP TABLE Orders;

The TRUNCATE TABLE Statement

An easier and faster way of removing all rows from a table is using the TRUNCATE command.

Syntax

TRUNCATE TABLE tablename

Example

TRUNCATE TABLE Customer;

Data Manipulation Language Commands in SQL

Introduction to Data Manipulation Statements

DML commands are the most frequently used SQL commands and is used to query and manipulate the existing database objects. Some of the commands are

- Insert
- Select
- Update
- Delete

The data manipulation statements are:

- The INSERT statement
- The SELECT statement
- The UPDATE statement
- The DELETE statement

THE INSERT STATEMENT

The INSERT statement enables you to enter data into the database. It can be broken down into two statements:

1. INSERT...VALUES
2. INSERT...SELECT

I. The INSERT...VALUES Statement

The INSERT...VALUES statement enters data into a table one record at a time.

The first form does not specify the column names where the data will be inserted, only their values:

INSERT INTO table_name VALUES (value1, value2...)

The second form specifies both the column names and the values to be inserted:

INSERT INTO table_name (col1, col2...) VALUES (value1, value2...)

Example

Assume you have a FRIENDS table that lists all the important stuff you have collected. If you wanted to add a new record to this table, you would write

SQL> INSERT INTO Employee (FIRSTNAME, AREACODE, PHONE, SALARY) VALUES ('WILMAN', 500, 555-3224, 5800);
SQL> INSERT INTO FRIENDS VALUES ('WILMAN', 500, 555-3224, 5800);

II. The INSERT...SELECT

The INSERT INTO SELECT statement copies data from one table and inserts it into an existing table.

Syntax

We can copy all columns from one table to another, existing table:

INSERT INTO table2 SELECT * FROM table1;

Or we can copy only the columns we want to into another, existing table:

INSERT INTO table2(column_name(s))SELECT column_name(s)FROM table1;

Example

SQL> INSERT INTO FRIENDS SELECT * FROM CUSTOMER;

10 rows inserted.

You are selecting all the rows that are in CUSTOMER table and inserting them into FRIENDS table.

THE SELECT STATEMENT

The SELECT statement is used to select data from a table. The tabular result is stored in a result table (called the result-set). The SELECT statement allows us to select specific columns of a table or entire table.

Syntax

SELECT column_name(s) FROM table_name;

Example

Customer_Id	Customer_Name	Address	City
1	Harde	Timoteivn 10	Sandnes
2	Maria	Borgvn 23	Sandnes
3	Pettersen	Storgt 20	Stavanger

SELECT Customer_Name, City FROM Customers;

Customer_Name	City
Harde	Sandnes
Maria	Sandnes
Petteren	Stavanger

SELECTS ALL ROWS FROM THE TABLE

Assume you have a Customer table that lists all the important stuff you have collected. You can display the table's contents by writing

Syntax

SELECT * FROM Customer;

Customer_Id	Customer_Name	Address	City
1	Harde	Timoteivn 10	Sandnes
2	Maria	Borgvn 23	Sandnes
3	Petteren	Storgt 20	Stavanger

THE SELECT DISTINCT STATEMENT

The DISTINCT keyword is used to return only distinct (different) values.

Syntax

SELECT DISTINCT column_name(s) FROM table_name;

Example

In the Customer table if you looked at the Address column using
SELECT Address FROM Customer;

City

Trichy
Madurai
Trichy

Notice that the city Trichy is repeated. What if you wanted to see how may different amounts were in this column?

SELECT DISTINCT Address FROM Customer;

City

Trichy
Madurai

Conditional Selection

Conditions are contained in the WHERE clause. Conditions enable you to make selective queries. In their most common form, conditions comprise a variable, a constant, and a comparison operator.

SELECT, FROM, and WHERE are the three most frequently used clauses in SQL. WHERE simply causes your queries to be more selective. Without the WHERE clause, the most useful thing you could do with a query is display all records in the selected table(s). The syntax is as follows:

SELECT "column_name" FROM "table_name" WHERE "condition"

Operators

Operators are the elements you use inside an expression to articulate how you want specified conditions to retrieve data. Operators fall into six groups: arithmetic, comparison, character, logical, set, and miscellaneous.

I. Arithmetic Operators

The arithmetic operators are plus (+), minus (-), divide (/), multiply (*), and modulo (%). Minus has two uses. First, it can change the sign of a number. The second (and obvious) use of the minus sign is to subtract one column from another.

Example

SQL> SELECT item produce, wholesale, wholesale + 0.25 retail FROM price;

SQL> SELECT state, hightemp lows, lowtemp highs, (lowtemp - hightemp) difference FROM hilow;

SQL> SELECT item, wholesale, (wholesale/2) saleprice FROM price;

SQL> SELECT item, wholesale, wholesale * 0.9 newprice FROM price;
SQL> SELECT numerator, denominator, numerator% denominator remainder FROM remains;

II. Comparison Operators

Comparison operators compare expressions and return one of three values: TRUE, FALSE, or Unknown. There are six comparison operators in SQL, and after introducing them, we'll see how they're used:

Operator	Meaning
=	Equal
<> or !=	Not Equal
<	Less Than

>	Greater Than
<=	Less Than or Equal To
>=	Greater Than or Equal To

Select command with where clause:

The WHERE clause is used to extract only those records that fulfill a specified criterion.

Example

Assume that there is a table called friends.

SQL> SELECT * FROM FRIENDS;

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
BUNDY	AL	100	555-1111	IL	22333
MEZA	AL	200	555-2222	UK	55555
MERRICK	BUD	300	555-6666	CO	80212
MAST	JD	381	555-6767	LA	23456
BULHER	FERRIS	345	555-3223	IL	23332

The equal to operator (=) works like this:

SQL> SELECT * FROM FRIENDS WHERE FIRSTNAME = 'JD';

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
MAST	JD	381	555-6767	LA	23456

The WHERE description, FIRSTNAME = 'JD', is known as a condition.

The greater than operator (>) works like this:

SQL> SELECT * FROM FRIENDS WHERE AREACODE > 300;

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
MAST	JD	381	555-6767	LA	23456
BULHER	FERRIS	345	555-3223	IL	23332

Similarly we can use other comparison operators.

III. Character Operators

You can use character operators to manipulate the way character strings are represented, both in the output of data and in the process of placing conditions on data to be retrieved. There are two character operators: the **LIKE** operator and the || operator.

LIKE Operator

What if you wanted to select parts of a database that fit a pattern but weren't quite exact matches? You could use the equal sign and run through all the possible cases, but that process would be boring and time-consuming. Instead, you could use LIKE. Consider the following:

SQL> SELECT * FROM PARTS;

NAME	LOCATION	PARTNUMBER
APPENDIX	MID-STOMACH	1
ADAMS_APPLE	THROAT	2
HEART	CHEST	3
SPINE	BACK	4
ANVIL	EAR	5
KIDNEY	MID-BACK	6

How can you find all the parts located in the back? A quick visual inspection of this simple table shows that it has two parts, but unfortunately the locations have slightly different names. Try this:

```
SQL> SELECT * FROM PARTS WHERE LOCATION LIKE '%BACK%';
```

NAME	LOCATION	PARTNUMBER
SPINE	BACK	4
KIDNEY	MID-BACK	6

You can see the use of the percent sign (%) in the statement after LIKE. When used inside a LIKE expression, % is a wildcard. What you asked for was any occurrence of BACK in the column location. If you queried

```
SQL> SELECT * FROM PARTS WHERE LOCATION LIKE 'BACK%';
```

you would get any occurrence that started with BACK:

NAME	LOCATION	PARTNUMBER
SPINE	BACK	4

Underscore (_)

The underscore is the single-character wildcard. Using a modified version of the table FRIENDS, type this:

```
SQL> SELECT * FROM FRIENDS;
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
BUNDY	AL	100	555-1111	IL	22333
MEZA	AL	200	555-2222	UK	55555
MERRICK	UD	300	555-6666	CO	80212
MAST	JD	381	555-6767	LA	23456
BULHER	FERRIS	345	555-3223	IL	23332
PERKINS	ALTON	911	555-3116	CA	95633
BOSS	SIR	204	555-2345	CT	95633

To find all the records where STATE starts with C, type the following:

```
SQL> SELECT * FROM FRIENDS WHERE STATE LIKE 'C_';
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
MERRICK	BUD	300	555-6666	CO	80212

PERKINS	ALTON	911	555-3116	CA	95633
BOSS	SIR	204	555-2345	CT	95633

You can use several underscores in a statement:

SQL> SELECT * FROM FRIENDS WHERE PHONE LIKE'555-6_6_';

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
MERRICK	UD	300	555-6666	CO	80212
MAST	JD	381	555-6767	LA	23456

Concatenation (||) Operator

The || (double pipe) symbol concatenates two strings. Try this:

SQL> SELECT FIRSTNAME || LASTNAME ENTIRENAME FROM FRIENDS;

ENTIRENAME

AL BUNDY
AL MEZA
BUD MERRICK
JD MAST
FERRIS BULHER
ALTON PERKINS
SIR BOSS

IV. Logical Operators

Logical operators separate two or more conditions in the WHERE clause of an SQL statement. The logical operators are: **AND operator, OR operator** and **NOT operator.**

AND Operator

The AND operator displays a record if both the first condition and the second condition are true. For example, if you want to know which employees have been with the company for 5 years or more and have taken less than 50 percent of their leave, you could write:

Example

SQL>SELECT * FROM FRIENDS WHERE ST='IL' AND FIRSTNAME ='FERRIS';

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
BULHER	FERRIS	345	555-3223	IL	23332

OR Operator

The OR operator displays a record if either the first condition OR the second condition is true.

SQL> SELECT * FROM FRIENDS WHERE ST='IL' OR ST='CO';

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP

BUNDY	AL	100	555-1111	IL	22333
MERRICK	UD	300	555-6666	CO	80212
BULHER	FERRIS	345	555-3223	IL	23332

NOT Operator

If the condition it applies to evaluates to TRUE, NOT make it FALSE. If the condition after the NOT is FALSE, it becomes TRUE. For example, the following SELECT returns the only two names not beginning with B in the table:

```
SQL> SELECT * FROM FRIENDS WHERE LASTNAME NOT LIKE 'B%';
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	ZIP
MEZA	AL	200	555-2222	UK	55555
MERRICK	UD	300	555-6666	CO	80212
MAST	JD	381	555-6767	LA	23456
PERKINS	ALTON	911	555-3116	CA	95633

V. Set Operators

The Set operators are Union operator, Intersect operator and Difference(Minus) operator.

UNION and UNION ALL Operator

UNION returns the results of two queries minus the duplicate rows. The following two tables represent the rosters of teams:

```
SQL> SELECT * FROM FOOTBALL;

NAME
----------
ABLE
BRAVO
CHARLIE
DECON
EXITOR
FUBAR
GOOBER

SQL> SELECT * FROM SOFTBALL;
NAME
----------
ABLE
BAKER
CHARLIE
DEAN
EXITOR
```

FALCONER
GOOBER

How many different people play on one team or another?

```
SQL> SELECT NAME FROM SOFTBALL UNION SELECT NAME FROM FOOTBALL;
NAME
----------
ABLE
BAKER
BRAVO
CHARLIE
DEAN
DECON
EXITOR
FALCONER
FUBAR
GOOBER
```

UNION returns 10 distinct names from the two lists.

```
SQL> SELECT NAME FROM SOFTBALL UNION ALL SELECT NAME FROM FOOTBALL;
NAME
----------
ABLE
BAKER
CHARLIE
DEAN
EXITOR
FALCONER
GOOBER
ABLE
BRAVO
CHARLIE
DECON
EXITOR
FUBAR
GOOBER
```

INTERSECT Operator

INTERSECT returns only the rows found by both queries. The next SELECT statement shows the list of players who play on both teams:

```
SQL> SELECT * FROM FOOTBALL INTERSECT SELECT * FROM SOFTBALL;

NAME
----------
ABLE
CHARLIE
EXITOR
GOOBER
```

MINUS (Difference) Operator

Minus returns the rows from the first query that were not present in the second. For example:

```
SQL> SELECT * FROM FOOTBALL MINUS SELECT * FROM SOFTBALL;
NAME
----------
BRAVO
DECON
FUBAR
```

Miscellaneous Operators: IN and BETWEEN

An easier method of using compound conditions uses IN or BETWEEN. For example, if you wanted to list all managers and staff:

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	SALARY
BUNDY	AL	100	555-1111	IL	22000
MEZA	AL	200	555-2222	UK	55000
MERRICK	UD	300	555-6666	CA	8000
MAST	JD	381	555-6767	LA	25000
BULHER	FERRIS	345	555-3223	IL	50000
PERKINS	ALTON	911	555-3116	CA	9000
BOSS	SIR	204	555-2345	CT	5500

IN operator

The IN operator allows you to specify multiple values in a WHERE clause.

Example

```
SELECT * FROM FRIENDS WHERE ST IN ('IL','CA');
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	SALARY
BUNDY	AL	100	555-1111	IL	22000
MERRICK	UD	300	555-6666	CA	8000
BULHER	FERRIS	345	555-3223	IL	50000
PERKINS	ALTON	911	555-3116	CA	9000

BETWEEN Operator

The BETWEEN operator is used to select values within a range. The values can be numbers, text, or dates.

```
SELECT * FROM FRIENDS WHERE SALARY BETWEEN 5000 AND 10000;
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	SALARY
MERRICK	UD	300	555-6666	CA	8000
PERKINS	ALTON	911	555-3116	CA	9000
BOSS	SIR	204	555-2345	CT	5500

To list everyone not in this range, try:

```
SELECT * FROM FRIENDS WHERE SALARY NOT BETWEEN 5000 AND 10000;
```

LASTNAME	FIRSTNAME	AREACODE	PHONE	ST	SALARY
BUNDY	AL	100	555-1111	IL	22000
MEZA	AL	200	555-2222	UK	55000
MAST	JD	381	555-6767	LA	25000
BULHER	FERRIS	345	555-3223	IL	50000

The UPDATE Statement

The UPDATE statement is used to update existing records in a table.

Syntax:

UPDATE table_name SET columnname1 = value1 [, columname2 = value2]...WHERE search_condition

This statement checks the WHERE clause first. For all records in the given table in which the WHERE clause evaluates to TRUE, the corresponding value is updated.

Example

SQL> UPDATE FRIENDS SET LASTNAME='Alfred' WHERE FIRSTNAME='JD';
SQL> UPDATE FRIENDS SET salary = salary + (salary * 0.2);

Here is a multiple-column update:

SQL> UPDATE FRIENDS SET LASTNAME='Alfred, AREACODE=481 WHERE FIRSTNAME='JD';

Some database systems provide an extension to the standard UPDATE syntax. SQL Server's Transact-SQL language, for instance, enables programmers to update the contents of a table based on the contents of several other tables by using a FROM clause. The extended syntax looks like this:

Syntax

UPDATE table_name SET columnname1 = value1 [, columname2 = value2]...FROM table_list WHERE search_condition

The DELETE Statement

In addition to adding data to a database, you will also need to delete data from a database. The syntax for the DELETE statement is

Syntax

DELETE FROM tablename WHERE condition;

The first thing you will probably notice about the DELETE command is that it doesn't have a prompt. Users are accustomed to being prompted for assurance when, for instance, a directory or file is deleted at the operating system level. Are you sure? (Y/N) is a common question asked before the operation is performed. Using SQL, when you instruct the DBMS to delete a group of records from a table, it obeys your command without asking. That is, when you tell SQL to delete a group of records, it will really do it!

Depending on the use of the DELETE statement's WHERE clause, SQL can do the following:

- Delete single rows
- Delete multiple rows
- Delete all rows
- Delete no rows

Here are several points to remember when using the DELETE statement:

- The DELETE statement cannot delete an individual field's values (use UPDATE instead). The DELETE statement deletes entire records from a single table.
- Like INSERT and UPDATE, deleting records from one table can cause referential integrity problems within other tables. Keep this potential problem area in mind when modifying data within a database.
- Using the DELETE statement deletes only records, not the table itself. Use the DROP TABLE statement to remove an entire table.

Example

SQL> DELETE FROM FRIENDS WHERE SALARY < 6000;

Delete All Data

It is possible to delete all rows in a table without deleting the table. This means that the table structure, attributes, and indexes will be intact:

DELETE FROM table_name; (OR)
DELETE * FROM table_name;

TCL COMMANDS

TCL- Transaction Control Language.

1. COMMIT - save work done
2. SAVEPOINT - identify a point in a transaction to which you can later roll back
3. ROLLBACK - restore database to original since the last COMMIT

SYNTAX:

1. *Savepoint savepoint_name;*

2. *SQL OPERATIONS ....*
   Roll back to savepoint_name;

3. *SQL OPERATIONS ....*
   Commit;

Exercise 1:

DDL Commands

1. Create a table employee (ename(30 chars), eid, edesignation(20 chars), ecity)
   Perform the following queries
   a) Describe the fields of the table.
   b) Define a primary key for the field eid.
   c) Define a constraint for the field ecity so that it should take any one of the following values "Madurai, Chennai, Coimbatore, Trichy".
   d) Add a new field named salary to the table and it must contain some values.
   e) Modify the field edesignation so that it can accept upto 30 characters.
   f) Remove the constraint placed on the field ecity.
   g) Insert 10 employee records.
   h) Display the employee details.

i) Drop a column salary.
j) Rename the table.
k) Delete all employee record from the table.
l) Drop the table.

DML Commands

1. Create the following tables

Student (Rollno, Name, Deptname, Marks (of 4 Subjects), Total, Percentage. Place constraint on the marks columns to be less than or equal to 100

Insert 10 student details.

a) Display the Student details.
b) Display the student names who got total greater than 300
c) Display the CSE department student names.
d) Display the department of all students without duplicates.
e) Display the student detail whose department is "it" and also percentage is greater than or equal to 75.
f) Find the student details whose department is in Civil, Mech.
g) Select regno, name, grade, department, percentage of all students except those who doesn't have percentage in 75, 80 and 85.
h) Select the students who have percentage in the range between 70 and 90.
i) Sort the student name in ascending order and descending order.
j) List out the departments with no of students present in the student table.
k) Group the student table according to the department having it or cse under the column name " Total No of Students".
l) Drop the column rollno.

2. Create the following tables

Product(Proid,Proddesc,Price,Stock)
Purchase(Purid, Proid,Qty,Supname)
Sales(Salesid,Proid,Qty,Custname)

a) Describe the fields of the table.
b) Set the necessary primary key and foreign key constraints.
c) Create an index on the purid field.
d) Create a sequence named Seq1 and use it for proid field.
e) Display the product details whose stock is <15.
f) Update the stock of all products by 10.
g) Display the product id and sum of quantity purchased.
h) List all products which start with either S or T.
i) Display supplier name when proid is given "P123"
j) List minimum, maximum, average price of product.
k) Display the amount (price * qty) of Products in each Sales.

TCL Commands

1. Create a table emp with the following fields

Empno, Ename, Address, Sex, DOB, Dateofjoining, Deptno, Division, Desig, Salary.

a. Insert 6 employee details.
b. Create a savepoint S1.
c. Update the salary field of an employee;
d. Create another savepoint S2.
e. Delete an employee details whose salary<2000.
f. Rollback to S2.
g. Insert another one employee record.
h. Perform commit operation.
i. Perform rollback to S1.

Ex.No: 2	Database Querying – Simple queries, Nested queries, Sub queries and Joins
Date:	

Aggregate Functions

These functions are also referred to as group functions. They return a value based on the values in a column. The examples use the table TEAMSTATS:

SQL> SELECT * FROM TEAMSTATS;

NAME	POS	AB	HITS	WALKS	SINGLES	DOUBLES	TRIPLES	HR	SO
JONES	1B	145	45	34	31	8	1	5	10
DONKNOW	3B	175	65	23	50	10	1	4	15
WORLEY	LF	157	49	15	35	8	3	3	16
DAVID	OF	187	70	24	48	4	0	17	42
HAMHOCKER	3B	50	12	10	10	2	0	0	13
CASEY	DH	1	0	0	0	0	0	0	1

A. COUNT

The function COUNT returns the number of rows that satisfy the condition in the WHERE clause. Say you wanted to know how many ball players were hitting under 350. You would type

SQL> SELECT COUNT(*) FROM TEAMSTATS WHERE HITS/AB < .35;

COUNT(*)
4

B. SUM

SUM does just that. It returns the sum of all values in a column. To find out how many singles have been hit, type

SQL> SELECT SUM (SINGLES) TOTAL_SINGLES FROM TEAMSTATS;

TOTAL_SINGLES
174

C. AVG

The AVG function computes the average of a column. To find the average number of strike outs, use this:

SQL> SELECT AVG (SO) AVE_STRIKE_OUTS FROM TEAMSTATS;

AVE_STRIKE_OUTS
16.166667

D. MAX

If you want to find the largest value in a column, use MAX. For example, what is the highest number of hits?

SQL> SELECT MAX (HITS) FROM TEAMSTATS;

MAX(HITS)
70

Sl. No.	Content of the File	Index	Remarks(√)
1.	Students Name List (CA & HOD) [Bottom]	-	✓
2.	Time Table (Class Time Table)	AC03a, AC03b	✓
3.	Time Table (Individual Time Table)	AC03c	
4.	Syllabus Copy	-	✓
5.	Laboratory Manual	-	✓
6.	Course Plan - Laboratory	AC05b	✓
7.	Course Assessment - Laboratory	AC06b	✓
8.	Model Practical Exam Question Paper	-	✓
9.	Mark Statement of Model Practical Exam	AC14a	✓
10.	Practical Mark	AC14d	✓
11.	Consolidated Practical Mark	AC14e	✓
12.	Practical Attendance	AC15b	✓
13.	Details of conduct of Special classes (If required)	AC20a	–
14.	Special Class Attendance (If required)	AC20b	–
15.	Students' record notebook	-	✓
16.	Mini project report (sample)	-	✓
17.	Course Outcome End Survey	AC 10e	✓
18.	Log Book Practical	AC 07b	✓

Prepared by: 16/6/22

Verified by: 04/8/22

Approved by:

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Department of Electronics and Communication Engineering
Department Advisory Committee Meeting-IV
List of DAC Members (Revised)

Date: 13.08.2021

Sl. No.	Name of the DAC Members	Affiliation	Position
1.	Dr.A.Rajeswari	Professor & Head, Department of ECE, Coimbatore Institute of Technology, Coimbatore.	Academic Member
2.	Mr.S.Mohamed Safiyur Rahman	ES - Active Safety (RBEI/ESC) Robert Bosch GmbH, Coimbatore.	R&D Member ✓
3.	Mr.K.Moorthi	Director-Business Development, Enthu Technology Solutions India Pvt Ltd, Coimbatore.	Industry Member
4.	Dr.S.Periyanayagi	Professor & Head. Department of ECE, Ramco Institute of Technology, Rajapalayam.	Convener
5.	Dr.B.Deepa lakshmi	Associate Professor, Department of ECE, Ramco Institute of Technology, Rajapalayam.	Co-Convener
6.	Dr.K.Basarikodi	Professor, Department of Mathematics, Ramco Institute of Technology, Rajapalayam.	Internal Member
7.	Dr.M.Kaliappan	Associate Professor, Department of Computer Science and Engineering, Ramco Institute of Technology, Rajapalayam.	Internal Member
8.	Mr.N.Karthikeyan	Assistant Professor (Sr.Gr.), Department of Physics, Ramco Institute of Technology, Rajapalayam.	Internal Member ✓
9.	Mr.B.Kannan	Assistant Professor (Sr.Gr.), Department of ECE, Ramco Institute of Technology, Rajapalayam.	Internal Member
10.	Mrs.S.Mareeswari	Engineer, Mobiveil Technologies India Private Limited, Chennai.	Alumni Member (Batch 2013-2017)
11.	Mrs.B.Anubala	Customer Operations Engineer, Cloudera Data Platform Pvt Limited, Chennai.	Alumni Member (Batch 2014-2018) ✓
12.	Ms.S.Divya	Systems Engineer, Infosys Limited, Chennai.	Alumni Member (Batch 2015-2019) ✓
13.	Mr.P.Siva Chidambaram	Test Engineer-1 (Silicon Validation Engineer), Tessolve Semiconductor Private Limited, Bangalore.	Alumni Member (Batch 2016-2020) ✓

✓ New member

13/08/2021
Faculty Coordinator

13/8/2021
HOD/ECE

Principal
13/8/21

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Department of Electronics and Communication Engineering
(Accredited by NBA)
Department Advisory Committee Meeting-IV
Agenda

Ref.: RIT/ECE/DAC/04 **Date: 17.08.2021**

The fourth department advisory committee meeting is scheduled on **04.09.2021 (Saturday)** from 10.30AM to 12.30PM through Google meet (https://meet.google.com/umj-nqto-bgs). All DAC members and faculty members are invited to attend the meeting. The agenda is given below.

Sl. No.	Topics	Faculty In-charge	Time
1.	Review of previous meeting (3rd DAC), Review of Quality Objectives and Suggestions given by NBA Peer Members	Dr.B.DeepaLakshmi	10.30am-10.40am
2.	Dissemination of Vision, Mission, POs, PSOs and PEOs.	Mr.S.Vijayakumar Ms.S.A.Radhika	10.40am-10.45am
3.	Teaching and Learning: • Curricular gap and Content Beyond Syllabus • Question Paper Quality Improvement	Mr.K.Ragavan	10.45am-10.55am
	• Innovation Methods Practiced and its Implications • Action taken for Slow Learners and Bright Students • Feedback on Teaching and Learning • Reforms in Teaching	Mrs.G.Gnana Priya	10.55am-11.05am
	• Project Review and Assessment • Institute – Industry Interaction and its Impact • Internship and In-Plant Training	Mr.G.Sivakumar	11.05am-11.10am
4.	• Attainment of COs, POs, PSOs with program effectiveness (2019-2020) • CO Targets for the Forthcoming Academic Year 2021-2022 • Assessments Methods	Dr.A.Azhagu Jaisudhan Pazhani & Dr.S.Vairaprakash	11.10am-11.20am
5.	Result Analysis of 2019-2020 Even Semester and 2020-2021 odd Semester	Mrs.V.Srirenga Nachiyar	11.20am-11.25am
	Professional Societies and Technical Association: Participants and its Inference	Mr.R.Deiva Nayagam	11.25am-11.30am
	Training and Placement Progress	Dr.A.Azhagu Jaisudhan Pazhani	11.30am-11.35am

6.	Research and Development (Publication, Patent, Projects, Consultancy, Research Collaboration)	Mrs.S.Jeeva	11.35am-11.40am
	Faculty Participations/Performance Awards and Achievements – Faculty members	Mr.D.Gopinath	11.40am-11.45am
7.	• Laboratory Utilization with Respect to OBE • Additional Facility Utilization	Mrs.R.Divya Ms.S.Harini Shriram	11.45am-11.50am
8.	Carrier Guidance Cell Activities	Mr.S.Vijayakumar	11.50am-11.55am
9.	EDC, IIC, NISP Progress, Extra-curricular Activities, Mentoring	Mr.P.Gunasekaran Mr.LK.Balaji Vignesh	11.55am-12.00pm
10.	Online Courses (Faculty Members & Students)	Mrs.R.Divya Mr.A.RameshBabu	12.00pm-12.05pm
11.	Continuous Improvements	Mr.P.Venkatesh	12.05pm-12.10pm
12.	Alumni Association Interaction	Mr.K.Ragavan	12.10pm-12.20pm
13.	Stack Holders Feedback Analysis: Students/ Parents/ Alumni/ Recruiters	Mrs.R.Ramalakshmi	12.20pm-12.25pm
14.	Department Budget Allocation & Expenses	Mr.B.Kannan	12.25pm-12.30pm

17/08/2021
Faculty In-charge

17/8/2021
HOD(ECE)

Vice-Principal

Principal

Copy to

1) All DAC members and faculty members through email
2) File

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Department of Electronics and Communication Engineering
(Accredited by NBA)
Department Advisory Committee Meeting-IV

Ref.: RIT/Academic/ECE/DAC/2021-2022/01 **Date: 06.10.2021**

MINUTES OF FOURTH DEPARTMENT ADVISORY COMMITTEE MEETING

The Third Department Advisory Committee Meeting was held on 04.09.2021 through an online platform (Google Meet) with the following Agenda.

- Review of previous meeting (3rd DAC), Review of Quality Objectives and Suggestions given by NBA Peer Members
- Dissemination of Vision, Mission, POs, PSOs and PEOs.
- Teaching and Learning:
  - Curricular gap and Content Beyond Syllabus
  - Question Paper Quality Improvement
- Innovation Methods Practiced and its Implications
- Action taken for Slow Learners and Bright Students
- Feedback on Teaching and Learning
- Reforms in Teaching
- Project Review and Assessment
- Institute – Industry Interaction and its Impact
- Internship and In-Plant Training
- Attainment of COs, POs, PSOs with program effectiveness (2019-2020)
- CO Targets for the Forthcoming Academic Year 2021-2022
- Assessments Methods
- Result Analysis of 2019-2020 Even Semester and 2020-2021 odd Semester
- Professional Societies and Technical Association: Participants and its Inference
- Training and Placement Progress
- Research and Development (Publication, Patent, Projects, Consultancy, Research Collaboration)

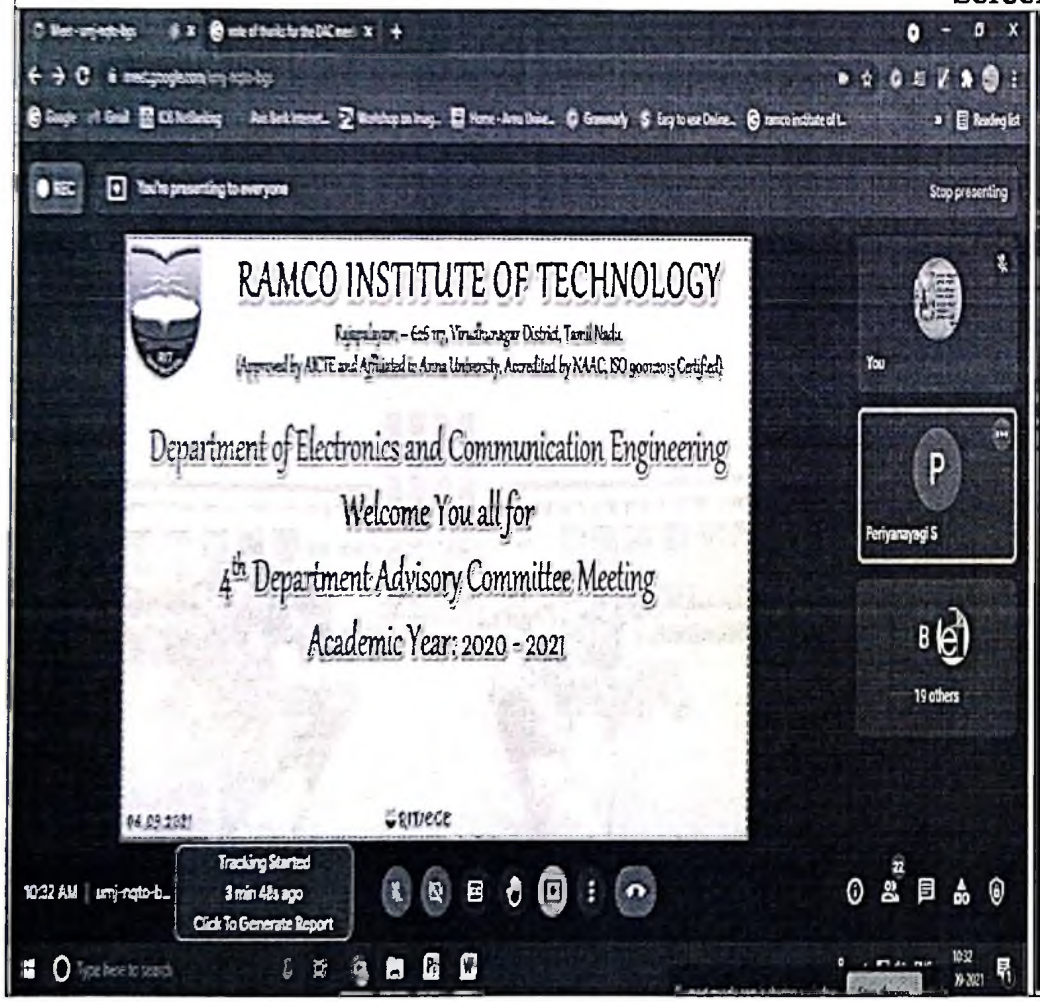
12.10.21

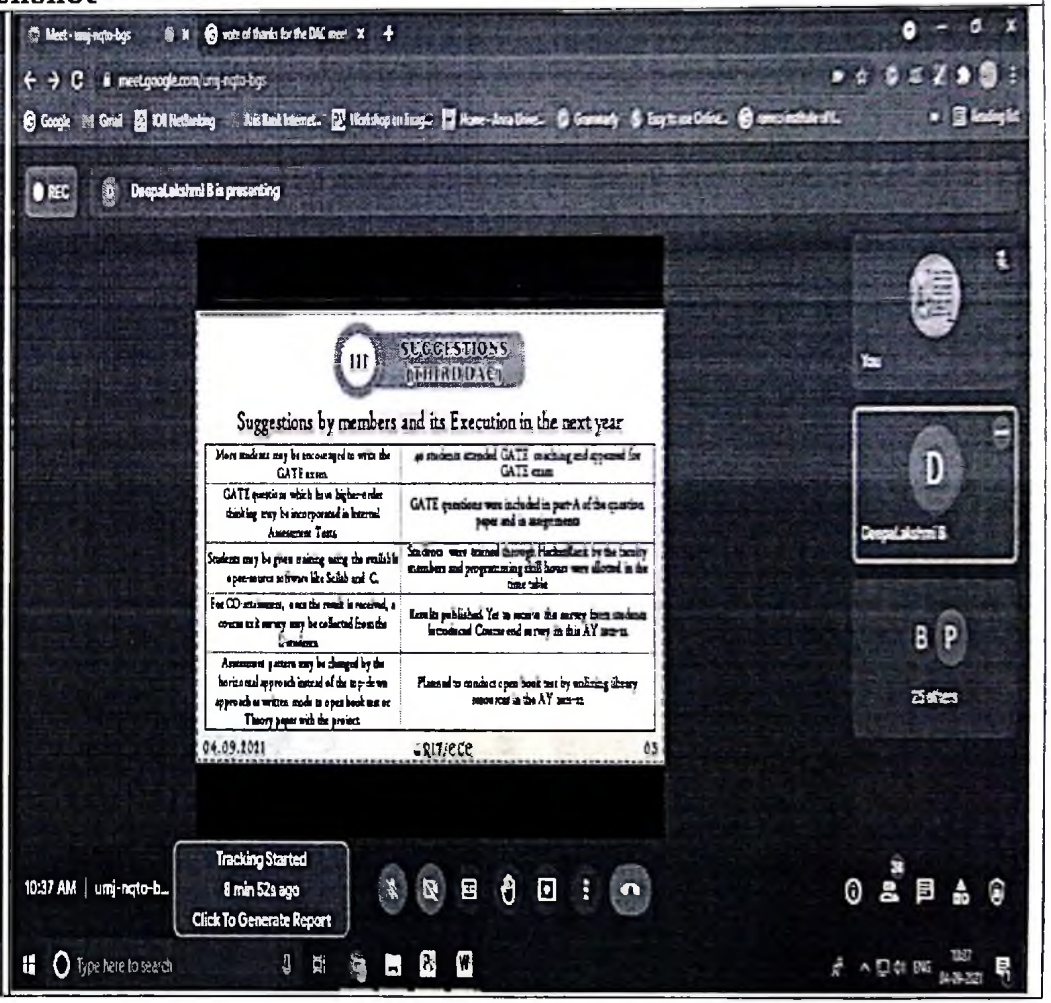
- Faculty Participations/Performance Awards and Achievements – Faculty members
- Laboratory Utilization with Respect to OBE
- Additional Facility Utilization
- Career Guidance Cell Activities
- EDC, IIC, NISP Progress, Extra-curricular Activities and Mentoring
- Online Courses (Faculty Members & Students)
- Continuous Improvements
- Alumni Association Interaction
- Stack Holders Feedback Analysis: Students/ Parents/ Alumni/ Recruiters
- Department Budget Allocation & Expenses
- Any other matters

1. Welcome Address	**(by Dr.S.Periyanayagi, HOD/ECE)**
Dr.S.Periyanayagi, HOD/ECE, welcome and introduced the distinguished R&D, Industry, Academic, Convener, Co-Convener, Internal, and Alumni DAC members:	
Dr.A.Rajeswari, Academic Member	Professor & Head, Department of Electronics and Communication Engineering, Coimbatore Institute of Technology, Coimbatore.
Mr.K.Moorthi, Industry Member	Director-Business Development, Enthu Technology Solutions India Pvt Ltd, Coimbatore.
Mr.S.Mohamed Safiyur Rahman, R&D Member	ES - Active Safety (RBEI/ESC) Robert Bosch GmbH, Coimbatore.
Dr.S.Periyanayagi, Convener	Professor & Head. Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam.
Dr.B.Deepalakshmi, Internal Member	Associate Professor, Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam.
Dr.K.Basarikodi, Internal Member	Professor, Department of Mathematics, Ramco Institute of Technology, Rajapalayam.
Dr.M.Kaliappan, Internal Member	Associate Professor, Department of Computer Science and Engineering, Ramco Institute of Technology, Rajapalayam.
Mr.N.Karthikeyan, Internal Member	Assistant Professor (Sr.Gr.), Department of Physics, Ramco Institute of Technology, Rajapalayam.
Mr.B.Kannan, Co-Convener	Assistant Professor (Sr.Gr.), Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam.
Mrs.S.Mareeswari, Alumni Member	Engineer, Mobiveil Technologies India Private Limited, Chennai.
Mrs.B.Anubala	Customer Operations Engineer, Cloudera Data Platform Pvt Limited, Chennai.
Ms.S.Divya	Systems Engineer, Infosys Limited, Chennai.
Mr.P.Siva Chidambaram	Silicon Validation Engineer, Tessolve Semiconductor Private Limited, Bangalore.

1. Review of previous meeting (3rd DAC) and Review of Quality Objectives		(by Dr.B.Deepa Lakshmi, Asso. Prof/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• The review of the previous DAC II meeting and the quality objectives status report for the Academic year 2020-2021. • The implementations as per the suggestions given by the DAC members during the previous meeting.	Nil	NIL

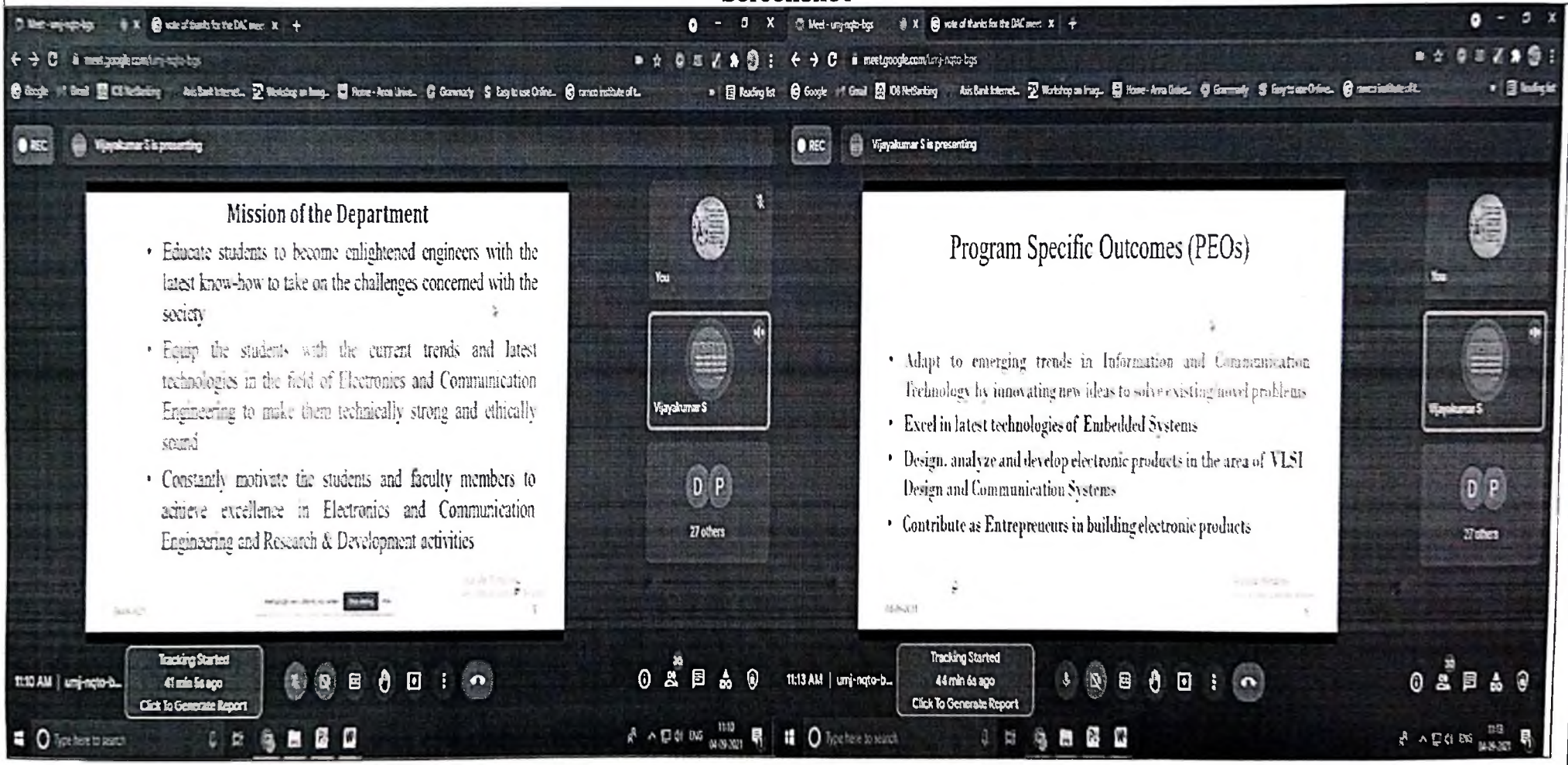
Screenshot





2. Dissemination of Vision, Mission, PEOs, and PSOs		(by Mr.S.Vijayakumar, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Department Vision, Mission, Program Educational Objectives (PEOs), and Program Specific Outcomes (PSOs).	• The DAC members suggested improving the Program Specific Outcome statements with keywords that can measure the outcome of the students.	**Remarks:** • For Suggestion 1: Planned to revise the PSOs statement **Target Date:** April 2022 **Responsibility:** Criterion 1 Coordinator

Screenshot



3. Teaching and Learning **(by Mr.K.Ragavan, AP(Sr. Gr.)/ECE)**

- Curricular gap and Content Beyond Syllabus
- Question Paper Quality Improvement

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The process of identifying the curricular gaps in Anna University's curriculum. • Steps taken to get identified gaps included in the curriculum based on the feedback/suggestions received from internal and external stakeholders for the Academic year 2019-20 & 2020-21.	• The DAC members suggested incorporating GATE Exam questions in Internal Assessment Test and Assignments to improve the higher-order skill of the students. • Train the students in open-source software and make them do projects.	**Remarks:** • For Suggestion 1: GATE questions were included in Tutorials and Assignments • For Suggestion 2: Identify available open-source software related to our department and training will be given in the upcoming semester. **Target Date:** May 2021 **Responsibility:** Faculty Members

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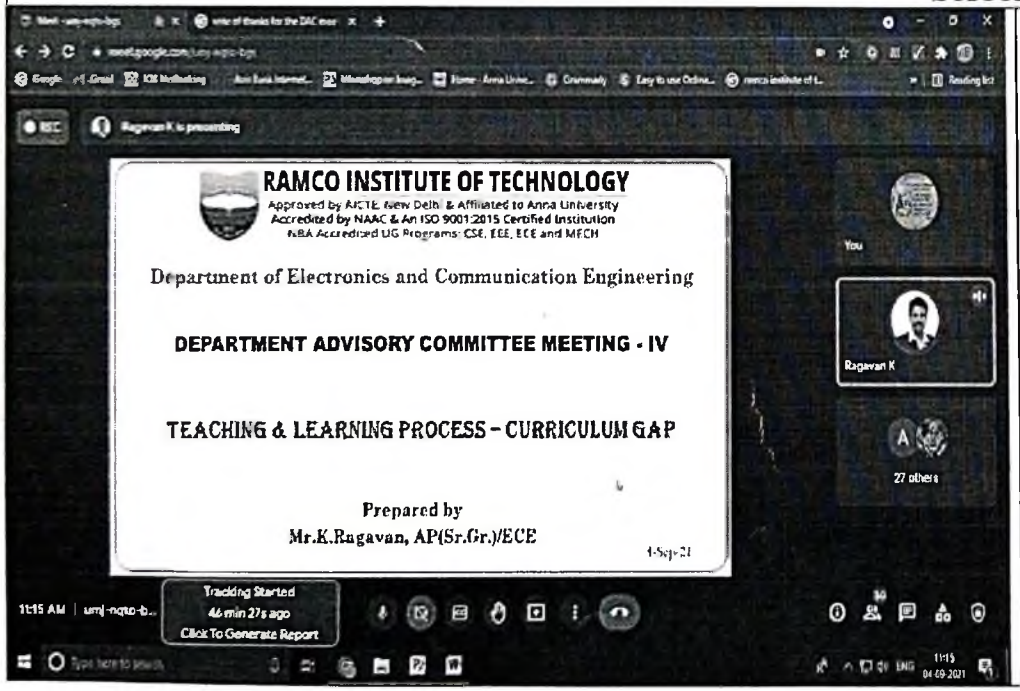
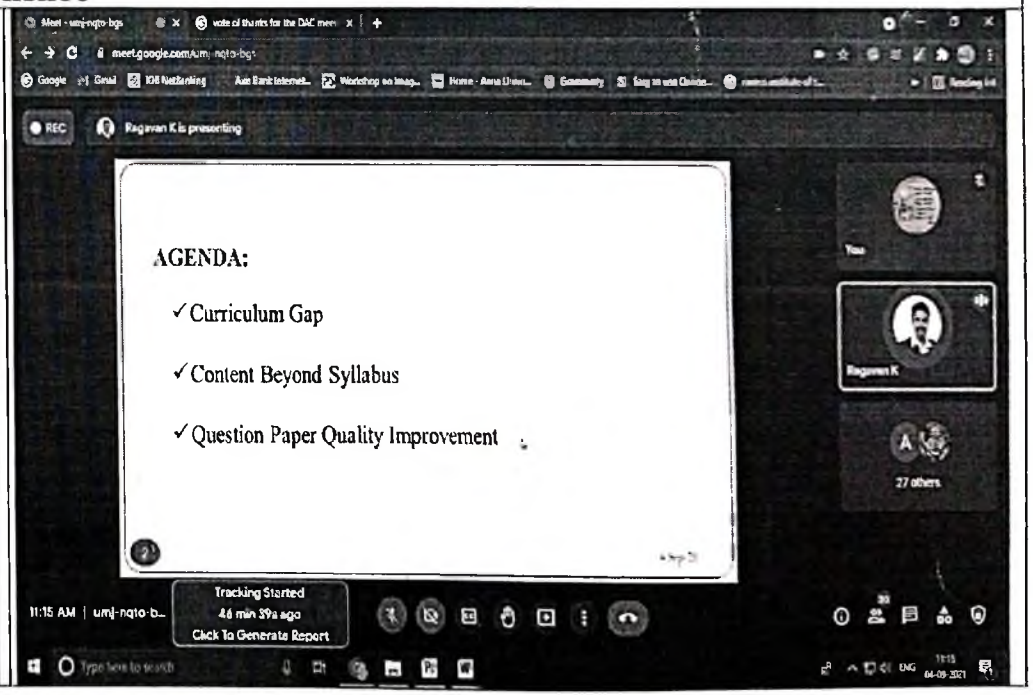


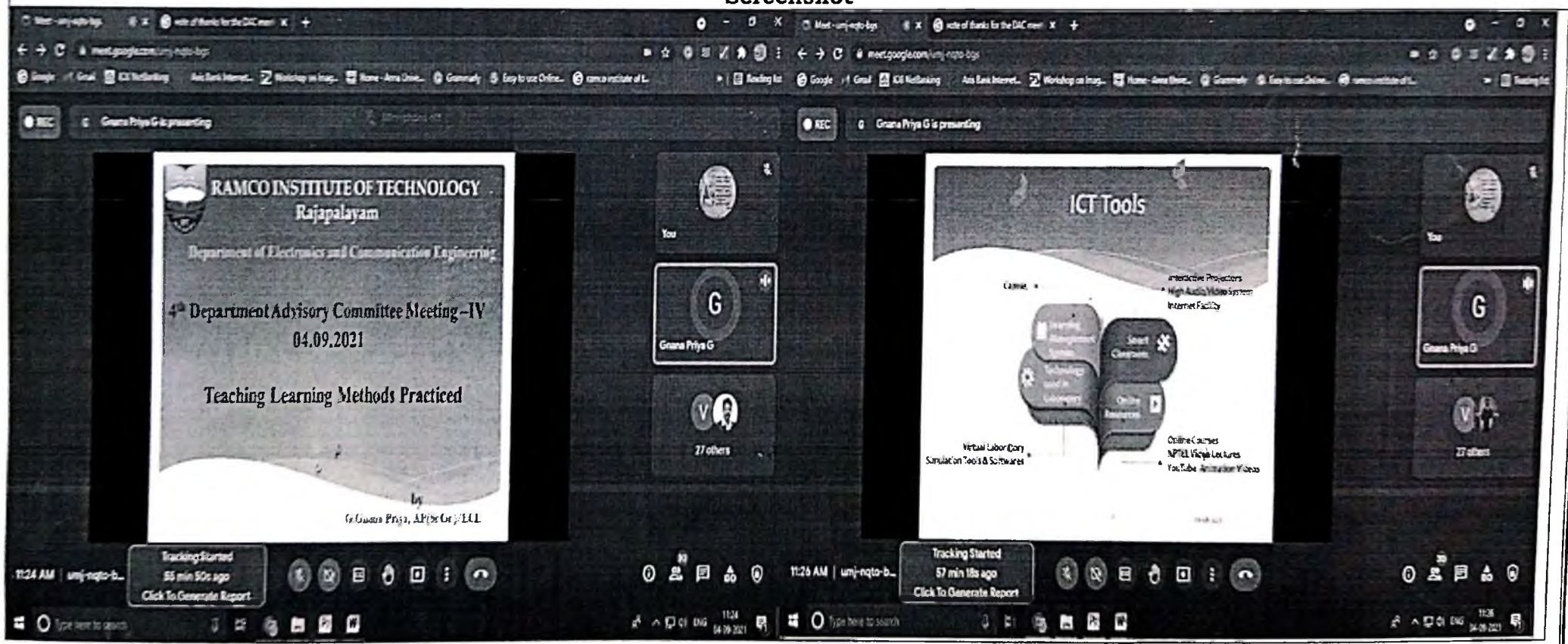


4. Teaching and Learning **(by Mrs.G.Gnana Priya, AP/ECE)**

- Innovation Methods Practiced and its Implications & Action taken for Slow Learners and Bright Students
- Feedback on Teaching and Learning & Reforms in Teaching

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The innovation in the teaching-learning process. • Collaborative learning, e-learning, virtual laboratory utilization, and activities for advanced and slow learners. • The new course plans and course assessments for theory and laboratory subjects.	• The DAC members asked about a specific plan for slow learners and bright students.	**Remarks:** • For Suggestion: After IAT-I, slow was identified and special coaching will be provided. **Target Date:** September 2021. **Responsibility:** Faculty Members and Class Advisors.

Screenshot



5. Teaching and Learning **(by Mr.G.Sivakumar, AP/ECE)**

- Project Review and Assessment
- Institute – Industry Interaction and its Impact
- Internship and In-Plant Training

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The Project Review and Assessment. • The industry projects and details of industry projects in the academic year (2020-2021). • Details of MoUs signed in the academic year 2020-2021 with various industries. • The Internship and In-Plant training details	• To improve the department and industry interaction, the DAC members suggested increasing hardware projects in the industry.	**Remarks:** • For Suggestion: Faculty in-charges asked to get industry-related problem statement from allotted Industry. **Target Date:** December 2021 **Responsibility:** Co-ordinators and Faculty Members

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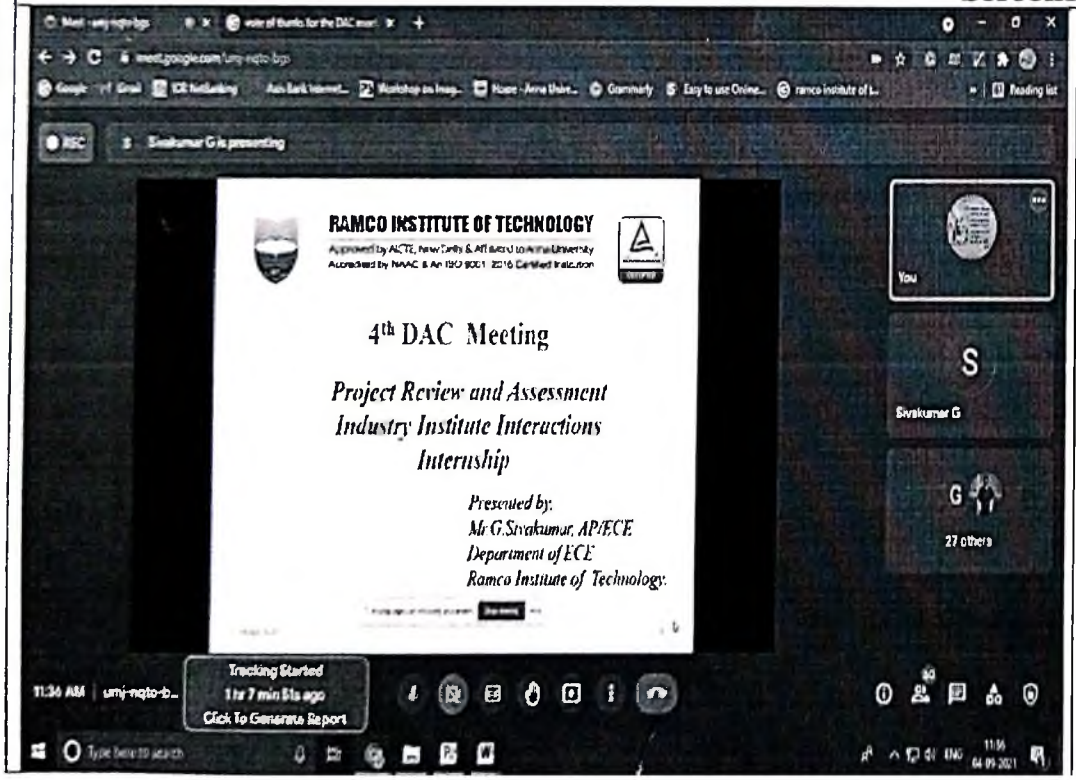

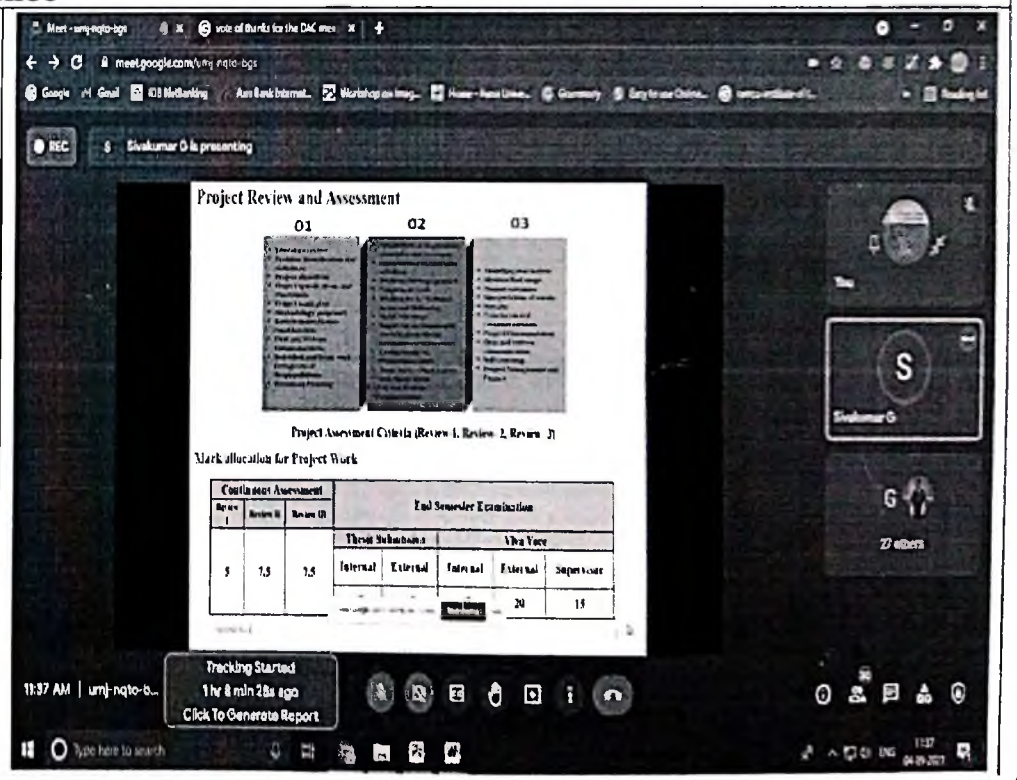

6. Teaching and Learning **(by Dr.A.Azhagu Jaisudhan Pazhani, Asso. Prof/ECE) & Dr.S.Vairaprakash, Asso. Prof/ECE)**

- Attainment of COs, POs, PSOs with program effectiveness (2019-2020)
- CO Targets for the Forthcoming Academic Year 2021-2022
- Assessments Methods

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The attainment level of POs and PSOs and action was taken for the last academic year (2020-2021). • The course exit survey for indirect assessment for the academic year 2020-2021. • Elaborated about the target for the forthcoming academic year and also discussed action is taken and preventive measures for achieving CO target.	• The DAC members were asked to include webinars, seminars, and FDP's for attainment calculation.	**Remarks:** • For Suggestion: Faculty members will arrange webinars/workshops/FDPs related to their subject topics. **Target Date:** December 2021 **Responsibility:** Faculty Members.

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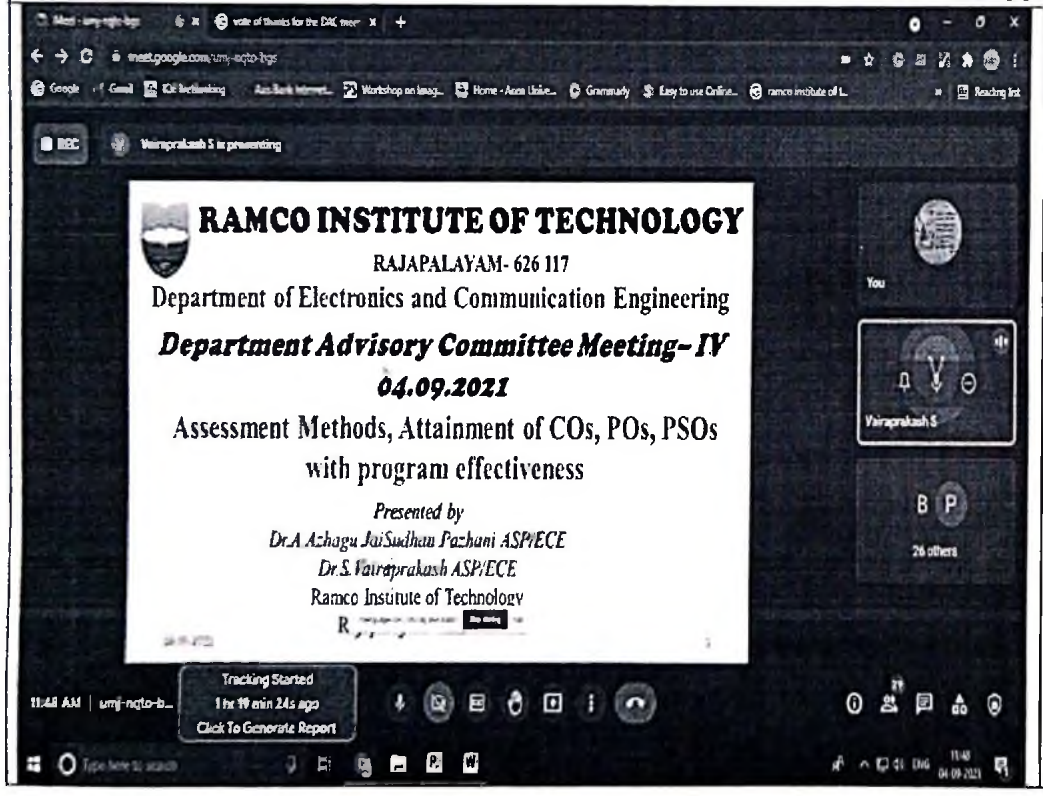

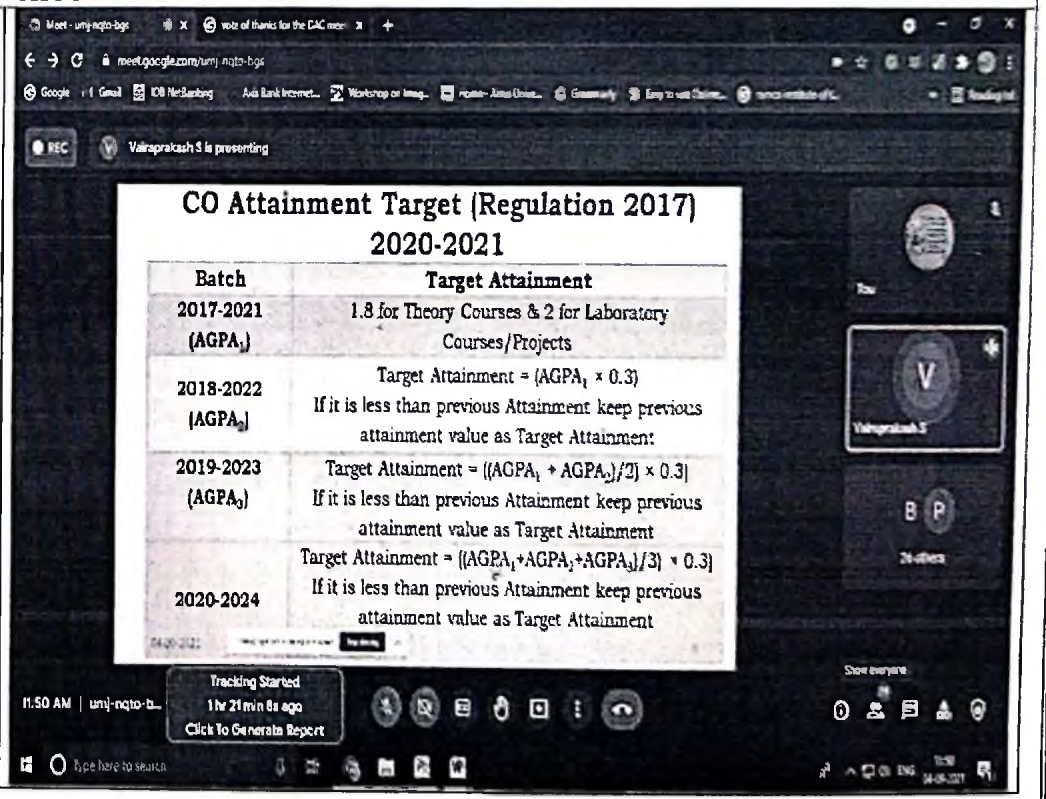

7. Result Analysis **(by Mrs.V.Srirenga Nachiyar, AP(Sr. Gr.)/ECE)**

- 2019-2020 Even Semester and 2020-2021 odd Semester

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The result analysis for the academic years 2019-2020 (Even) and 2020-2021 (Odd & Even). • The average grade point calculation for differentiating the result analysis, since the Anna University Examination has been conducted as an open book Test.	• The DAC members suggested improving the Grades of the Students	**Remarks:** • Planned to improve the Grades of the students **Target Date:** Continuous **Responsibility:** All Faculty members and HOD/ECE

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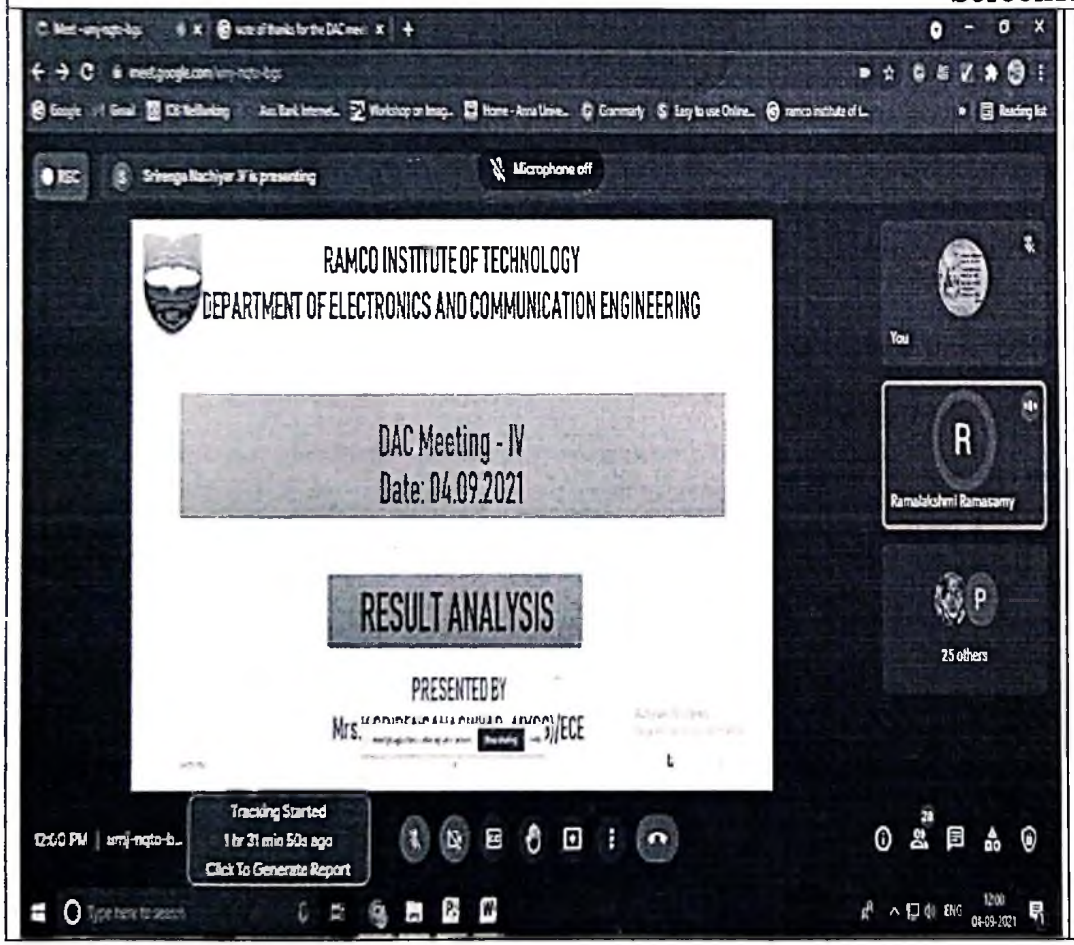

8. Professional Societies and Technical Association **(by Mr.R.Deiva Nayagam, AP/ECE)**

- Participants and its Inference

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• Various professional societies at the department level and described the number/name of events conducted through the professional societies in the academic year 2020-2021. • The various activities held under Technical association-RIT electronica like events organized/Annual newsletter/Bi-Annual Magazine. • Finally proposed the number of events planned under various professional societies and technical associations for the academic year 2021-2022.	• The DAC members satisfied with the number/quality of events organized under professional societies • The members suggested applying for project proposals and getting funds under IETE. • Also suggested to participate in various inter-college events under the sponsorship of various professional societies to get the fee waiver.	**Remarks:** • Planned to apply UG students project proposal for the funding under professional societies. **Target Date:** Continuous **Responsibility:** Professional Society In-charges and Project Co-ordinators.

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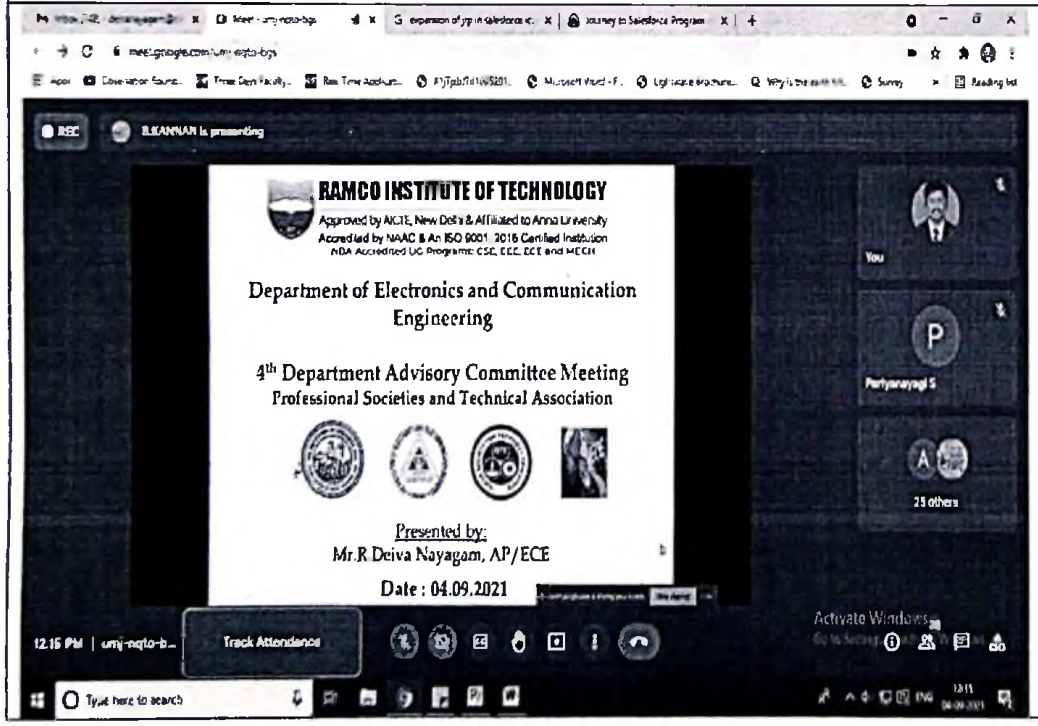

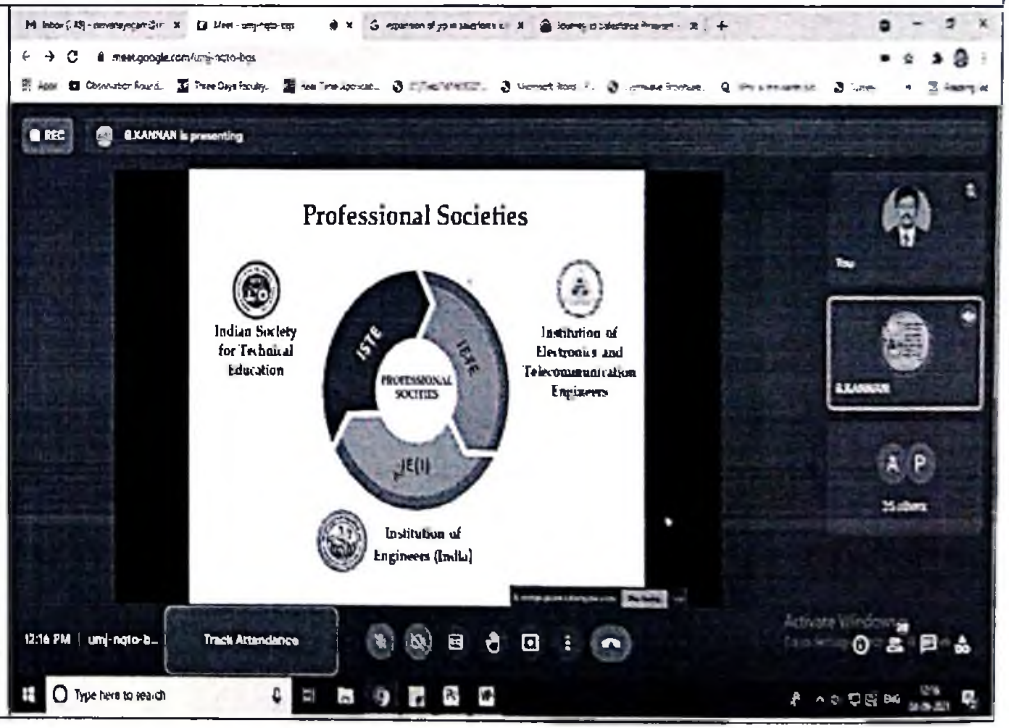

9. Training and Placement Progress **(by Dr.A.Azhagu Jaisudhan Pazhani, Asso. Prof/ECE)**

- Participants and its Inference

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• The placed student details and company invited for on-campus and off-campus. • The training provided for the batch 2017-2021 for placement and action took for feedback from Recruiters & Employers. • Briefed the mock interview, technical training, and knowledge-sharing techniques.	• The DAC members requested to provide more technical training to get core opportunities.	**Remarks:** • Company-specific training was going for the students regularly. **Target Date:** Continuous **Responsibility:** Placement Coordinators.

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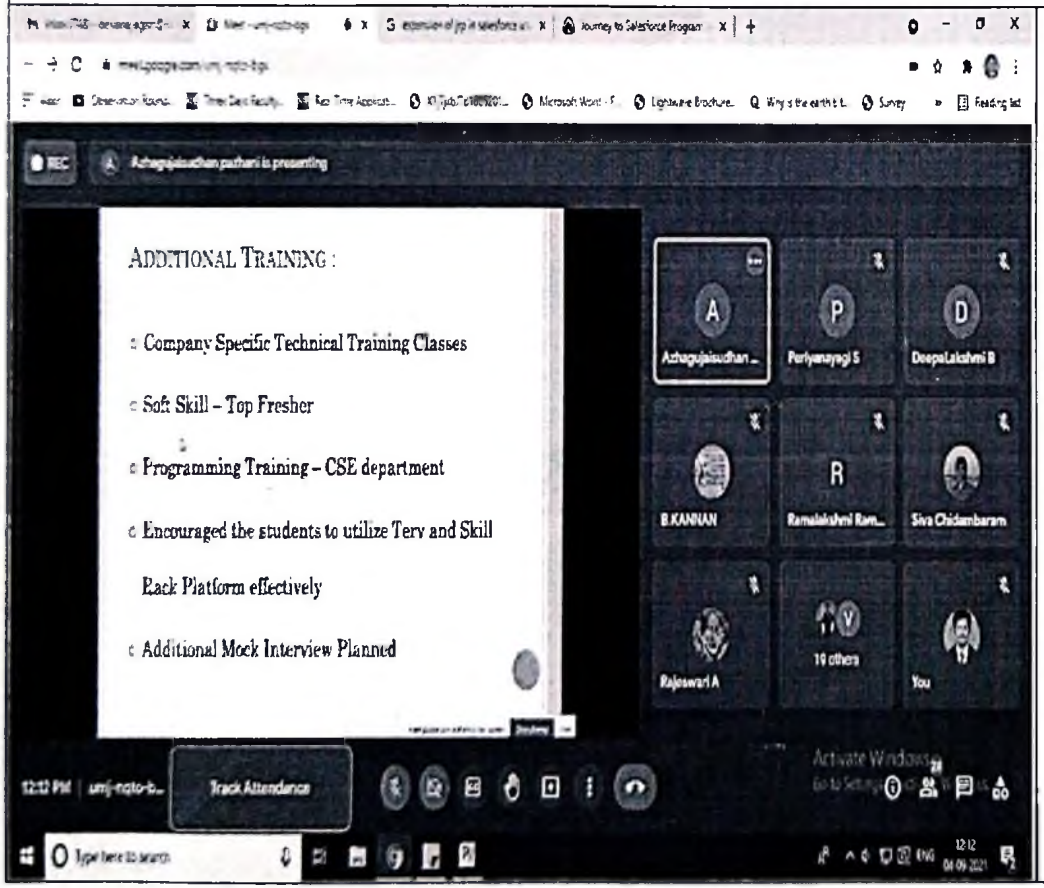

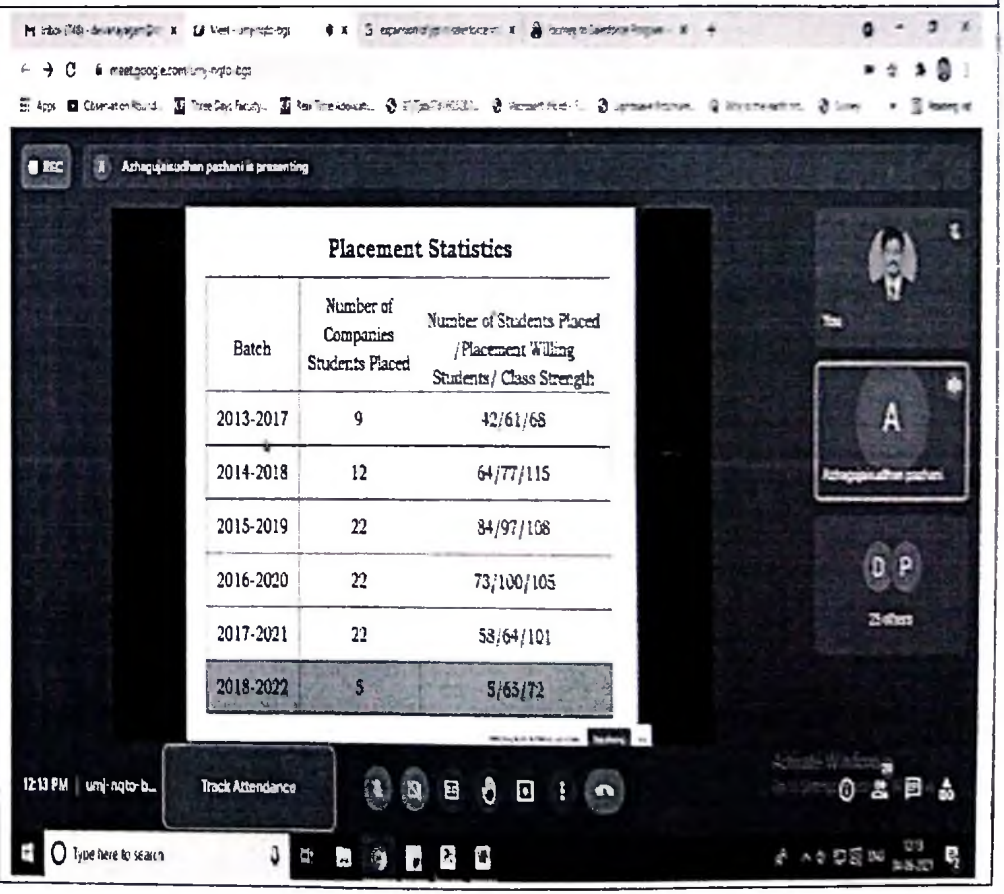

10. Research and Development **(by Mrs.S.Jeeva, AP/ECE)**

- Publication, Patent, Projects, Consultancy, Research Collaboration, and Visiting / Adjunct Faculty

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• Briefed faculty publication details along with Citations, H-index, i-10 Index. • Elaborated the various sanctioned funded projects like MODOROB, TNSCST & FAER. • Presented the Patent filed details. • Presented the submitted research project proposals. • Presented the consultancy work details. • Presented book chapter publication & reviewer details.	• The DAC members suggested improving more number of referred journal Publications. • Funding Project proposals are done by consultation with Industry Experts.	**Remarks:** • Faculty members are advised to analyze the comments of submitted proposals received from funding agencies. • Faculty members are insisted to collect the FER received patent remarks. **Target Date:** Continuous **Responsibility:** All the Faculty Members

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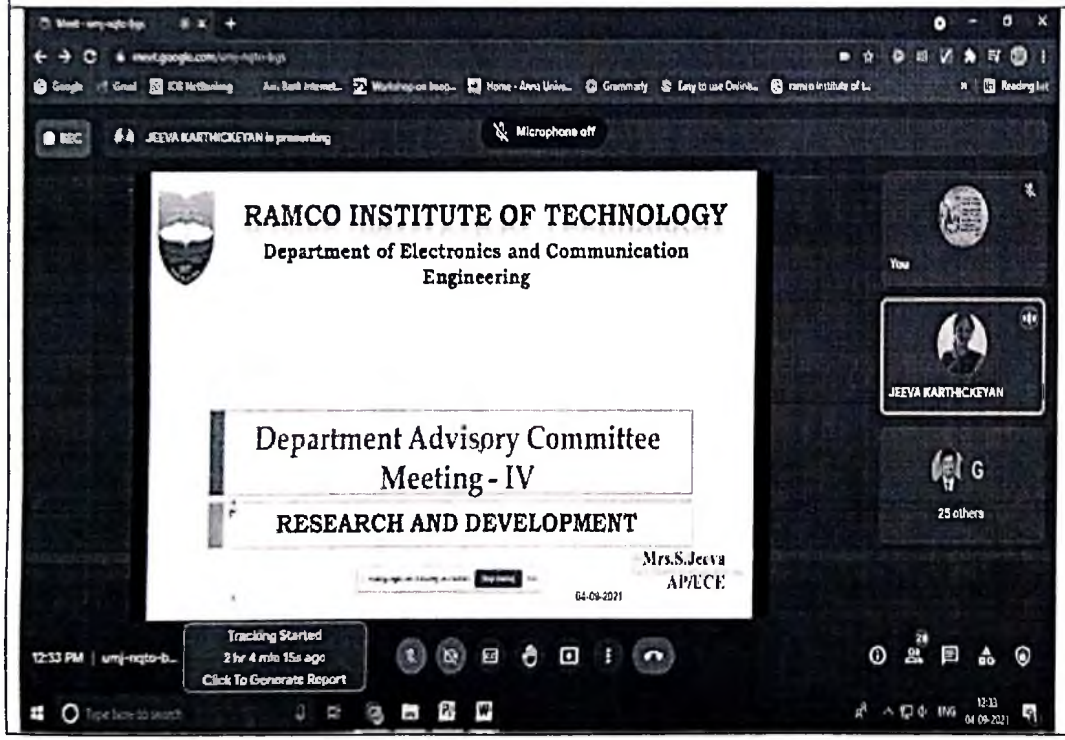

11. Faculty Participations/Performance Awards and Achievements – Faculty Members		(by Mr.D.Gopinath, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Explained the faculty details, faculty participation, ATAL FDPs • Shared the course underwent by the faculty members. • Elaborated the faculty member's performance awards and achievements. • Presented the details of faculty members acted as resource person.	Nil	Nil

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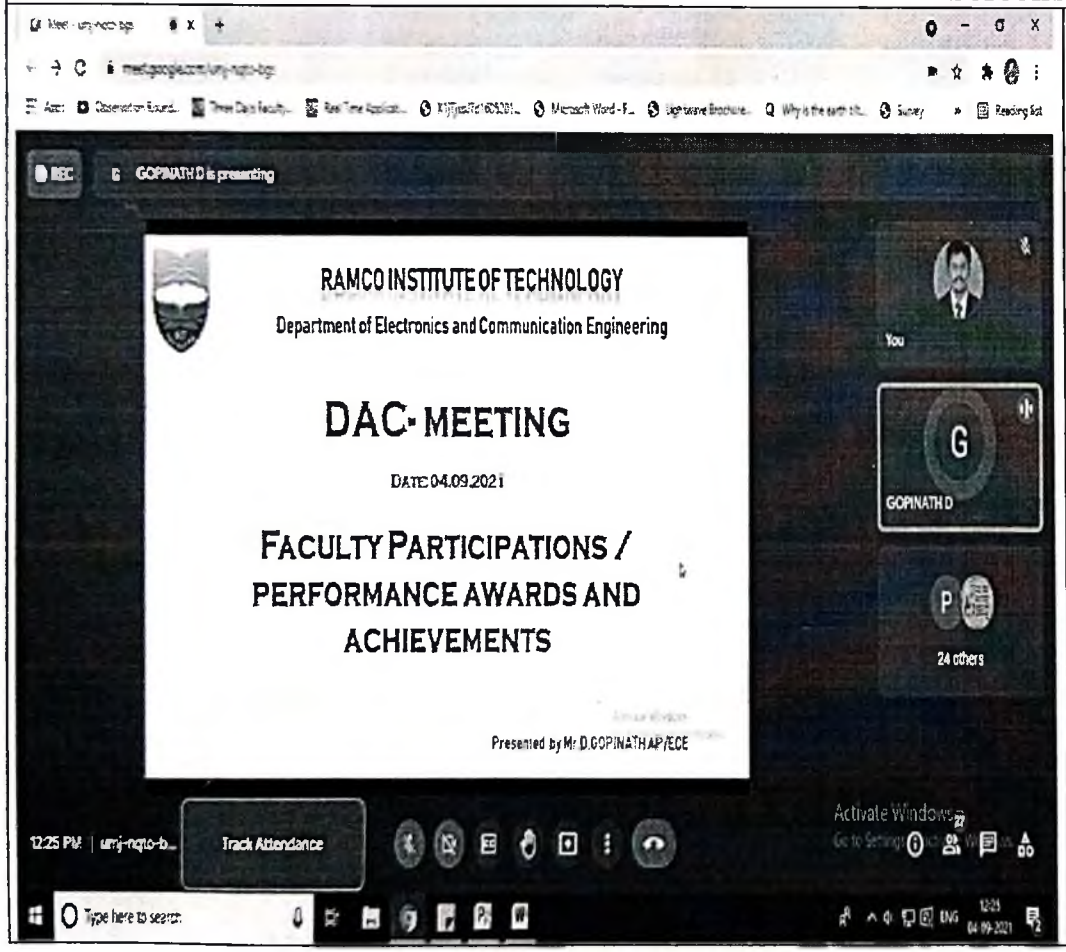

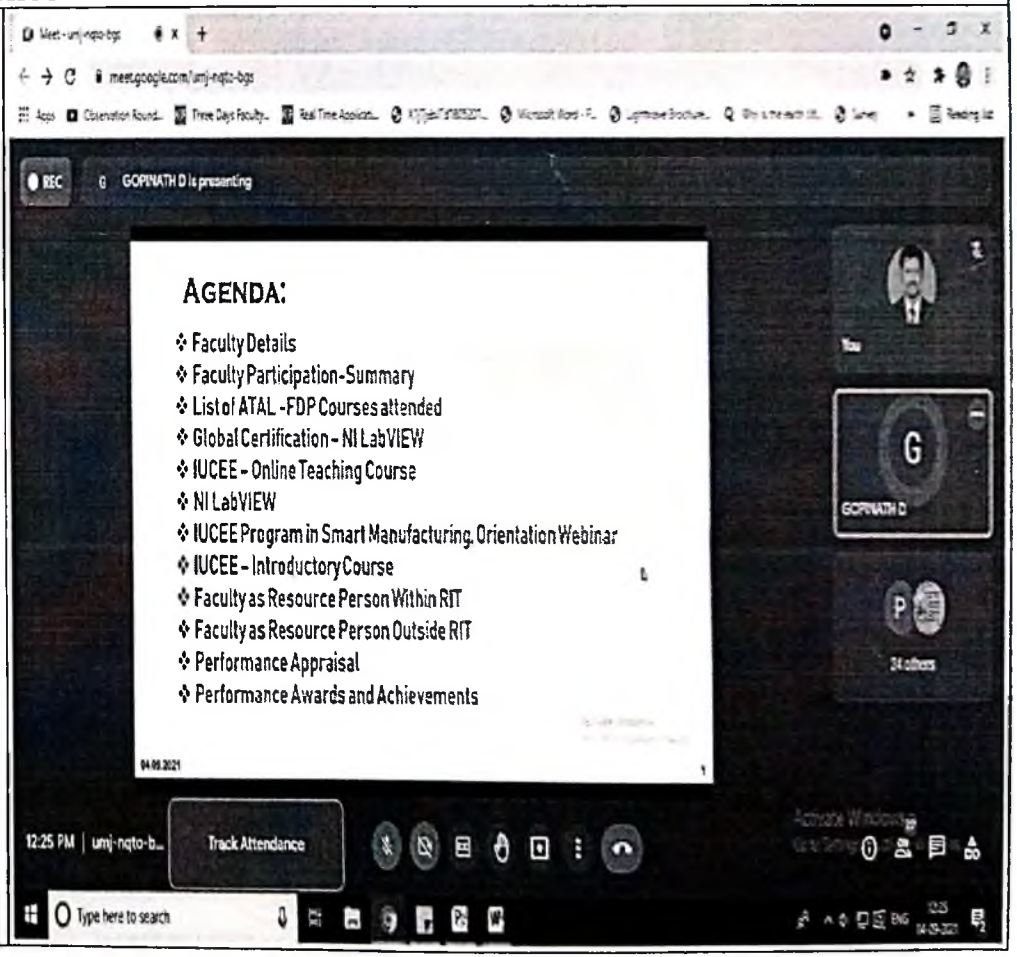

12. Laboratory Utilization with Respect to OBE and Additional Facility Utilization **(by Mrs.R.Divya, AP/ECE & Ms.S.Harini Shriram, AP/ECE)**

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• Elaborated about Laboratory utilization with respect to OBE. • Shared the Additional Facility Utilization available in the department.	• The DAC members suggested utilize the resource available in the department and college fully for the project and R&D.	**Remarks:** • Students were doing their projects using NI-LabVIEW and MATLAB. • Faculty members were using the virtual laboratory for handling few experiments. **Target Date:** Continuous

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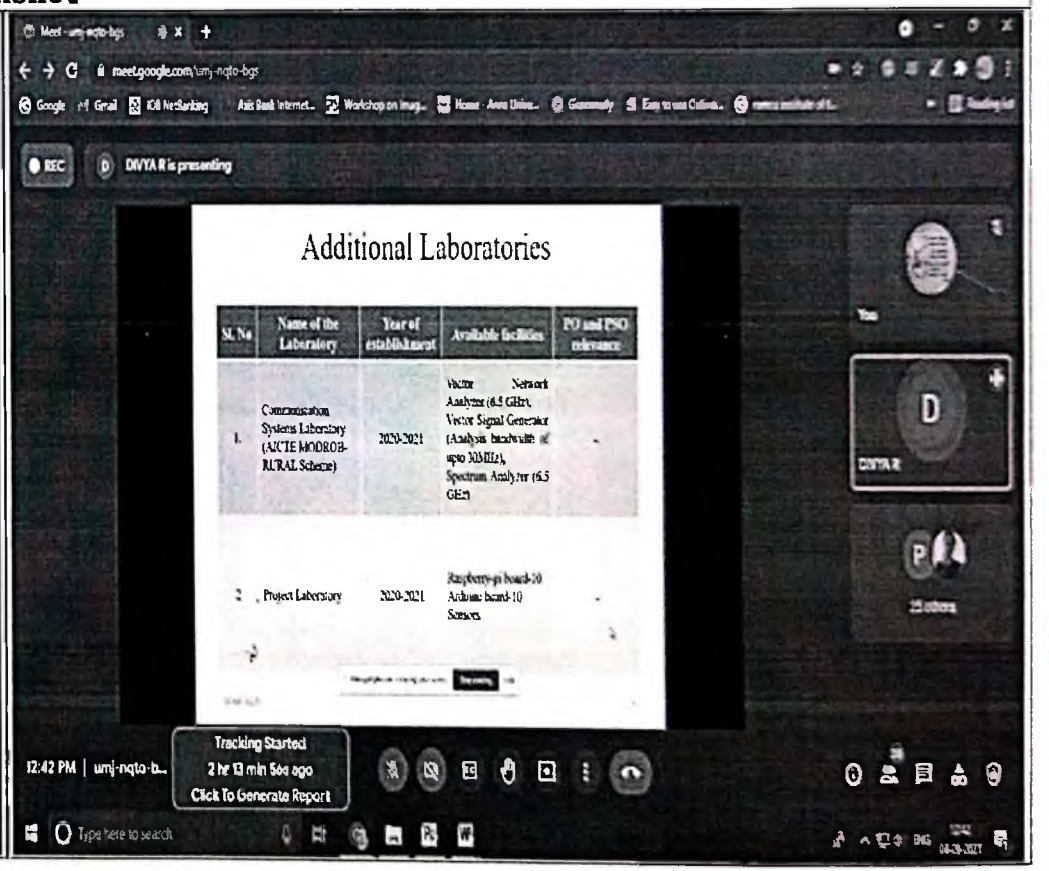
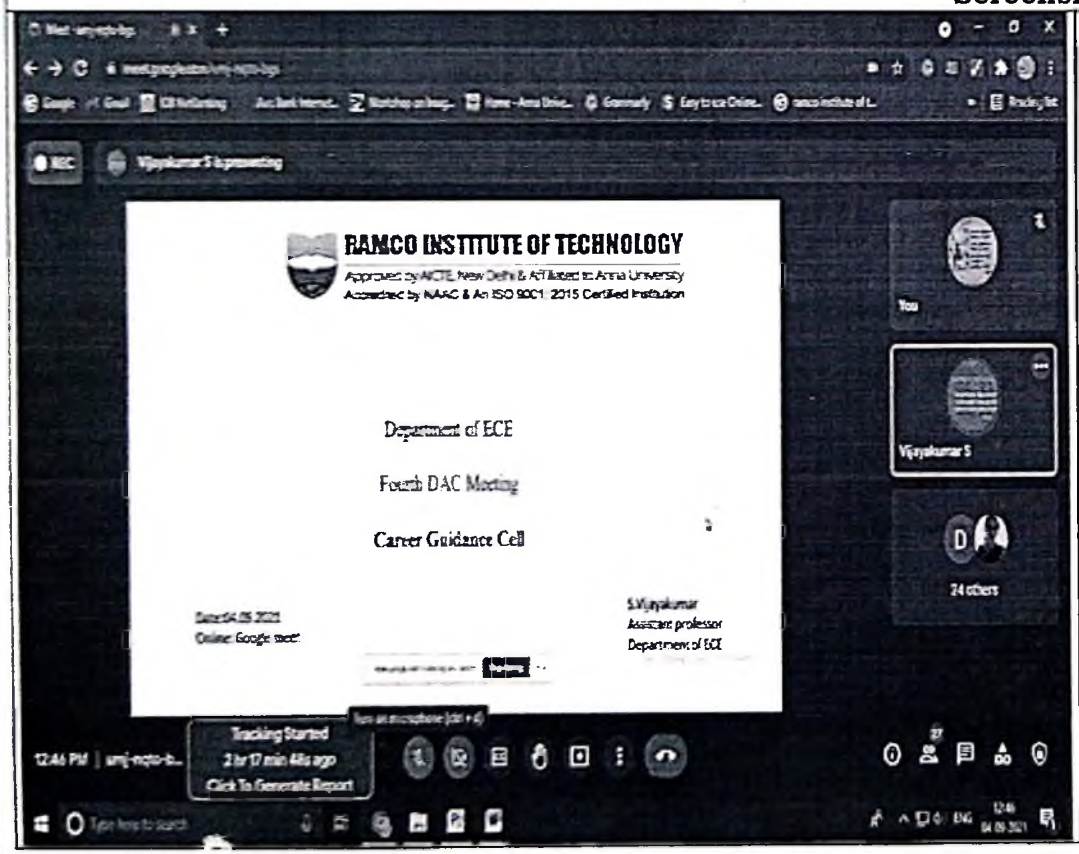


13. Career Guidance Cell Activities		(by Mr.S.Vijayakumar, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Explained about the various events conducted by the career guidance cell such as GATE coaching, Opportunities to pursue higher studies abroad, cracking TNPSC exams to the students	• The DAC members suggested starting Tessolve Semiconductor training for third-year students.	**Remarks:** • For Suggestion 1: Willingness for training got from students and training started **Target Date:** September 2021 **Responsibility:** Tessolve semiconductor training in-charge

Screenshot



14. EDC, IIC, NISP Progress, Extra-curricular Activities, Mentoring		(by Mr.P.Gunasekaran, AP/ECE & Mr.LK.Balaji Vignesh, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Explained EDC, IIC, NISP Progress, Extra-curricular Activities for the academic year 2021-2022, and Mentoring.	• The DAC members insisted on motivating the students to participate in extra-curricular activities.	**Remarks:** • For Suggestion: Planned to motivate the students to participate in various events. **Target Date:** April 2022 **Responsibility:** Coordinator

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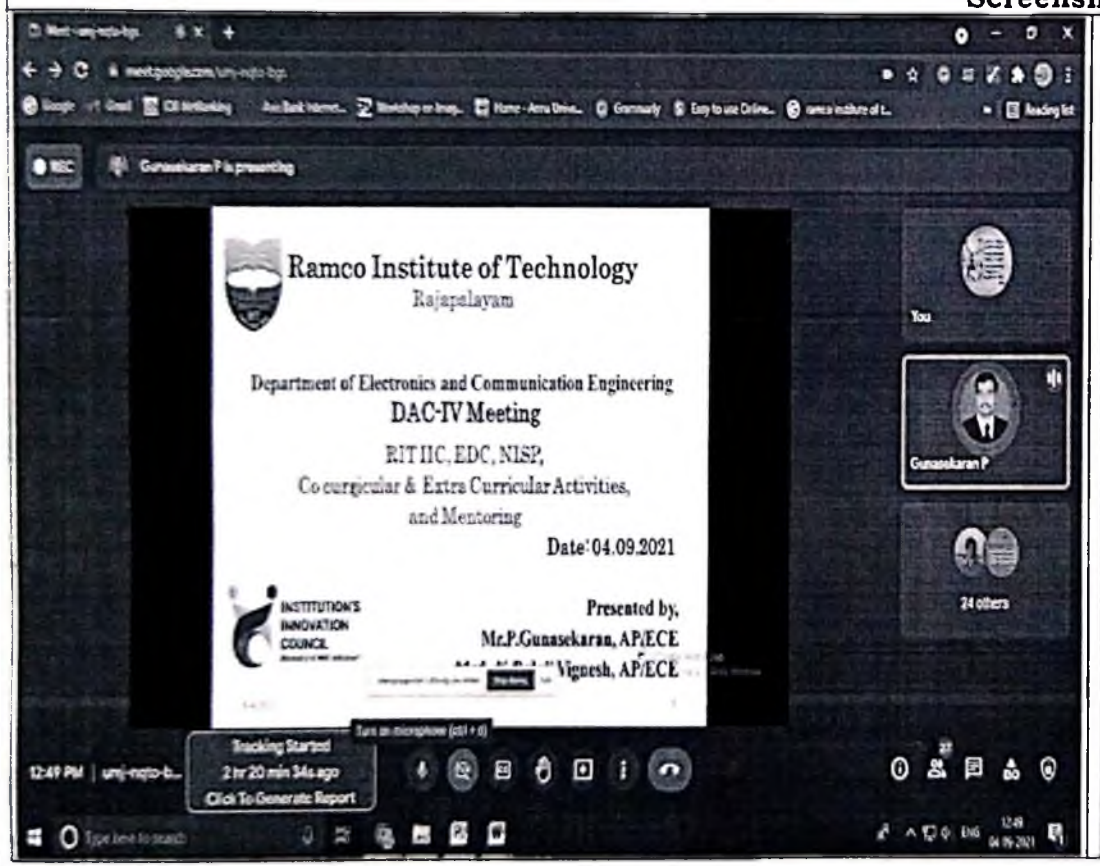

15. Online Courses (Faculty Members & Students) (by Mrs.R.Divya, AP/ECE & Mr.A.RameshBabu, AP/ECE)

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• Explained about faculty online course details and students online course details. • Shared the outcomes due to the online courses did by the faculty members and students. • Presented the action plan for the academic year 2021-2022.	Nil	Nil

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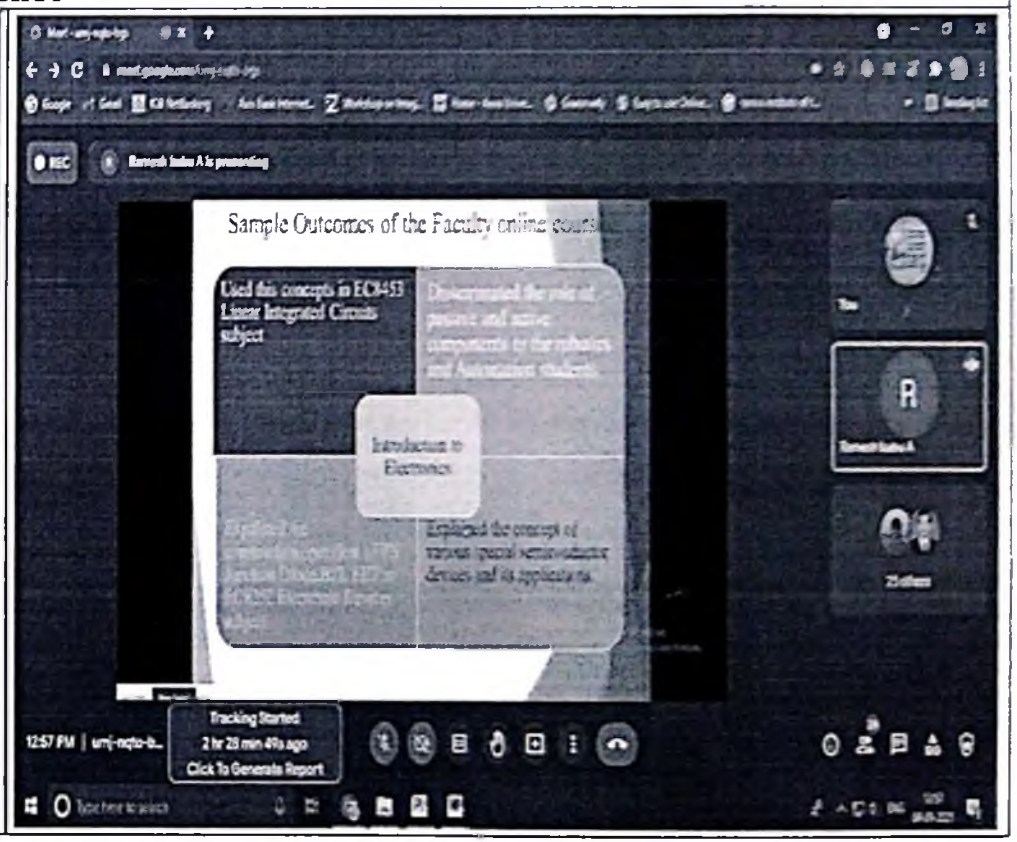

16. Continuous Improvements		(by Mr.P.Venkatesh, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Shared the PO and PSO attainment (2019-2020) • Explained the academic audit (new forms) and action is taken. • Presented the student's admissions details with their cut-off marks range. • Improvements in placements, higher studies and entrepreneurship.	Nil	Nil

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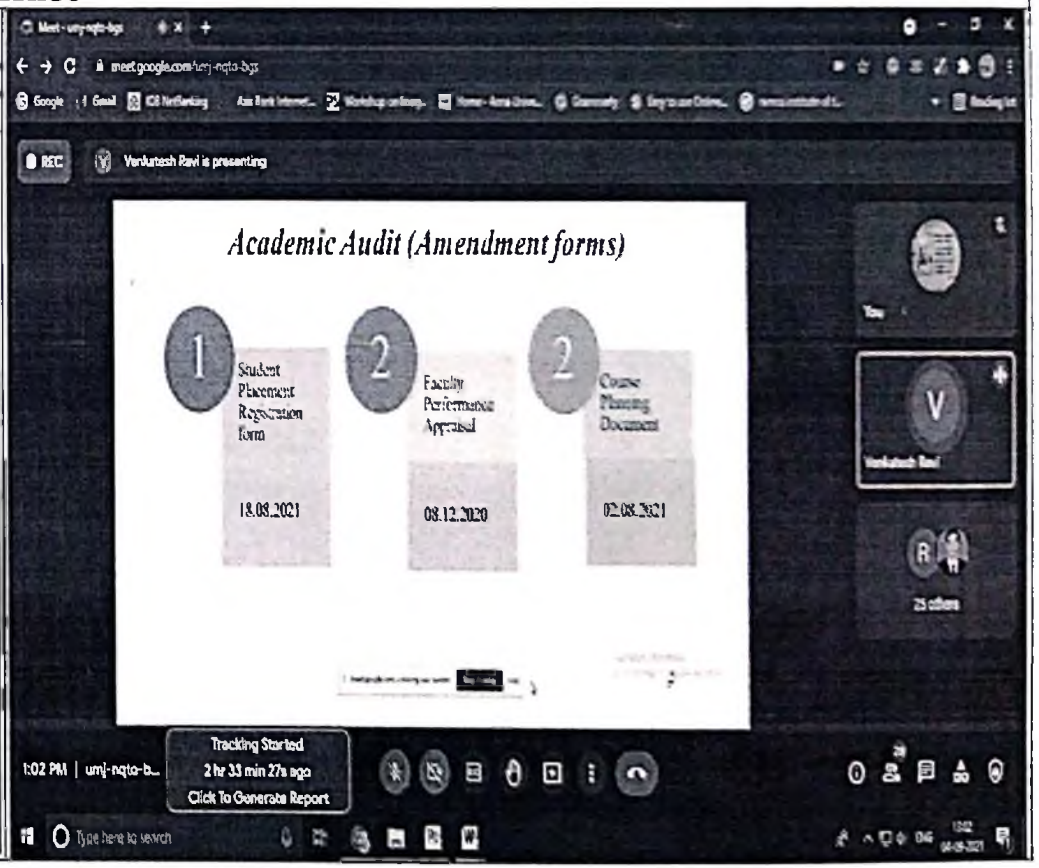

17. Alumni Association Interaction		(by Mr.K.Ragavan, (Sr. Gr.)AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Explained the extended support of alumni in the national conference, webinars/guest lectures, placement training, workshops, value-added courses, student's projects as reviewers, and DAC meetings as members.	• The DAC members suggested utilizing the alumni for placement training.	**Remarks:** • Planned to invite more alumni for placement traning and to motivate the students. **Target Date:** Continuous **Responsibility:** The placement coordinator

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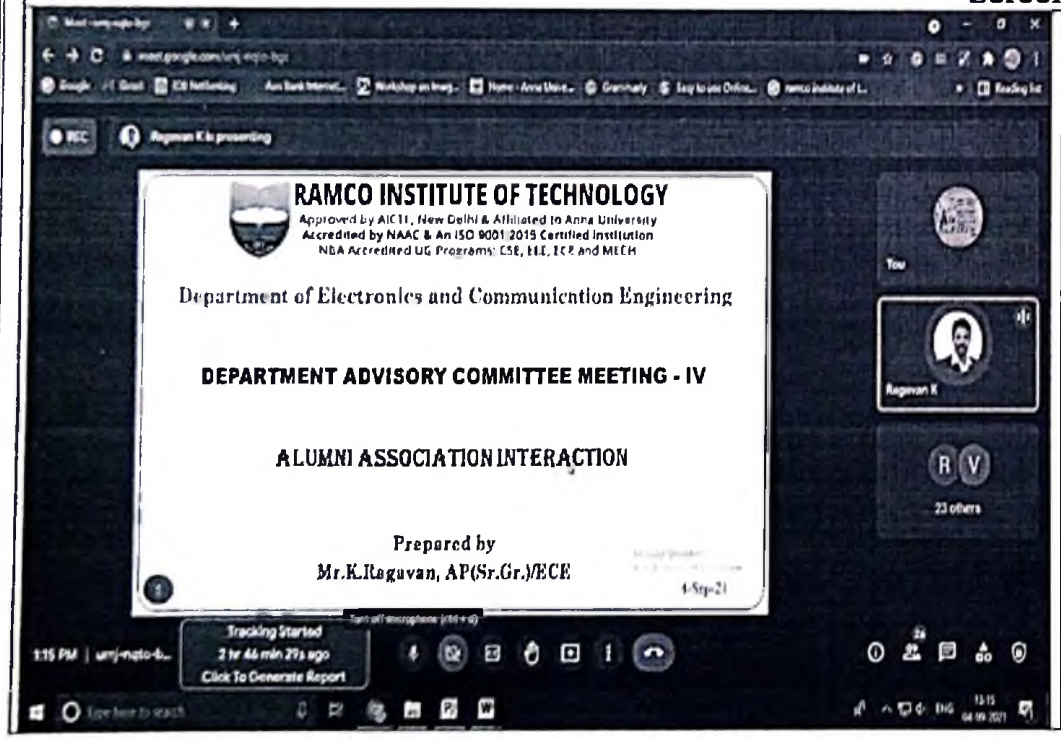

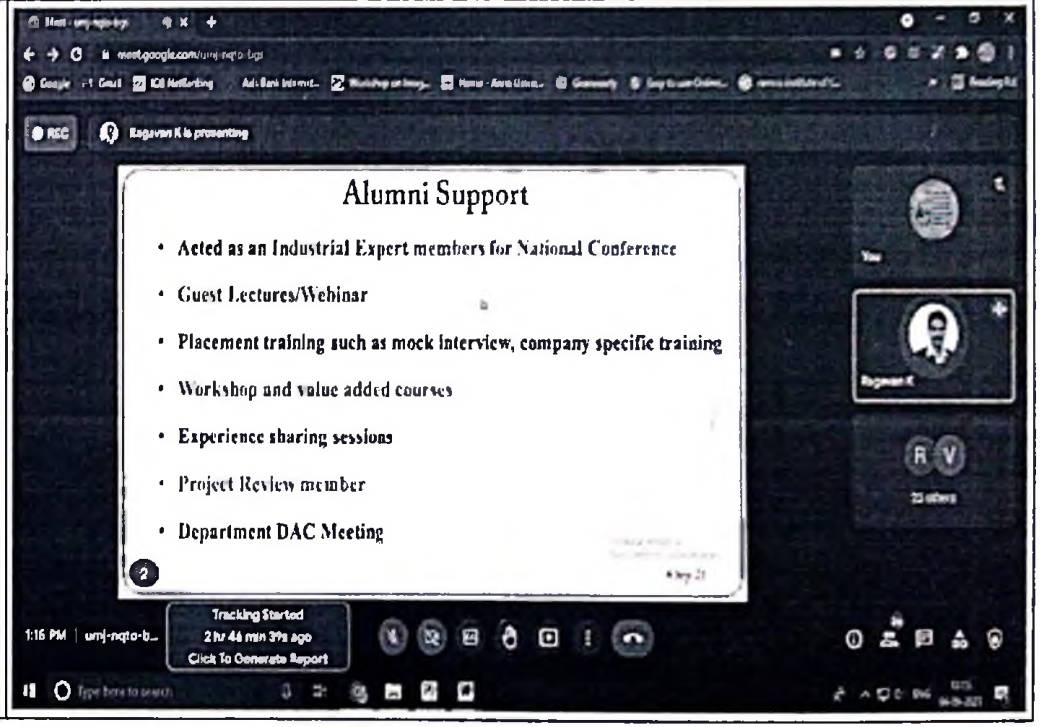

18 Stack Holders Feedback Analysis: Students/ Parents/ Alumni/ Recruiters		(by Mrs.R.Ramalakshmi, AP/ECE)
Points Delivered by the Faculty Members	**Suggestions were given by DAC Members**	**Remarks with Target Date and Responsibility**
• Explained in detail regarding the stakeholder's feedback system and analysis for the academic year 2020-2021. • Actions taken based upon the suggestions and feedback received from the stakeholders were explained in detail.	• The DAC members suggested improving the feedback received from the stakeholders.	**Remarks:** Few of the suggestions and feedback received from the stakeholders are already implemented and yet to implement the other suggestions and feedback in this academic year **Target Date:** Within this academic year **Responsibility:** Students, Parents, Alumni, Recruiters, Faculty Members, HOD

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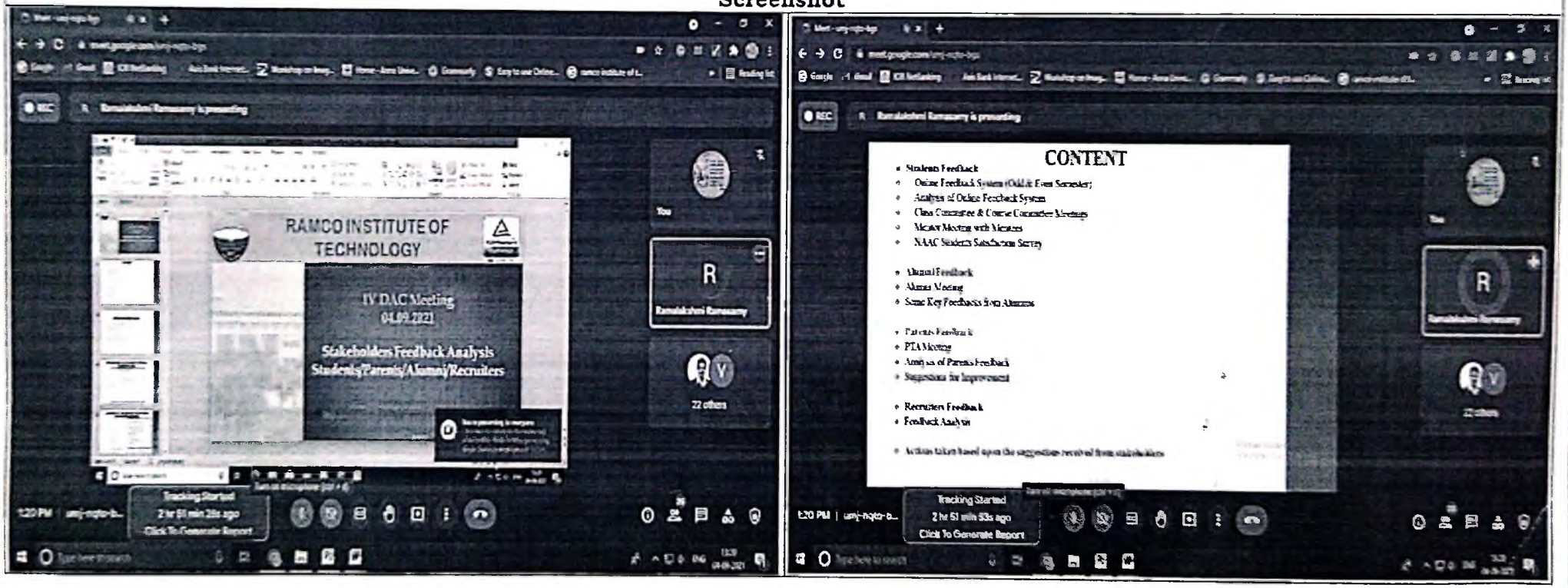

19. Department Budget Allocation & Expenses **(by Mr.B.Kannan, AP(Sr. Gr.)/ECE)**

Points Delivered by the Faculty Members	Suggestions were given by DAC Members	Remarks with Target Date and Responsibility
• Explained the Adequacy of Budget Allocation and Utilization of Allocated Funds for the academic years 2019-2020 and 2020-2021. • Expounded the budget allocation for the academic year 2021-2022.	• The DAC members suggested improving the both Adequacy of Budget Allocation and Utilization of Allocated Funds for the academic year 2021-2022.	**Remarks:** • For Suggestion 1: Planned to utilize the allotted amount under the various head to achieve the utilization percentage above 90%. **Target Date:** April 2022 **Responsibility:** Budget Co-ordinator, In-charges, and HOD/ECE

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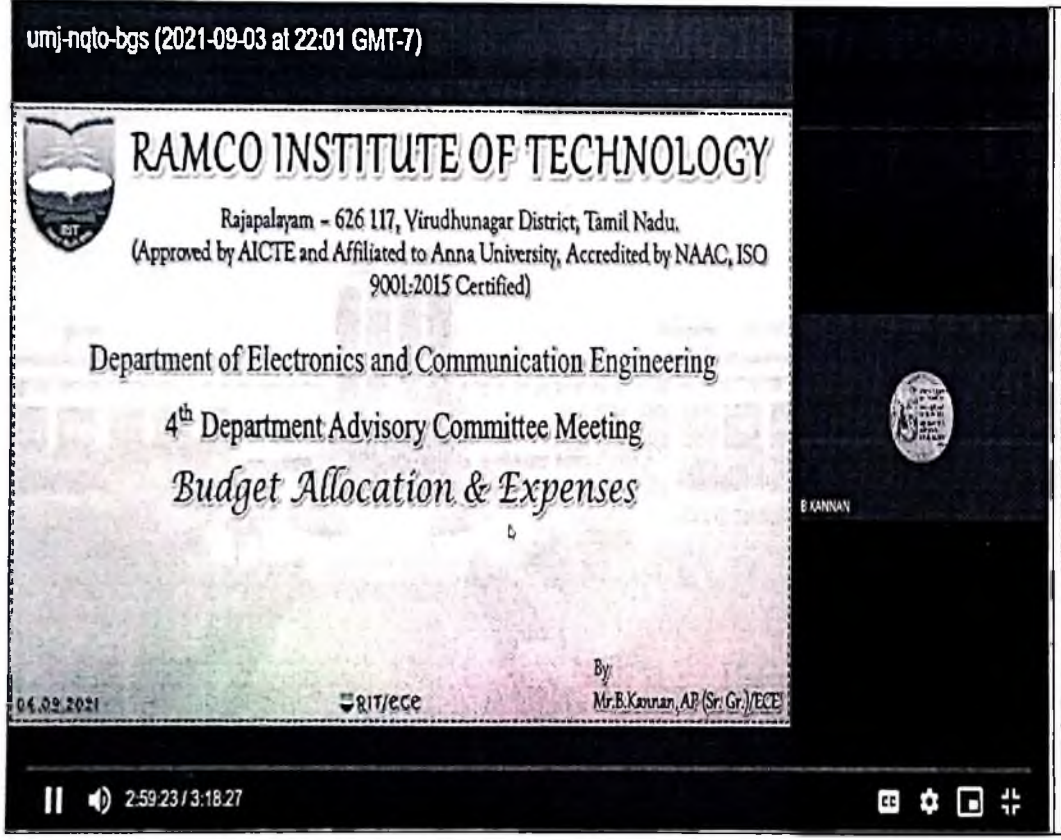

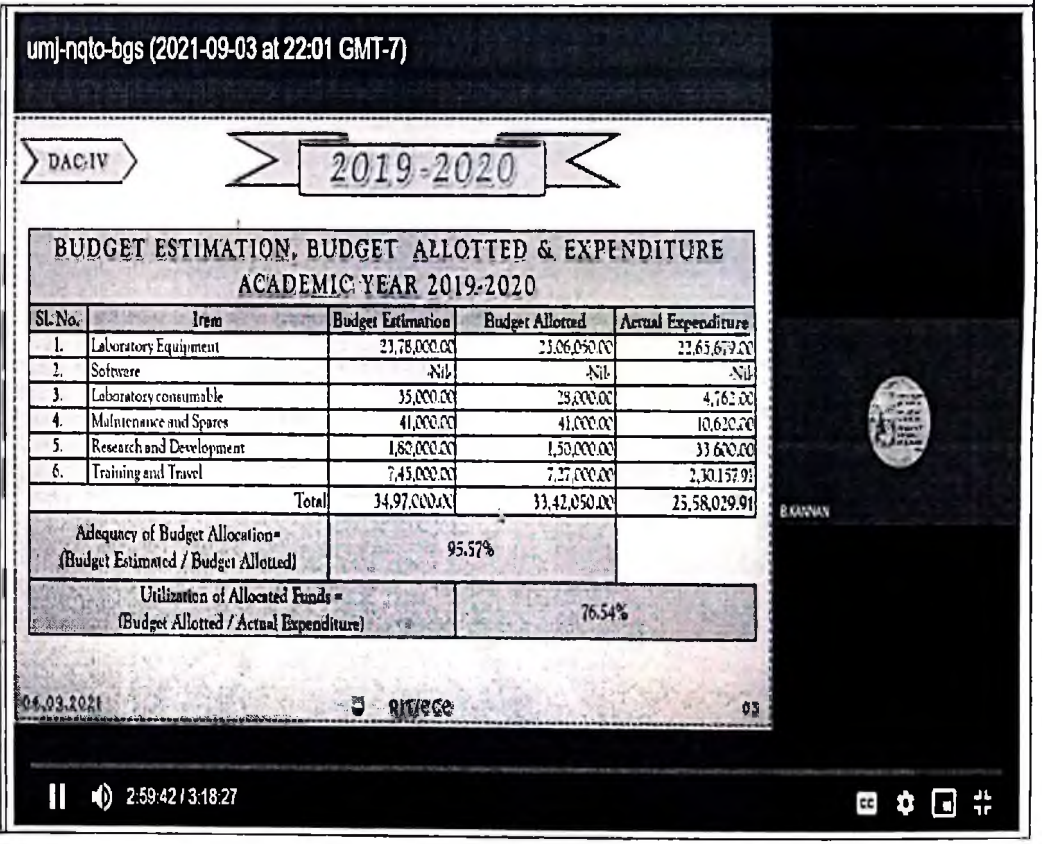

Suggestions provided by the DAC members a summary.

- It is suggested that you record the Content Beyand Syllabus handling topics in the logbook.
- Faculty members may prepare the material using an online platform and publish it online, for example, the FOSSE platform.
- Requested to utilize the facilities and resources available in the department for further improvement of faculty members' R&D and students' projects.
- The final year project may be converted into as many patents and papers as possible.
- More MOU signed company projects may be taken as final year projects.
- Entrepreneurship activities have to be taken to the next level.
- DAC members requested that we focus on social-related projects that could help students become entrepreneurs in the long run.
- DAC members suggested improving the Program Specific Outcome statements with keywords that can measure the outcomes of the students.
- DAC members asked to give more focus on target fixing.
- Student's online courses may be considered for PO attainment.
- Members suggested giving more importance to the slow learners can improve the results.
- Students may be encouraged towards project-based learning, modelling of the systems.
- Members were asked to take steps to improve effective communication for better placement.
- To involve the students in placement learning, a few online placement games, quizzes, and GD may be used from the third year onwards.
- DAC member, Mr.S.Mohamed Safiyur Rahman, asked to encourage the students to do the interdisciplinary projects.
- DAC member, Mr.P.Siva Chidambaram, requested to concentrate on core company placement with core company-related training for the students.

11/10/21
Prepared by:

11/10/21
Verified by:

12/10/21
Approved by:

Copy to: 1) Circulate among all members for needful action.
2) File

Date: 07.09.2021

Minutes of the Meeting of Department Advisory Committee Meeting - IV

The 4th Department Advisory Committee Meeting for the AY 2021 – 22 (Odd Semester) was conducted on 04.09.2021 (Saturday) from 10.30 AM to 12: 45 PM through Google Meet.

The meeting was convened with the following agenda:

1. Review of previous Department Advisory Committee Meeting – III
2. Marks scored in the various criteria of NBA
3. Institute Vision, Mission, Department Vision, Mission, PEOs, existing and proposed PSOs
4. Teaching and Learning Process – Curricular Gap Identification Process, Curriculum Gap Fulfilment, Innovative Practices And Reforms In Teaching, Action Taken For Advanced And Slow Learners, Feedback From Stakeholders, Quality in Internal Assessment Test,
5. Industry Institute Interactions and its Impact - Internship/ Industrial Training Progress
6. Attainment of COs, POs, PSOs with Program Effectiveness
7. Result Analysis of End Semester Examination
8. Activities of Professional Societies
9. Training and Placement Progress – Improvement in Placement
10. Faculty – Cadre Proportion & Qualification, Specialization, Student Faculty Ratio (SFR), Retention, publications and Participation details.
11. Funded Projects Details , Infineon Solar Pump Motor Drive Design Challenge 2021, Chatra Viswakarma Award Details 2020 – 21, Plan for Faculty R & D Activities for the Academic Year 2021-22
12. Performance Appraisal
13. Laboratory Facilities
14. Career Guidance Cell Activities
15. EDC, IIC, NISP Progress, Extra-curricular activities and Mentoring
16. Online course completion details – 2020-21
17. Continuous Improvements, ISO Audit (26.09.2020 to 17.07.2021)
18. Alumni Interactions, Alumni Suggestions
19. Review of Stakeholders Feedback – Students/Parents/Alumni/Recruiters
20. Budget for the Academic Year 2021 – 2022

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The members present in the meeting were given below.

Members present:	**Internal Members from RIT**
1) Dr.P.Ilango, Director Strategic Academic Relations, ML Research and Innovation, Data Foundry AI, Coimbatore. (Industry Member) 2) Dr.Vijayaraghavan Viswanathan, Founder & CEO of Eternl Resilient Tech Pvt Ltd, Bangalore, India Advisor, Amrita University and Visiting Professor, Sona College of Technology, Tamilnadu, India Steering Committee Member, Ministry of MSME, Govt of India. (R&D Member) 3) Dr. S. Balamurugan, Chairperson and Professor, Electrical and Electronics Engineering, School of Engineering, Coimbatore. (Academic Member) 4) Mr.M.Murali Kumar, Engineer, Firmware Design and Development, Data Patterns India Private Limited, Chennai. (Alumni Member) 5) Mr. A. Mohamed Sameer, Senior Engineer, Plant Maintenance, Rane NSK (P) Ltd, Chennai. (Alumni Member)	1. Dr.S.Kannan, Prof & Head / EEE 2. Mr.D.Karthik Prabhu, AP(SG)/EEE 3. Dr.V. Sivakumar, ASP/MECH 4. Mr. K. Ragavan, AP(SG)/ECE 5. Mr.T.Selvaganesh, AP/Maths **Faculty Members – Dept. of EEE, RIT** 1. Dr.K.Karthikeyan, ASP 2. Mr.N.Ganesh, AP(SG) 3. Mr.E.Thangam, AP(SG) 4. Mr.S.Meenakshi Sundaravel, AP(SG) 5. Mr.A.Arun Kumar, AP 6. Mr.A.S.Vigneshwar, AP 7. Mrs.S.Jeyanthi, AP

Sl. No.	Agenda	Target Date	Points discussed	Responsibility
1.	Review of previous Department Advisory Committee Meeting – III	Continuous	Minutes of third Department Advisory Committee Meeting. The implementation of suggestions given by the advisory committee members in the previous meet was reviewed by the members. Presented the marks scored in the various criteria of NBA, Institute Vision and Mission, Department Vision, Mission, PEOs, existing and proposed PSOs.	All the NBA Criteria Coordinators and faculty members

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2.	Teaching and Learning Process (TLP)	Continuous	Presented Curricular Gap Identification Process, Curriculum Gap Fulfilment, Innovative Practices And Reforms in Teaching, Action taken for Advanced and Slow Learners, Quality in Internal Assessment Test, Laboratory Facilities	All the faculty members
3.	Course Outcomes, Program Outcomes and Program Specific Outcomes	Continuous	Presented the Attainment of COs, POs, PSOs with Program Effectiveness	All the faculty members
4.	Students Performance	Continuous	Result Analysis of End Semester Examination 2020 -2021	All the student members, subject handling faculty members
5.	Department and Industry Interaction	Continuous	Involvement of industrial experts in the project review committee and Department Advisory committee. Industry Institute Interactions and its Impact - Internship/ Industrial Training Progress	All the faculty members & Internship/In-plant training in-charge
6.	Students feedback related to teaching and learning, Training and Placement Progress, Feedback from Recruiters and Employers	Continuous	Feedback from Stakeholders and Review of Feedback of Stakeholders – Students/Parents/Alumni/Recruiters	All the students, class advisor, mentor and Placement coordinator
7.	Alumni Interaction and Contribution	Continuous	Alumni Interactions and Alumni Suggestions	Alumni coordinator
8.	Faculty contribution	Continuous	Faculty – Cadre Proportion & Qualification, Specialization, Student Faculty Ratio (SFR),	All the faculty members & RIT

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			Retention, publications, Participation, Funded Projects Details, Faculty Online course completion details (2020 – 21), Infineon Solar Pump Motor Drive Design Challenge 2021 Plan for Faculty R & D Activities for the Academic Year 2021 – 22.	RC member
9.	Activity leads to Quality improvements	Continuous	Student Online course completion details (2020 – 21), ISO Audit (26.09.2020 to 17.07.2021), Career Guidance Cell Activities, Chatra Viswakarma Award Details 2020 – 21.	All the faculty members
10.	Members Suggestions for Improvements	Before commencing the next DRM - V	**Dr.P.Ilango, Director Strategic Academic Relations, ML Research and Innovation, Data Foundry AI, Coimbatore. (Industry Member)** suggested • To encourage the faculty members to publish in SCI/WOS/SCIE that will be helpful in getting funded projects from the funding organization. **Dr.Vijayaraghavan Viswanathan, Founder & CEO of Eternl Resilient Tech Pvt Ltd, Bangalore, India Advisor, Amrita University and Visiting Professor, Sona College of Technology, Tamilnadu, India Steering Committee Member, Ministry of MSME, Govt of India. (R&D Member)** suggested • To celebrate failures – the criteria for evaluating the mini projects/students should be how they have tried, milestones achieved and where they have failed. This will allow the student to have more hands on training on their project. • To call the normal electrician in to the institute and sit with the students because, in many situations students cant able to converse with an electrician, plumber, etc., • To make the students to do Megger test, to identify the neutral return, to make them to understand the voltage between	All the faculty members

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			neutral and earth and its impact to the circuit, industrial standard of earthing voltage. • To create the simulation to make the students to dig an earth pit of various sizes themselves to understand the megger difference. • To make the students to understand the basic operation of Multimeter by providing them the hands on experience. • To make the students to understand the energy efficiency, selection of energy efficient bulb, selection of energy efficient air conditioning system, BER rating and ISEER rating. • To promote interdisciplinary projects relevant to the problems associated with the college • To conduct a monthly Question and Answer session by creating the open forum with students and faculty members to answer the questions asked by the students which helps the students and the faculty members to enrich their knowledge. • To conduct a monthly session on reading the Journal paper published by the faculty members for the students from the First year onwards to inculcate the quality of research and research paper • To promote the student to take elective courses from Coursera and the credits should be given to the students after successful completion of the course. • To create Wall/Hall of Fame to improve the innovative projects and those projects can be presented in the Innovation Day which improves Institute Industry Collaboration. **Dr. S. Balamurugan, Chairperson and Professor, Electrical and Electronics Engineering, School of Engineering,**	

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			Coimbatore. (Academic Member) suggested that • PSOs should be fine-tuned, specific to the department and program, should tell the strength of the department. • PSO1 can be changed specific to the course; it is so generic with the mix of all the foundational courses which does not highlight the strengths of the department. • PEOs can be changed such that it should describe the career and professional accomplishments of the students who were graduated from the institution. It should describe the capability of the students to get placed in MNCs, become entrepreneur, and go for higher education. • Improving good quality publication will have more impact on getting the funded projects. • CO – PO mapping can be done using whole numbers instead of decimal numbers by practicing top down approach for OBE. **Mr.M.Murali Kumar, Engineer, Firmware Design and Development, Data Patterns India Private Limited, Chennai. (Alumni Member)** suggested that • The concepts taught in the class should be related with the real time application. • The alumni details can be collected, they can be categorized into various domains and make the students to have interaction with them to understand the domain related importance for the subject. • The students should be made to understand the impact of the subject related to their career. • The students should analyse their project and able to divide it into software, hardware, applications and future scope of the project.	

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			• The students should have strong fundamental knowledge and knowledge in the subjects mentioned in area of interest before appearing for interview. **Mr. A. Mohamed Sameer, Senior Engineer, Plant Maintenance, Rane NSK (P) Ltd, Chennai. (Alumni Member)** suggested that • The quality of Electrical Engineers can be improved by implementing the application/model based learning. • The students should be taught by their peers with the latest technologies for a minute or more before the commencement of the classes. • The students should be trained in specifically to achieve their goals. • In PSO3, communication systems can be added in addition to the industrial automation systems. **Dr.V.Sivakumar, Associate Professor, Department of Mechanical Engineering, Ramco Institute of Technology (Internal Member)** suggested • To implement the new PSOs by following the process of establishing PSOs as mentioned in NBA criteria 2.1.1. • To measure the outcome of slow learners after conducting special classes. • To identify the CO not attained subjects and take the necessary action. • To identify the CO's highly attained subjects (eg. Target: 1.8 and Attained 2.8 means 55.56% higher) and follow the best practices done by the faculty members. • To improve the number of IEEE memberships in the department. • To get more output from MoU signed companies (Industry authored papers / Value added course / Sponsor from industry - getting the used product to	

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			demonstrate & project proposal submission) • To apply for the best professional society chapter award • To organize the orientation program to improve higher studies and entrepreneurship. • To enhance the research outcomes (Publications (SCI E/Scopus Indexed), Patent, copyright, Product development, and funded projects) **Mr.K.Ragavan, Assistant Professor, (Senior Grade) Department of Electronics and Communication Engineering, Ramco Institute of Technology (Internal Member)** suggested • To improve the innovative practices in Teaching Learning Process apart from using Canvas LMS, Mentimeter, Class Poll. • To encourage the students to participate in National Level Project Contest. • To utilize NI LabVIEW and Tessolve Laboratories by doing experiments relevant to the subjects/laboratories (M&I, Control Syaytems, LIC, DLC, EDC, etc.,) in the given curriculum. • To utilize the 3D printing lab by developing the models used for teaching the concepts of the subjects/laboratories in the given curriculum. **Mr.D.Karthik Prabhu, Assistant Professor(Senior Grade), Department of Electrical and Electronics Engineering, Ramco Institute of Technology (Internal Member)** suggested • To improve funded projects and journal quality and H-index of the department. Also asked whether marks were allotted for journal publications other than	

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			SCI/SCIE and Scopus. • To identify the curricular gap by mapping CO – PO and CO – PSO and to organize, guest lecture, seminar/webinar to improve the knowledge of the students. **Mr.T.Selvaganesh, Assistant Professor, Department of Electrical and Electronics Engineering, Ramco Institute of Technology (Internal Member)** suggested • To encourage the students to register for competitive exams such as GATE/CAT/MAT/TOEFL/IELTS, etc., and get a valid score to pursue their higher educated in reputed institutions in India and Abroad. Incentives can be given to the students with valid score in the above mentioned exams. • To encourage the faculty members to register for competitive exams such as GATE/NET/TOEFL/IELTS, etc., and get a valid score to pursue their higher education in reputed institutions in India and Abroad. Incentives can be given to the faculty members with valid score in the above mentioned exams.	
Prepared by: 07/09/2021 **DAC Coordinator**		**Verified by:** S. K 07/09/2021 **HoD/EEE**		**Approved by:** 7.9.21 **Principal**

Copy to:

1) Members of DACM
2) Faculty members of Electrical and Engineering through e-mail and Canvas LMS for information and necessary action.
3) File

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RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001: 2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Mechanical Engineering

Academic Year 2021 – 2022

Minutes of Meeting – 4th Department Advisory Committee (DAC)

Date of Meeting : 04.09.2021 (Saturday)
Time of Meeting : 3:30 PM to 5:30 PM
Reference : RIT/Mech./DAC/04
Google Meet Link : https://meet.google.com/ebg-xtgh-xxp

The meeting was convened with the following agenda:

1. Review of 3rd DAC meeting held on 21.11.2020
2. Program Curriculum and Teaching – Learning Processes
   a. Curricular Gap Identification and content beyond syllabus
   b. Implementation and effectiveness of teaching and learning
   c. Impact analysis of industry – institute interaction / industrial training and action taken
3. Review of assessment and analysis of the attainment of COs/POs/PSOs with program effectiveness
4. Appraisal of student support system Co-curricular / Extra-Curricular activities
5. Faculty participation and contributions
6. Status of continuous improvement
7. Review of department academic plan and department progress
8. Review of 3rd Program Assessment and Quality Improvement Committee (PA&QIC) meeting held on 19.07.2021

The members were present in the meeting are given below.

Members present:

1) Mr.T.Thirumalai kumar, Assistant Manager, HRD, Brakes India Private Limited, Chennai. (Industry Member)
2) Dr.N.Durairaaj, Additional General Manager, Boiler Shops Unit II, BHEL, Tiruchi. (R& D Member)
3) Dr.R.Jeyapaul, Prof. and Head, Department of Production Engineering, National Institute of Technology, Tiruchirappalli (Academic Member)
4) Dr.P. Maran, Professor, Department of Mechanical Engineering, TCE, Madurai (Academic Member)
5) Mr.V.K. Vikram (Batch 2015-2019) Systems Engineer, Infosys Limited, Technopark Campus, Tirvandrum, Kerala
4. Dr.O.Senthilkumar, ASCP/Chemistry
5. Dr.T.Manimaran, ASCP/Maths
6. Mr.T.Chockalingam, AP/Civil, RIT
7. Dr.P.Sureshkumar, ASCP/Mech.
8. Dr.V.Sivakumar, ASCP/Mech.
9. Mr.J.Jerold John Britto, AP(SG)/Mech.
10. Mr.N.L.Sujin, AP/Mech., RIT
11. Mr.S.Santhosh (Reg. No.953618114059), IV Year Mech.
12. Mr.R.Dinesh (Reg. No.953619114014), III Year Mech.
13. Mr.J.M.Bala Abisheik (Reg. No.953620114003), II Year Mech.

Faculty Members – Dept. of Mech. Engg., RIT

1) Dr.S.Godwin Barnabas, ASCP
2) Mr.M.Lakshmanan, AP(Sr.Gr.)

6) Mr.S.Shanmugam (Batch 2015-2019) Senior Executive, Rane TRW Steering Systems Pvt Ltd. Alwarpet, Chennai. 7) Mr.A.Arun Shenbaga Raj (Batch 2016-2020) Founder & CEO, TN76 Food Delivery Service, Tenkasi. 8) Mr.D.Sree Balasubramanian, F/o S.Pradeep durai (II Year B.E. Mech.) Office Superintendent, BSNL, Nagarcoil. 9) Dr.T.Stanley Davis Mani, F/o. S.Biju Danie (III Year B.E. Mech.) Assistant Professor of Commerce, St.John's College, Palayamkottai, Tirunelveli. 10) Mr.J.Ramkumar, Lab Assistant, PACR Polytechnic, Rajapalayam. **Internal Members from RIT** 1. Dr.S.Rajakarunakaran, Prof & Head / Mech. 2. Dr.K.Karthikeyan, ASCP/EEE 3. Dr.M.Gomathy Nayagam, ASCP/CSE	3) Mr.J.Jerold John Britto, AP(Sr.Gr.) 4) Mr.M.Ashok Kumar, AP(Sr.Gr.) 5) Mr.C.Gururaj, AP(Sr.Gr.) 6) Mr.M.Sivagaminathan alias Balaji, AP(Sr.Gr.) 7) Mr.G.Prabu ram, AP(Sr.Gr.) 8) Mr.S.Maharajan, AP 9) Mr.T.Selvasundar, AP 10) Mr.S.Valai Ganesh, AP 11) Mr.J.Jabinth, AP 12) Mr.L.Karthikeyan, AP 13) Mr.M.Santhana Maruthu Pandian,AP 14) Mr.R.Arun Kumar, AP 15) Mr.N.L.Sujin, AP 16) Mr.R.Prabhakaran, AP 17) Mr.R.Venkatesh, AP 18) Mr.M.Ramar, AP 19) Mr.P.Pavithran, AP 20) Mr.S.Kathiravan, AP

1. Review of 3rd DAC meeting held on 21.11.2020

Dr.P.Sureshkumar, ASCP/Mech. presented the progress and salient action taken for the suggestions given in 3rd DAC meeting held on 21.11.2020.

Suggestions	Action Taken
Approach the professional societies for funding to conduct program	One-day Workshop on "Welding Emerging Power Plant Materials" conducted by RIT-IWS and received fund Rs.10,000, from Indian Welding Society (IWS).
The faculty members working in the Additive Manufacturing field should highlights the opportunities available in this field and encourage the students to do projects.	Additive Manufacturing area exposed by the faculty members to the students. Student Project done: 08, Competition Participation : 02, Course attended: 02, consultancy work carried out : Rs.8850, Internship training : 16 students
Do the impact analysis and take corrective action plan for further improvement to the next academic year.	After 3rd DAC, the Impact analysis of each criterion has been completed and presented in 4th DAC meeting
Enhance the fruitful interaction through MoUs with industries and obtain more outcomes.	Details are provided in the 4th DAC meeting for Outcome attained through MoU and plan for AY 2021-2022
Review of CO-PO-PSOs semester wise. Suggested to create a plan for the forthcoming academic year and periodically check the progress and its deviation if any.	Semester wise review has been completed. Revised plan for the AY 2020-2021 is presented by the respective criteria coordinator in 4th DAC meeting.

Suggestions	Action Taken
Ensure third and final year students are provided opportunities to refresh their fundamentals in their higher semesters.	Regularly, faculty members are taking refresher class for basic subjects during GATE and Competitive exams coaching classes
Create awareness about Entrepreneurship through Institute Innovation Council by conducting program.	19 Entrepreneurship awareness program conducted through IIC within RIT 11 programs Student participated in outside RIT
Disseminate the activities carried out through the industry by the departments in the college website.	Industry Institute Interaction details are updated in website. https://www.ritrjpm.ac.in/departments/mechanical-engg/dept-industry-institute-interaction.php
The faculty members to do more innovative practices in their theory and laboratory courses and update in the website periodically	Innovative Practices are regularly updated in the college website https://www.ritrjpm.ac.in/departments/mechanical-engg/mech-innovative-practices.php
Periodically review the Internship/In-plant training undergone by the students through Department Consultative Committee.	Periodic review has been completed for IPT/Intern.
Create the pathway to the interested mechanical engineering students to involve in the Automation and Robotics Club	Participated in EYRC and EYIC & won Rs.5000 and Pluto drone system, Awareness program were conducted in the area of Automation and Robotic
Submit more inter disciplinary project proposals to the governmental and nongovernmental agencies.	1. Mech. and CSE: 01, Submission Date: 15.11.20, Proposed amount: 24,38,821/-, Funding Agency: DST (DDT) 2. Physics, Chemistry and Mech. Engg.: 01, Submission Date: 27.10.20 Proposed amount: 21,34,320/-, Funding Agency: DST (DDT) 3. Mechanical & Chemistry: 01, Submission Date: 30.11.20 Proposed amount: 24,62,746/-, Funding Agency: DST (WMT) 4. CSE & Mechanical: 01, Submission Date: 30.11.20 Proposed amount: 22,51,966/-, Funding Agency: DST (WMT) 5. Mech. & ECE: 01, Submission date: 10.06.21, Funding Agency: SERB Mech. & Physics: 01, Submission date: 10.06.21, Funding Agency: SERB
Provide facilities for the hostellers to come and work in the laboratory after regular working hours.	Implemented and will be continued in the AY 2021-2022

2. Program Curriculum and Teaching – Learning Processes

Mr.G.Prabu ram, AP (Sr.Gr)/Mech. briefed the Teaching learning process followed in the department as follows:

2.1 Curriculum Gap Identification:

The curriculum gap for the AY 2021-2022 is identified based on feedback from Industry expert, Academic expert, Parents, Students and Alumni. For the same the department courses were divided in to three broad domains and domain coordinators were nominated. The detail of the same is listed below.

Sl. No.	Domain	Coordinator	Members
1.	Thermal	Mr.M.Ashok Kumar, AP(SG)	Dr.V.Sivakumar, ASCP Mr.M.Sivagaminathan alias Balaji, AP(SG) Mr.R.Arun Kumar, AP Mr.N.L.Sujin, AP
2.	Design	Mr.J.Jerold John Britto, AP(SG)	Mr.C.Gururaj, AP(SG) Mr.G.Prabu ram, AP(SG) Mr.S.Valai Ganesh, AP Mr.J.Jabinth, AP Mr.L.Karthikeyan, AP Mr.R.Venkatesh, AP Mr.R.Prabhakaran, AP Mr.T.Selva Sundar, AP
3.	Manufacturing	Mr.S.Maharajan, AP	Dr.S.Rajakarunakaran, Professor and Head Dr.P.Suresh Kumar, ASCP Dr.S.Godwin Barnabas, ASCP Mr.M.Lakshmanan, AP(SG) Mr.M.Santhana Maruthu Pandian, AP Mr.M.Ramar, AP Mr.S.Kathiravan, AP Mr.P.Pavithran, AP

The domain wise meeting was organized by the domain in charges and the respective domain faculty members were allotted with courses for curriculum gap suggestions from different stake holders including parent, students, industrial experts, professional society representatives, peer groups. The curriculum was circulated among stake holders in third week of July, 2021. The gaps were suggested by the experts and same was consolidated during last week of July 2021. The identified gap was submitted to Anna University for further review and recommendation on 27.07.2021. The gap identification was course specific as well as curriculum specific.

The domain committee reviewed the suggestions and the gap was sent to University Centre for Academic Courses in following aspects:

- Addition of curricular content
- References to be included in existing curriculum as well as for the proposed curriculum
- Rearrangement of courses in the curriculum to meet pre-requisites
- Suggestion of new courses to cater the needs of industrial demands.

Based on the suggestion from experts, the following courses are developed to be offered as Value Added Course in the AY 2021 – 22 and the same was submitted to Centre for Academics, Anna University for approval on 27.07.2021.

1. MEVAC1906 IoT and AR Applications in Mechanical Engineering

2. MEVAC1907 Modern Fabrication Techniques of Plastics

3. MEVAC1908 Chatbot Design for Industrial Applications

The details of the approval status by Anna University is given by

S.No.	Course Name	Status
1.	MEVAC1907 Modern Fabrication Techniques of Plastics	Not Approved
2.	MEVAC1908 Chatbot Design for Industrial Applications	Not Approved
3.	MEVAC1906 IoT and AR Applications in Mechanical Engineering	Approved

The curriculum content for the above said courses includes references, pre-requisites, objectives, outcomes, assessment methods along with detailed delivery plan/schedule.

Based on the input from criteria 7 (Continuous Improvement), it is decided to offer the following two Value Added Courses for the AY2021-2022.

MVA005 – Smart Materials and Structures

MVA006 – Green Energy Technologies and Management

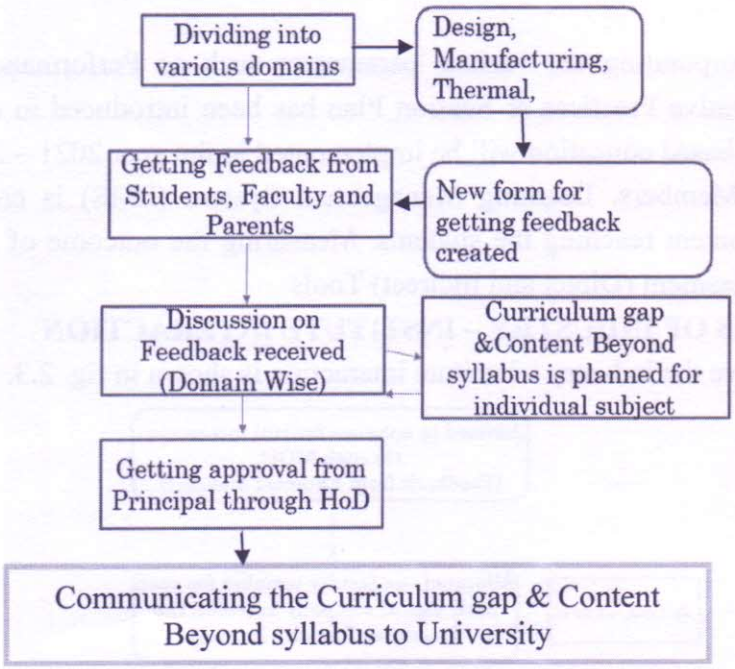
Two new forms to be introduced in AY 2021 – 22 for strengthening the curriculum gap identification process: Student's feedback on curriculum and Faculty's feedback on curriculum

2.1.1 Content Beyond Syllabus Plan:

The domain head suggested the respective domain faculty members to prepare the content beyond syllabus based upon the curriculum gap identification. The corresponding content beyond syllabus is mapped with the respective POs and PSOs.

2.1.2. Action Plan:

The flow chart (2.1.2) describes the detailed procedure in identifying the curriculum gap and developing the content beyond syllabus to fulfill the gap identified.



2.1 Action plan taken for curriculum gap identification and developing content beyond syllabus

2.2. IMPLEMENTATION AND EFFECTIVENESS OF TEACHING LEARNING PROCESS:

Innovative Practices adopted in the AY 2020-2021:

Few sample innovative practices are listed below for the AY 2020-2021:

Sl. No.	Course Code & Title	Practice followed	Topic
1.	GE8075 Intellectual Property Rights	Information sharing platform	IPR Infringement Case Studies
2.		Quizziz online poll game	End of Unit IV
3.		Online course assignment	Patent informatics
4.		Guest Lecture	Patent Search and applying digital signature for Patent filing
5		Feedback based learning	Patent Drafting
6.	CE8395 Strength of Materials for Mechanical Engineers	Use of Simulation Software (Beamguru)	Shear Force and Bending Moment Diagram
7.	ME8692 – Finite Element Analysis	T2P Description using software	Beam FEA using CREO
8.	PR8592 – Welding Technology	Cross Word Puzzle	Unit I overview
9.		Virtual welding using mobile app (Welducation)	Types of welding
10.		Connection with welding	Welding basics
11.	ME8693 Heat and Mass Transfer	Problem solving using MAT Lab simulation	Forced convection problem

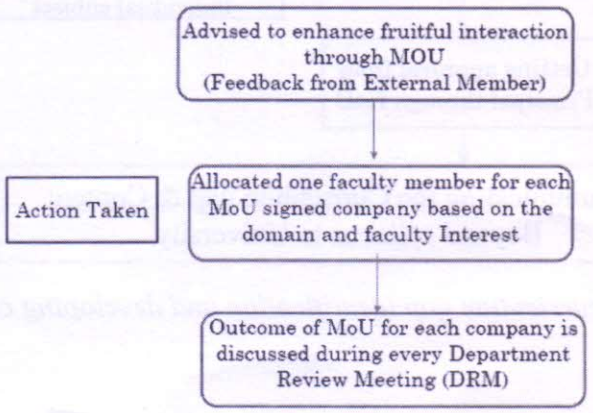
Based on the input from criteria 7 (Continuous Improvement), feedback through course exit survey it is proposed to follow online simulation tools like MAT Lab, Software, etc. for making the students to understand the concepts.

2.2.1. Action Plan:

Revised course plan incorporating the various parameters such as Performance Indicators, Topic Learning Outcome, Innovative Practices & Session Plan has been introduced in order to increase the effectiveness of Outcome based education will be implemented in the year 2021 – 22 after receiving the feedback from external Members. Learning Management System (LMS) is created by all faculty members to ensure the content reaching the students. Measuring the outcome of individual student is planned with various Assessment (Direct and Indirect) Tools

2.3. IMPACT ANALYSIS OF INDUSTRY – INSTITUTE INTERACTION

The action taken to improve the industry – institute interaction is shown in fig. 2.3.



2.3 Impact analysis of Industry – Institute Interaction

List of MOU's signed for the period of November 2020 – August 2021

Sl. No.	Name of the Industry	Date on which MoU signed	Nominated faculty coordinator
1.	Eureka education group, Coimbatore	27.11.20	Overall Coordinated by Placement Department
2.	Great Learning, Bengaluru	30.11.20	Mr.M.Santhana Maruthu Pandian
3.	Aravind Herbal, Rajapalayam	16.12.20	Mr.L.Karthikeyan
4.	Indian Welding Society, Trichy.	08.01.21	Mr.S.Maharajan
5.	V-Invent Chemilab Private Limited, Rajapalayam	30.12.20	Mr.J.Jerold John Britto
6.	Raja Nursery Garden, Rajapalayam.	11.01.21	Mr.S.Valaiganesh
7.	TRY CAE, Trichy	13.01.21	Mr.J.Jabinth
8.	Skill Shark, Telangana	25.01.21	Mr.G.Prabu Ram
9.	M/S.Global precision Technologies, Coimbatore.	07.07.21	Mr.S.Maharajan

Following are the outcomes attained form the Industry during the period November 2020 – August 2021

Name of the Industry	Industry-Institute Interaction
Harita Techserv Ltd, Chennai	✓ 17 students trained & 3 students got placed.
Ramco Group of Textile Division, Rajapalayam	✓ Student Project, Industrial visit for faculty members and students ✓ Final year student Mr.S.Vignesh presented international conference paper titled "Implementation of KAIZEN concept in Textile Industry.
Gowri House Metal Works LLP, Rajapalayam	✓ Two Lecture series conducted, Industrial problem solved, Industrial visit for faculty members and students were arranged in 20th April 2021.
MEDSBY Healthcare and Engineering Solutions Coimbatore.	✓ Received Best Collaborator award in National Level, Faculty and student training, Product developed using additive manufacturing, ✓ 3D printing consultant activity carried out for the SACS MAVMM Engineering college for the amount worth of Rs 8,500/- ✓ With the support of Medsby our students secured 1st,2nd and 3rd prizes in 3D printing competition conducted by IITM PALS.
Tvs training and services, Chennai.	✓ Placement process is in progress
Ramco Cements Ltd.,Chennai.	✓ Industrial visit for faculty and student Placement, 3rd year students undergone internship in March 2021, 2 final year batch students carried out project work.

Name of the Industry	Industry-Institute Interaction
M.S. Chellamuthu trust,Madurai	✓ Guest lecture given for professional ethics, Faculty Training, counselling for students and faculty members.
NI Systems Private Limited, Bangalore	✓ CLAD certificate achieved by 2 of our final year Students, attended training programs, after completing training placement will be given.
Great Learning	✓ Student are doing online courses
Aravind Herbal, Rajapalayam	✓ 1.Industry problem are given to the student's project in the automation and thermal stream. ✓ 2.Project proposal submitted by the mechanical department faculty members in DST under WMT theme got selected for final presentation.
Indian Welding Society,Trichy.	✓ Value added courses are planned for the students and it is in process
V-Invent Chemilab Private Limited, Rajapalayam	✓ 70% of the Plastering work setup were completed by the RIT faculty members.
Raja Nursery Garden, Rajapalayam.	✓ Applied REAL FOREST mobile app to start-up to be a part of NIAM-Startup Agri-Business Incubation Programme with Registration Number: Reg//NIIAM// AGRIIBUSIINESS//2020//40. ✓ Started Phase-I Work of REAL FOREST applications Module Zero portion. ✓ Allotted students to do their mini projects and extended their work upto final project. ✓ RIT and Raja Nursery Garden submitted proposal titled "Agro Real Forest Digitalization "under "Start-up Agri business incubation programme" worth of Rs.25,00,000/- to Centre for Innovation, Entrepreneurship and Skill Development, CCS National Institute of Agricultural Marketing.

2.4 IMPACT ANALYSIS OF INDUSTRIAL TRAINING

It was presented as follow for the internship initiatives:

- Due to pandemic crisis, students were encouraged to undergo virtual internship. The details of student internship were presented and the same is listed below in table.

Sl. No.	Name of the Company	No. of students
1.	Intech olympiad online summer internship (A Four Technologies)	13
2.	Ezenith Education	01
3.	Uniq Technologies	01
4.	Internship studio	01
5.	Cognitech	02
6.	Xyma Analytics, IIT-M research Park, Chennai	01

Sl. No.	Name of the Company	No. of students
7.	Ramco Cements, RR Nagar, Virudhunagar	03
8.	Rajapalayam Mills Limited, Rajapalayam	01
9.	Summits Hygronics Pvt Limited	02
10.	SB Engineering, Coimbatore	01
11.	Rane Engine Valve Limited, Pudukottai	02
12.	National Instruments	04

- ✓ The department consultative committee was constituted and the committee assessed their internship training by verifying the submitted report and presentation presented by the student. An exclusive rubric is deigned to evaluate the performance of the students.

Consolidated and comparison of Industrial Training in various Academic Year

Sl. No	Academic Year	No. of Students	Internship details
1	2018-19	39	https://www.ritrjpm.ac.in/images/mechanical/2018-19.pdf
2	2019-20	49	https://www.ritrjpm.ac.in/images/mechanical/2019-20.pdf
3	2020-21	31	https://www.ritrjpm.ac.in/images/mechanical/2019-20.pdf
4	2021-22	62	As on date (04/09/2021)

Action Plan – Status

- ✓ Revision of ISO Form 06 – In-plant Training Progress Report - **Completed.**
- ✓ Sending Internship mark statement, consolidated details and certificates to Anna University CoE office – Sent **(Completed)**
- ✓ Letter will be sent to include Internship in listed course in Employability enhancement courses - Anna University Centre for Academics – Sent **(Completed)**

3. Review of assessment and analysis of the attainment of COs/POs/PSOs with program effectiveness

The points presented in the 4rd DAC meeting by **Mr.J.Jabinth, AP/Mech.** are as follows,

a. Assessment methods practiced in the last academic year.

Direct	Indirect
Internal Assessment Test 1,2,3, Assignmen Quiz, Course Exit Survey	Alumni Exit survey, Program Exit survey

b. Course Exit Survey is newly included in the Academic year 2019 – 20. The total number of subjects for which CES calculated in Academic Year is 64. For Academic year 2020 – 21, total number of subjects for which CES calculated is 79.

c. The details of courses considered for attainment calculations (Academic Year: 2019-20) are,

No. of Course Outcomes	ODD	EVEN
Project	1	1
Elective Course	4	6
Practical Course	10	11
Theory Course	26	24

d. The details of course outcomes considered for attainment calculations,

No. of Courses and their levels	L1	L2	L3	L4
ODD	19	79	107	13
EVEN	21	68	78	09

e. Details of co-correlations with POs & PSOs (Academic Year: 2019-20)

ODD

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
36	34	35	37	22	18	14	30	17	36	1	34

ODD

PSO1	PSO2	PSO3	PSO4
18	26	19	16

EVEN

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
29	28	28	26	20	14	11	29	15	32	6	30

EVEN

PSO1	PSO2	PSO3	PSO4
16	18	16	9

f. Target Setting Procedure for CO Attainment

Batch	Target Attainment
2017-2022 ($AGPA_1$) – R17	1.8 for Theory Courses & 2 for Laboratory Courses/Projects
2018-2023 ($AGPA_2$) – R17	($AGPA_1 \times 0.3$)
2019-2024 ($AGPA_3$) – R17	Maximum of $\left(\left(\frac{(AGPA_1 + AGPA_2)}{2}\right) \times 0.3, (AGPA_1 \times 0.3)\right)$

g. Details of Not Attainment CO subjects

Sl.No.	Code	Name	Target	CO	Status
1	C102	Engineering Mathematics I	1.8	1.01	Not Attained
2	C103	Engineering Physics	1.8	1.45	Not Attained
3	C104	Engineering Chemistry	2.11	0.27	Not Attained
4	C105	Problem Solving and Python Programming	2	0.46	Not Attained
5	C109	Technical English	2.01	1.89	Not Attained
6	C201	Transforms and Partial Differential Equations	1.8	0.52	Not Attained
7	C202	Engineering Thermodynamics	1.8	1.16	Not Attained
8	C203	Fluid Mechanics and Machinery	1.8	1.05	Not Attained

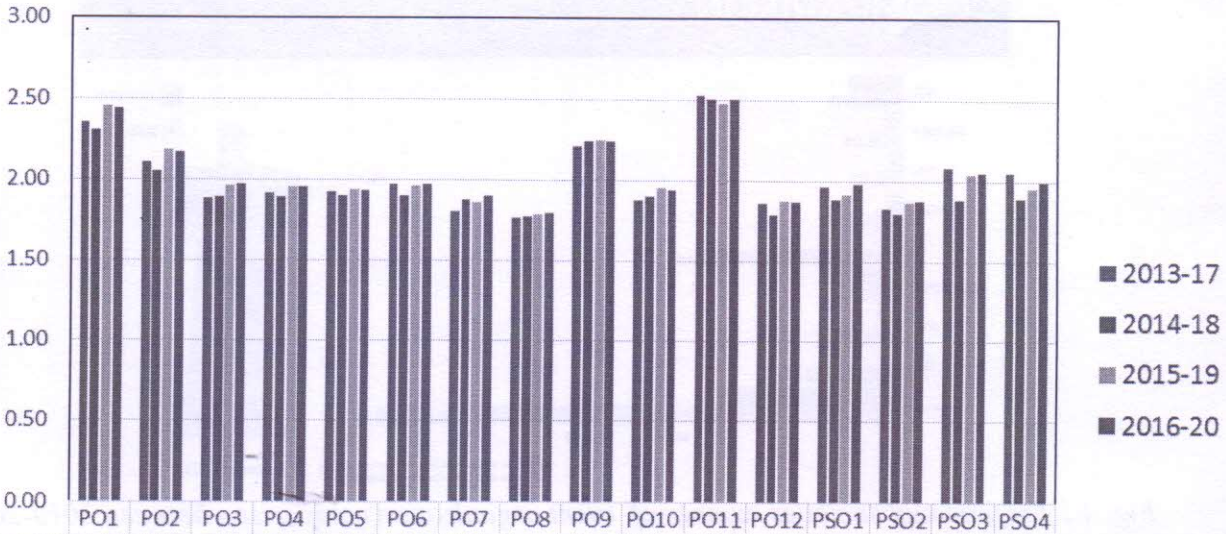
Identified the low CO's attainment courses and the necessary action will be taken by the respective course handling faculty members

Highly Attained subjects (>40% improvement compared to target):

Code	Subject Name	%
C419	Additive Manufacturing	48
C415	Non Destructive Testing and Materials	48
C303	Design of Machine Elements	45
C408	Maintenance Engineering	43
C406	Welding Technology	43
C202	Strength of Materials	42
C404	Total Quality Management	42

Identified the high attained courses and the good practices are suggested to follow for the continuous improvement.

h. Details of PO Attainment



	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
2013-17	2.35	2.10	1.88	1.91	1.93	1.97	1.81	1.76	2.21	1.87	2.52	1.86	1.96	1.83	2.08	2.05
2014-18	2.31	2.05	1.89	1.89	1.90	1.90	1.87	1.77	2.24	1.90	2.50	1.79	1.89	1.80	1.89	1.89
2015-19	2.46	2.18	1.97	1.95	1.94	1.96	1.86	1.79	2.24	1.95	2.48	1.87	1.92	1.87	2.04	1.95
2016-20	2.44	2.17	1.97	1.95	1.93	1.97	1.90	1.79	2.24	1.94	2.50	1.87	1.98	1.88	2.05	1.99

Highly attained POs: PO7 & PSO1

4. Appraisal of student support system Co-curricular / Extra-Curricular activities

Presenter: Mr. S. Valai Ganesh, AP/Mechanical

Presented about various professional societies and club events, Students Awards and Achievements, Publication details, Projects, Inplant Training, Internship for the AY 2020-2021

- RIT ISTE planned 13 events and conducted 13 events. 6 events are department specific events and totally 623 participations from these events
- SAEINDIA planned 06 events and conducted 08 events. 471 participations across all locations of Tamil Nadu attended this event. In addition that,
  - RIT CRITON has participated in SAEISS Tractor Design Competition- 2020
  - RIT SPARTANS has participated in Bicycle Design Competition- 2020.
- RIT IWS planned 06 activities and conducted 07 events. A grand total of 178 participations from these society activities. In addition to that,
  - Made an MoU with WRI for conducting Value Added Program to the RIT students
- RIT ISHRAE planned 07 and conducted 07 events. Overall, 236 participations from all of these events

- RIT IEI Mech conducted more events than other societies/club. Planned 18 and conducted 46 events. A grand total of 4954 participations from all over India participated in these activities.
- RIT Mechanizo planned 18 events and conducted 07 events. Most of the planned events were conducted by the professional societies was the main reason behind less activity in this association
- Automation and Robotics Club planned 10 events and conducted 09 events. A total of 849 participations from all over India actively participated from these events
- RIT ISIE club was formed during October 2020. 22 events were conducted and 712 participations from these events.
- Totally there are 78 events planned out of which 119 events are conducted and plan versus conversion ratio is 152.56%. Previous academic year, totally 42 events were conducted.

Fig. 4.1 shows the comparison of professional society's number of event organisation between 2019-20 and 2020-21

Fig. 4.1 Professional societies number of event organization comparison between 2019-20 and 2020- 21

- Conducted event details are already uploaded in college website and department newsletter

Notable Awards and Achievements:

- S.Balaji of III Mech student received **InnoWAH 2019-2020 Finalist Certificate** organized by IIT PALS at IITMRP.
- S. Nishanth of III Mech has secured "**All India level 58th Rank in National Creativity Aptitude Test- Category 2**" organized by International forum for excellence in Higher Education, New Delhi on 22 Oct., 2020.
- Team Efficycle secured **29th position in all over India and 4th position in Tamil Nadu** in "**SAE NIS EFFI-CYCLE 2020 E-Mobility Season (Virtual Event)**" organized by SAEINDIA on 31 Oct., 2020.
- H. Prasanna Venkatesh, III Mech from Team Mech has own "**First Prize and cash award of Rs. 3000 INR in Mechanical Channel Case study**" organised by IIT PALS, Chennai on 08 Mar., 2021
- M. Thojesh Nandha, A. Sivaram Kumar, III Mech from Team Aspirants has own "**Second Prize and cash award of Rs. 2000 INR in Mechanical Channel Case study**" organised by IIT PALS, Chennai on 08 Mar., 2021.
- M. Thojesh Nandha, S. Santhosh, III Mech has received the prize and cash award worth Rs.4000 in the Qualifier Round - II "**Annual innoWAH! Exhibition**" for the project entitled as "**AI BASED MASK VENDING MACHINE**" organised by IIT PALS, Chennai on 20

Mar., 2021. Dr. P. Sureshkumar, ASCP/Mech mentored the team. Dr. M. Kaliappan, Prof/CSE coordinated the team.

- R. Dinesh, R. Shyam Sundar, II Mech delivered a lecture on "**Building Line Follower Robot with virtual demo and Building Voice Follower Robot**" during three-day training program on "**Robo Design and Programming**" organised by ARC RIT during 08-09 Jun., 2021.
- B. Keerthivasan, I Mech awarded as "**Outstanding Performance in National Engineering Olympiad 4.0**" with AIR 15 in the category- First-year Engineering on 03 July, 2021.
- M. Thojesh Nandha, IV Mech was invited to give a "**Motivation talk to the participants of the Online Youth Leadership Training Program – YLTP**" conducted by Art of Living International Center, Bangalore on 27 Aug., 2021.

Newsletter/Magazine Links:

- Techno Mechanic 2021 Magazine- https://www.ritrjpm.ac.in/images/news-letter-magazine/TECHNO_MECHANIC_2021.pdf
- Techno Mechanic 2021 Magazine- https://www.ritrjpm.ac.in/images/news-letter-magazine/RIT-techno-mechanic-19-20.pdf
- Newsletter 2019-2020- https://www.ritrjpm.ac.in/images/news-letter-magazine/Mech_Newsletter_2019-2020.pdf

Participations- Co-curricular Activities:

Fig. 4.2 shows the number of student's participation in Co-curricular activities

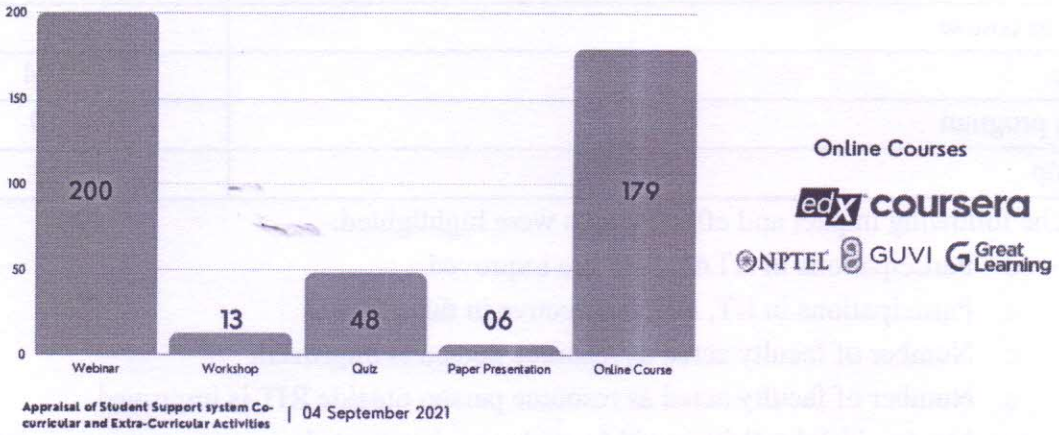


Fig. 4.2 Students participation in Co-curricular activities

Participations- IV/IPT/Internship Activities:

The comparison of IV/IPT/Internship activities by the students is shown in fig. 4.3.

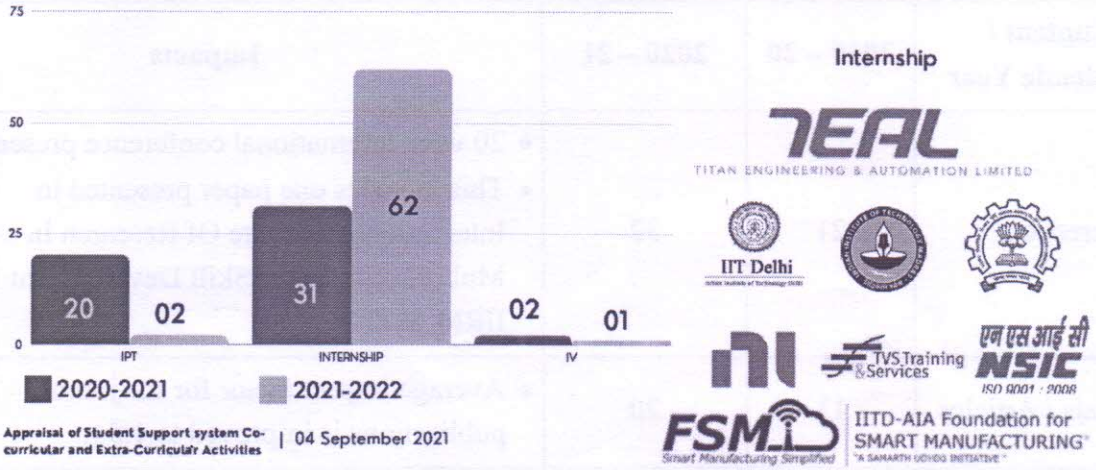


Fig. 4.3 IV/IPT/Internship activities by the students

Student Projects Details:

- Final Year (2020 – 21)
  - Total no of projects (Final Year) = 53 (24 from 'A' section+ 29 from 'B' section)
  - No. of In house projects : 48
  - No. of Industrial Projects: 05 (03 from 'A' section+ 02 from 'B' section)
- Third Year (2020 - 21) – Design & Fabrication
  - Total No. of projects (Third Year) = 32 (16 from 'A' section+ 16 from 'B' section)
  - No. of Projects Identified as patentable : 06 (Four from Final year and three from Third year)

Conference Details:

- Total Numbers of Papers Presented in Conferences- 22
  - International Level Conferences- 09, National Level Conferences-13
  - Published Papers in Journals/Book Chapters- 03, Journals in-communication-02

5. Faculty participation and contributions

Mr.N.L.Sujin, AP/Mech. presented the faculty participation in webinar, FDP, STC, Training program and workshop for the academic year 2020 – 2021.

Event	Count
FDP	53
Short term course	2
Webinar	114
Training program	10
Workshop	13

- The following impact and effectiveness were highlighted:
  - Participations in ATAL FDP are improved.
  - Participations in IIT, NIT is effective in this period.
  - Number of faculty acted as resource person is improved.
  - Number of faculty acted as resource person outside RIT is improved.
  - Mr. Jerold John Britto and Mr. Praburam have acted as a resource person for virtual laboratory program organized by our institute.
- Highlighted and compared the paper publication, presentation in conference and the IPR contributions with the previous academic year.

Content / Academic Year	2019 – 20	2020 – 21	Impacts
Conferences	21	32	• 20 were international conference presentations. • This includes one paper presented in International Institute Of Research In Multidisciplinary – Skill Development Trust - IIRM 2021
Journals / Articles	11	20	• Average impact factor for the journal publications is improved to 1.54.
Book Chapters	7	4	• Published in a reputed publisher

Content / Academic Year	2019 – 20	2020 – 21	Impacts
Patents	3	6	• Patent filing is improved.
Copy Rights	1	4	• Copyrights registrations improved.

- Highlighted national and international conference presentation and the average impact factor of journal publication.
  - First examination report received during the academic year 2020 – 2021 : 8
  - Responded to FER received during the academic year 2020 – 2021 : 4
- Status of completed funded project during the academic year 2022- 2021:
  - IE(I) R&D grant in aid scheme: 1
- On-going funded project during the academic year 2022- 2021:
  - DST STTP – 1
  - RuTAG IIT Madras – 1
  - AICTE MODROB – 1
- Presented the project proposal submitted to various funding agencies such as DST, SERB, TNSCST, IE(I), FAER and ISHRAE during the academic year 2020 - 2021:
  - Total number of proposals: 31
  - Inter-disciplinary proposals: 3
- Among the 31 proposals, under evaluation – 2 and Waiting for results – 19.
- Presented the performance appraisal procedure and its effectiveness.

6. Status of continuous improvement

Mr.L.Karthikeyan, AP/Mech. presented the status of continuous improvement as follows:

1. 3rd DAC meeting expert suggestions for continuous improvement, actions taken in last year and its effectiveness were presented such as
   a. Impact analysis and corrective action plan for further improvements in each academic year
   b. Analysis of CO-POs-PSOs attainment levels (Semester wise)
   c. Follow up in calculation procedure for CO-PO-PSO attainment and setting the target
   d. Awareness about Entrepreneurship through IIC
2. Attainment of POs - PSOs and targets for the last four batches were discussed. The actions taken for the attainment improvement of each POs and PSOs were presented.
3. Presented the academic audit process and actions taken thereof during 2020-21 and presented external audit (Annual surveillance dated: 29.01.2021) comments for scope for improvements.
4. Emphasized the actions taken by the department to address the comments given by the external audit members and its implementation & effectiveness as listed below.

Audit Date	Type of audit	Scope for improvement	Actions taken for Implementation	Effectiveness
29.01.21	External audit (Annual surveillance)	Effectiveness of review process in class & laboratory delivery / Mentor system ***(Ref: Ext audit minutes Sl.No 2)***	Mentoring system is reviewed during DRM ***(Ref: DRM2/2020-21 Even Sl.No4)***	Students performance improved in skill rack performance

Audit Date	Type of audit	Scope for improvement	Actions taken for Implementation	Effectiveness
		Procedural part – documents incorporated in the system wherever possible ***(Ref: Ext audit minutes Sl.No 8)***	Mr.R.Arunkumar, AP/Mech created Canvas LMS for Dept. ***(Ref:https://canvas.instructure.com/courses/2149971)***	All the dept. files are kept and posted in Canvas LMS and ready for quick access
		Improvement potential – To change the structure of department ***(Ref: Ext audit minutes Sl.No 1b)***	➢ Nomination of dept. academic coordinators is done (RAK/GPR) ➢ ***(Ref: DRM5/2020-21 Even Sl.No.4)*** ➢ Nomination of dept. Placement in charge is done (MSB) ➢ Nomination of domain head to strengthen dept. activities JJB – Design , MAK – Thermal, SMR – Manufacturing	✓ Strengthen Teaching – Learning process ✓ Improvement in placements & easy follow up ✓ Continuous dept. growth in all fields ✓ Improvements in R&D
		Lesson plan with micro level planning ***(Ref: Ext audit minutes Sl.No 5)***	➢ To plan micro level planning ➢ Usage of LMS ➢ CE's collected by each faculty ➢ Framing dept. Project QP	✓ Improved TL process ✓ 360^0 learning environment ✓ Dynamic change

5. ISO form refinement (TG 01 – Annual performance appraisal form) and its effectiveness towards teaching – learning process was discussed such as improvements in innovation & Teaching (Theory & Practical), improvements in teaching performance, more tangible outcomes in project work, Curricular gap/ Content beyond the syllabus plan, improvements in activities that contribute in student success, mentoring effectiveness, R&D activities improvement and more extract from Industry interaction & MoU's

6. Presented our department faculty involvement in the refinement of ISO forms & process refinement (Class committee meeting, course committee meeting & feedback form parameters with proof's

7. Presented placement index improvement in 2019-20 (74.79%) & 2020-21 (84%) and compared with last three years. (Placement index= (No. of students placed (X) + No. of students progressed to Higher studies (Y) + No. of students turned as Entrepreneurs (Z) / Total No. of students)

8. Showed the quality higher studies progression in 2019-20 (progression in IIT's/AU/VIT etc.,)

9. Presented RIT- IIC activities and improvements in entrepreneurs 2019-20.

10. Placement details of 2017-21 batch is presented and compared with previous years (73% core industries / 13% service industries / 14% IT sector). The students got placed in fifteen reputed companies.

11. Present academic year (2021-22) admission details and promotional activities were discussed and improvements in quality of admission is compared with last year.

7. Review of department academic plan and department progress

The department plan and department progress was presented by **Mr.R.Arun Kumar, AP/Mech.** He presented the proposed academic reformations to be taken for the academic year 2021 – 22. The plan was divided in to six categories as follows:

1. Teaching Learning Process
2. Research and IP assets
3. Co-curricular activities
4. Industry Institute Interaction
5. Placement support systems
6. Entrepreneurial support systems

The above mentioned six categories plan along with the progress status was presented in a tabular form as follows:

7.1. Teaching learning process:

- Teaching learning process is one of the core strengths of the department which is strengthened in a continuous manner.
- To strengthen the process further, it is planned to revise the Teaching Learning Process in two aspects.
  a. Planning aspects
  b. Assessment for attainment calculation

1a. Planning aspects:

Sl. No.	Proposed plan	Progress Status
01.	Inclusion of Performance Indicators suggested in AICTE Exam Reform Policy 2018	Included in Course Plan document
02.	Formulation of Topic Learning Outcome to assess the student's attainment in micro level on each Course Outcome (CO)	Included in Course Plan document
03.	Inclusion of CO to measure the outcome psychomotor domain of the student (1 for theory courses and 3 for practical courses)	Included in Course Plan document
04.	Micro planning on lecture – Session plan	2 per course is planned for the semester as a start
05.	Formulation of guidelines for giving additional input to the bright learners at three phases ***Phase I*** – Entry of course till IAT I ***Phase II*** – IAT I to IAT II ***Phase III*** – IAT II to End of course	In progress – a dynamic rubrics is formulated to identifying bright learners at three phases

Sl. No.	Proposed plan	Progress Status
06.	Utilization of MAT lab tool in possible courses	Faculty members are planning to use in their respective courses
07.	Department academic activities to be divided based on stream	Department is divided in to three streams: 1. Design 2. Manufacturing 3. Thermal

7.1.1. Assessment for attainment calculation:

Sl. No.	Proposed plan	Progress Status
01.	Use of different methods (Direct Assessment and Other Direct Assessment) to measure the attainment of the students	Included in Course Plan document
02.	Inclusion of Course Outcome Exit Survey as indirect assessment for measuring course outcome	Collected for AY 2020 – 21 (Even Semester) Implemented
03.	Rubrics based evaluation for all assignments to ensure transparent assessment	Implemented
04.	Curriculum gap addressed through content beyond syllabus to be assessed using any one other direct assessment tool and to be included for CO attainment calculation	In progress
05.	Effectiveness of innovative practices to be assessed through pre implementation and post implementation assessments	In progress

7.2. Co-Curricular & Extra-Curricular Activities:

- It is planned to include all the co-curricular activities and extra-curricular activities in PO attainment calculations. To start with, few programs will be considered through assessment for PO attainment calculation and other programs will be considered based on the participation count of the students.
- By 2023 – 24 all the program will be taken into account for PO attainment calculation through assessment at the end of each program.

Status: Initiated the process

7.3. Research and Intellectual Property (IP) assets:

- Promoting research and creating IP assets will strengthen the stream in technology transfer in turn commercialization of those IP assets. The revenue generated through commercialization IP assets can be further used for research and allied activities.
- To attain the above sustainable model, the target set is planned for the academic year 2021 – 2022 as follows:

Sl. No.	Proposed plan	Progress Status
01.	4 research project proposals to be submitted in the AY 2021 – 22	Yet to be started
02.	Patents filing ***Remarks:*** It is decided to fix the conversion ratio of grant from filing as 60%	6 in this academic year. Identified the same from projects Drafting is in progress
03.	Copyrights registration	6 in this academic year So far 2 works are submitted for review
04.	Journal publication – one Scopus indexed journal per faculty	3 publications so far

7.4. Industry Institute Interaction:

- Through the industry institute interaction, the following outcomes are planned for the semester
  a. Placement opportunities
  b. Internship / industrial training
  c. Inclusion of Value Added Courses
  d. Projects
  e. Consultancy
  f. Research proposal / publications
- The details of outcomes planned through MoU is listed below:

Sl. No.	Name of the Industry	Activities planned	Status of the plan
01	Harita Techserv Ltd,Chennai	Placement training to the final year students of 2021-22	To be executed
02	Ramco Group of Textile Division, Rajapalayam	2 Industrial visits is planned for the students and faculty members	To be executed
		One expert to be invited for project review	To be executed
		One students project work is planned to generate Industry authored paper	To be executed
03	Minniyal Private Limited, Krishnankoil	2 Guest lectures is planned related to Entrepreneurship	To be executed
04	TVS training and services, Chennai.	Placement training to the final year students of 2021-22	To be executed
05	Ramco Cements Ltd.,Chennai.	2 Students internship,2 industrial visit and 2 project work is planned One expert to be invited for project review	To be executed
06	Ramco Industries Ltd., Chennai.	1 Students internship,1 industrial visit and 1 project work is planned	To be executed

07	Gowri House Metal Works, Rajapalayam	E-TPM implementation is planned	Mr.G.Prabu ram AP(SG)/Mech guiding the Students for E-TPM Implementation and this process is on-going one.
		4 Industry Institute Lecture series is planned this academic year 2021-22	One Industry Institute lecture series was recently conducted in RIT Campus on 29.08.21 on the following titles 1.Stress relieving 2.Positive Attitude 3.Effectiveness of Team work
08	MEDSBY Healthcare AND Engineering Solutions, Coimbatore.	3 special lectures is planned	To be executed
		1 Training programs is planned	To be executed
		Funded projects submission related to additive manufacturing	To be executed
09	M.S. Chellamuthu trust, Madurai	2 Guest lectures related to counselling for the faculty and students	To be executed
10	Aravind Herbal, Rajapalayam	Industry problems will be given to the students as Mini-project, final year project work	To be executed
		Funded project proposal submission addressing the problem faced by the Industry	To be executed
11	Indian Welding Society, Trichy.	Value added credit course is planned	To be executed
12	V-Invent Chemilab Private Limited, Rajapalayam	Planned to complete the final fabrication of plastering device	To be executed
13	TRY CAE	1 Guest lecture planned	To be executed
14	Skill Shark	Webinar titled "New era of E-Vehicle" is planned.	To be executed
15	IIT Bombay	Awareness program planned for 100 participants from 4-5th September 2021	To be executed

7.5. Placement Support System:

- It is proposed to change the placement strategy from "Training and recruitment" model to "Recruitment and training" model wherever possible
- It is planned to formulate a placement policy for department to meet the expectations of students.

7.6. Entrepreneurial Support System:

- Incubation Unit to be established by interlinking the facilities available (MSME incubation unit is sanctioned)
- To connect department with entrepreneurial ecosystem enablers (MoU to be signed with ICT Academy), (registered as spoke institution under EDII)
- Encouraging faculty members and students to attend programme on Entrepreneurship to expand the connectivity.

8. Review of 3rd Program Assessment and Quality Improvement Committee (PA&QIC) meeting held on 19.07.2021

Dr.V.Sivakumar, ASCP/Mech. presented the progress and action taken for the suggestions given in 3rd PA&QIC meeting held on 19.07.2021.

3rd PA&QIC Agenda	Suggestions	Action Taken
Result Analysis of 2019-2020 Even Semester and 2020-2021 Odd Semester	Take necessary step to improve the average grade point value	It has been decided to collect and analyze the reasons from the subject handling faculty member and take the necessary actions for the betterment.
Teaching and Learning	Include the outcome of Value added courses and Innovative practices in the attainment calculation	Before and after conducting Value added courses and innovative practices the assessment will be done.
	Measure the outcome of slow learners	Suggested the faculty members to measure the outcome of slow learners after conducting special classes
	Identified the lack of modern tool usage in many subjects	Modern tool usage can be implemented for all subjects.
Attainment of COs, POs, PSOs with program effectiveness (2019-2020)	Identify the CO not attained subjects Highly attained subjects and Highly attained PO values	Identified the CO not attained subjects, highly attained subjects and Highly attained PO values.
Institute – Industry Interactions and its impact	Increase the number of outcomes from the MoU signed industries	Allotted Faculty members are suggested to request more guest lectures and Industrial visits through Industrial experts from the MoU signed industries.
		It is planned to generate more industry authored papers in future from the completed students project work carried out in the industry.
	Advised to concentrate on increasing the quality of placement in the academic year 2021 – 2022	The detailed action plan for Training and Placement was prepared and got approval from Principal. Approved plan is implemented for the AY2021-22.

3rd PA&QIC Agenda	Suggestions	Action Taken
Training and Placement Progress & Carrier Guidance Cell activities	Arrange interactive sessions with distinguished Alumni who are all selected in government job sectors and pursuing students.	The list of activities to be carried out through Alumni. association got approval from Principal
	In Career guidance manual add the job specific training programs details	Job specific training programs details will be included in the Career Guidance manual
Professional Societies and Technical Association: Participants and its inference	Number of students benefited from each societies should be included in final summary table	Summary table will be presented in the next meeting.
Internship & In- Plant Training	Suggested to incorporate quantitative measures in outcome attainment	Internship assessment can be considered for attainment calculation.
EDC, IIC and NSIP Progress	Improve the number of IP portfolio	The number of IP Portfolio will be improved for the AY 21-22
Faculty Participations / Performance	Collaborate to work with mathematical faculty and introduce mathematical modeling in the project proposal.	To be carried out in the AY 2021-22
	Submit a review paper and communicate one Journal paper from the outcome of the DST project	The experimental work is going on. The paper will be communicated to Journal
	Appoint Honorary Professor in the field of Mechanical Engineering	Appointed a Honorary Professor Dr. Wojciech Borek
	Establish global contact and publish papers with foreign universities	Global contact establishment done through Extramural Lecture Series
Laboratory utilization with respect to OBE	Get sponsor from Industry (Used product for demonstration purpose)	The necessary action will be done by the domain head.
	Planning of Additional Experiments	Planning of Additional Experiments will be ensured through domain heads
	Skill enhancement programme for Lab technicians	Program will be conducted in this AY 2021-2022
Alumni Association Interaction	Enhance the frequency of Alumni meet	The list of activities to be carried out through Alumni association got approval from Principal
	Share the content discussed with the Alumni to	The minutes will be shared to all the student members through

3rd PA&QIC Agenda	Suggestions	Action Taken
	all the current students and faculty members	email.
Continuous Improvements	Do the process refinement (Academic audit) with the help of HOD, senior faculty & Criteria-2,3,4 coordinators	The academic audit will be conducted at the end of this semester
	Constitute department level academic audit consultative committee for continuous improvements	
	Report PO's/PSO's attainment of value added courses, Extracurricular and co-curricular activities	The initiative is taken in AY2021-2022

Suggestions given by the members

Mr.T.Thirumalai Kumar, Assistant Manager, HRD, Brakes India Private Limited, Chennai. (Industry Member) suggestions as follows:

- Upgrade the FDP related to industries to get more exposure about industrial needs
- Enhance the number of industry based projects from the final year student project work
- Industry exposure to students can be improved
- Willing to give industrial mentors for 5 batch of students

Dr.R.Jeyapaul, Prof. and Head, Department of Production Engineering, National Institute of Technology, Tiruchirappalli (Academic Member) suggestions as follows:

- Evaluation of CO, PO attainment can be done during the mid-semester to improve teaching and learning process in course of semester
- The strategy for handling online classes can be planned
- One lecture to be covered by industrial person at least a topic in a course for explaining real time applications
- Academic connections can be made for students to connect with reputed institutions related to higher studies or research
- Best performers award may be given to the faculty members during the teachers day
- Arrange professional counseling for students

Dr.P. Maran, Professor, Department of Mechanical Engineering, TCE, Madurai (Academic Member)

- Peer group can be implemented for non-attainment course.
- Awareness to be given to the students about competitive exams
- Activities of professional society can be involved with industry
- Visionary Learning Community of India can be incorporated for guiding students

Dr.N.Durairaaj, Additional General Manager, Boiler Shops Unit II, BHEL, Tiruchi. (R& D Member) suggested to motivate the students to do project in industry and get industry exposure during the course of study itself.

Mr.V.K.Vikram (Batch 2015-2019) Systems Engineer, Infosys Limited, Technopark Campus, Tirvandrum, Kerala suggested to create a pathway to improve the handy skills of the students.

Dr.K.Karthikeyan, ASCP/EEE suggested to improve the number of industry projects and organizing awareness programs related to higher studies and entrepreneurs

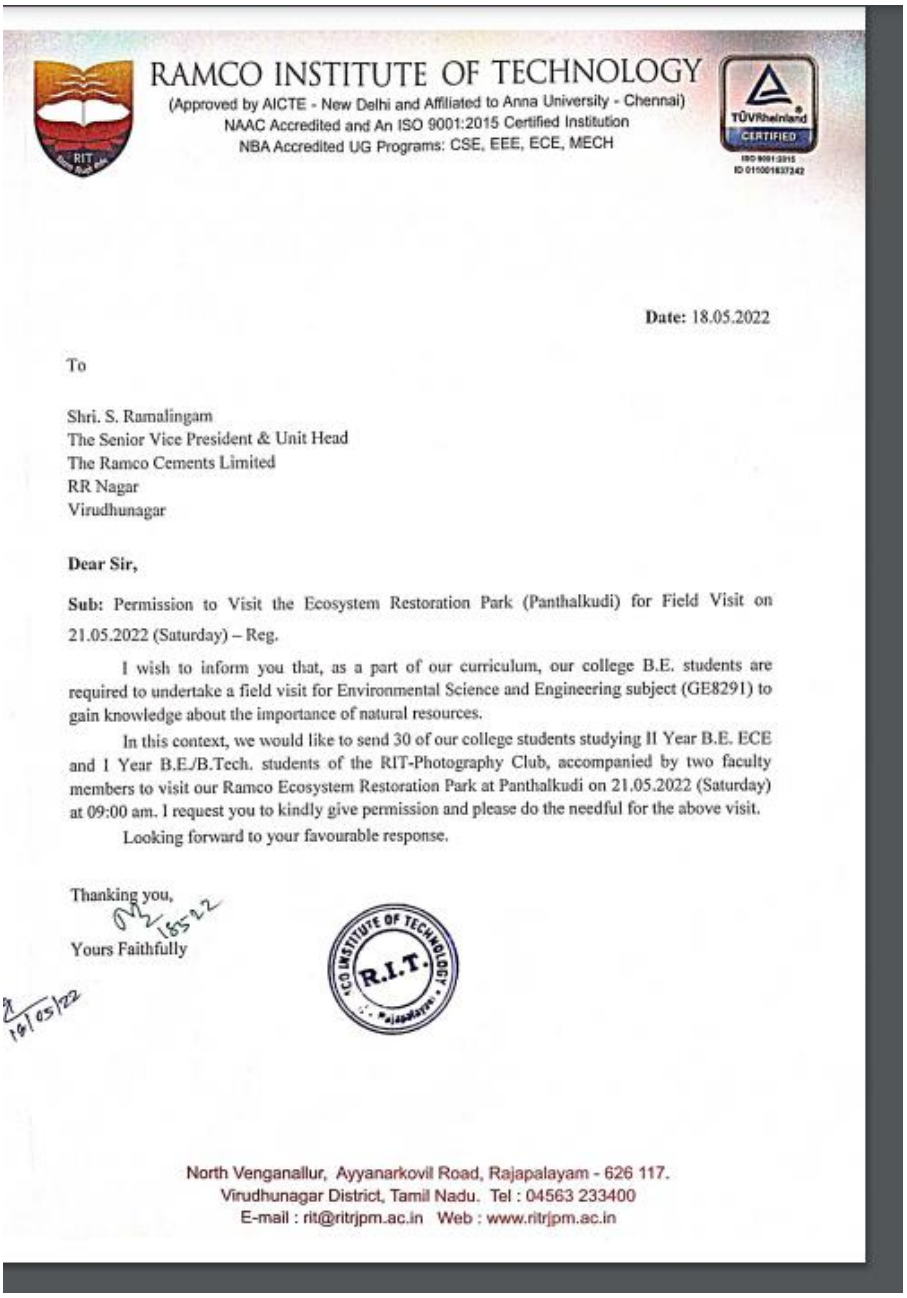
Dr.M.Gomathy Nayagam, ASCP/CSE mentioned to improve the department level career guidance cell activities (GATE, GRE, MAT)

Mr.T.Chockalingam, AP/Civil, RIT appreciated the progress of the department and informed to guide the third year students to participate in GATE exam.

Prepared by 25/9/21 **NBA Coordinator** 25/9/21 **HoD Mech.** 25/9/21

Vice Principal 25/9/21 **Principal** 27.9.21

Copy to:
1) Members of DACM
2) Faculty members of Mechanical Engineering through e-mail and Canvas Classroom for information and necessary action.
3) File



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ISO 9001:2015
ID 01100163742

Date: 18.05.2022

To

Shri. S. Ramalingam
The Senior Vice President & Unit Head
The Ramco Cements Limited
RR Nagar
Virudhunagar

Dear Sir,

Sub: Permission to Visit the Ecosystem Restoration Park (Panthalkudi) for Field Visit on 21.05.2022 (Saturday) – Reg.

I wish to inform you that, as a part of our curriculum, our college B.E. students are required to undertake a field visit for Environmental Science and Engineering subject (GE8291) to gain knowledge about the importance of natural resources.

In this context, we would like to send 30 of our college students studying II Year B.E. ECE and I Year B.E./B.Tech. students of the RIT-Photography Club, accompanied by two faculty members to visit our Ramco Ecosystem Restoration Park at Panthalkudi on 21.05.2022 (Saturday) at 09:00 am. I request you to kindly give permission and please do the needful for the above visit.

Looking forward to your favourable response.

Thanking you,

18/5/22

Yours Faithfully

19/05/22

R.I.T. RAMCO INSTITUTE OF TECHNOLOGY Rajapalayam

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.
Virudhunagar District, Tamil Nadu. Tel : 04563 233400
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

REPORT ON FIELD VISIT TO THE ECO RESTORATION PARK

Niskrtih

Nisarga-paritranam –Ramco 21 May 2022

We visited the Niskrtih – Ramco's Mine Restoration Project in Pandalgudi on 21 May 2022. The main objective was to make the students aware about the importance and conservation of ecosystem and biodiversity. 30 students along with the faculty in-charge Dr. .G.Kanthimathii gone to the visit at 09.00am.

Introduction:

Ramco Eco Park was inaugurated by MK Stalin, Chief Minister of Tamil Nadu on 06th March 2022. The concept for this Eco restoration has been designed by Ramco in association with Botanical services, Auroville. The overall aim is to create natural self-sustaining eco system that supports local bio diversity (flora and fauna), as well as establishing environmental education centre and recreation area that caters to the needs of the school students and visitors.

Objectives:

With an objective of restoring the mined out land, Ramco Cements has initiated an afforestation program at Pandalgudi to balance the ecological impact of Limestone mining. The Eco restoration is planned for the entire mining area which covers around 800 acres, and is being initiated in a Phase wise. The first phase in 2019, involved afforestation programme covering an area of 72 acres by landscaping the mined out area and terracing the dump. This area will be the hub for the whole project, and the environment centre is located here surrounded by ornamental garden with native species and drought.

Phase 2 covers 190 acres and was started in January 2021 and completed in 2022. The dump of 30 meters high on the Hangwall side has been terraced creating 18 km of walking and cycling trails, afforestation on dumps & Periphery, Miyawaki plantation, etchas been done with 1.50 lakh saplings planted. The majority of this plantation is with native species adapted to low rain regime of the local area.A butterfly garden has also been created for various species of butterflies to visit the garden.This garden serves as a perfect recreational activity–viewing the butterflies interacting with the environment.

Phase 3 covers an additional 100 acres and was started in December 2021 and will be completed by March 2023. As on date, an area of 350 acres out of the 800 acres project has been covered and around 2.50 Lakh saplings has been planted against the proposed 1 million saplings.

Indigenous in-house nursery with trained professionals has been developed for sustaining the green belt development.The project will create diverse forest area, with plant species that facilitates the local species of birds, insects, small animals & reptiles to thrive. Transforming this area in the future to be a fully functioning ecosystem. Create new recreation area accessible for communities in nearby Staff Township, Local schools and other organisations. An Interpretation centre has also been constructed for the benefits of school and college students.

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ISO 9001:2015
ID 9108633093

20.05.2022

To

Mr.R.Vimalathithan,
Director,
Krish Tec,
Coimbatore.

Sir,

Sub: Invitation – Technical Expert from Industry – to review and evaluate the progress of the project – VIII Semester B.E. Electronics and Communication Engineering – Academic Year 2021-22 – reg.

As per the guidelines given by the Anna university, we have constituted a project review committee for this academic year 2021-22 to evaluate the progress of the project work (EC8811) carried out by the VIII semester B.E. Electronics and Communication Engineering students. To enrich the project assessment process, we are inviting industrial experts for project review for this academic year. In this regard, we invite you as technical expert from industry for conducting project review–II on 30.05.2022 (Monday). Remuneration will be provided as per our institute norms.

Thanking you,

Yours faithfully,

20/5/22
Dr.S.Periyanayagi
HOD/ECE

20/5/22
Dr.L.Ganesan
Principal

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.
Virudhunagar District, Tamil Nadu. Tel : 04563 233400
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

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ISO 9001:2015
ID 9108633093

20.05.2022

To

Mr.Mohamed Safiyur Rahman
Software Project Manager,
Robert Bosch Engineering and Business Solutions India Pvt. Ltd.,
Coimbatore.

Sir,

Sub: Invitation – Technical Expert from Industry – to review and evaluate the progress of the project – VIII Semester B.E. Electronics and Communication Engineering – Academic Year 2021 - 22 – reg.

As per the guidelines given by the Anna university , we have constituted a project review committee for this academic year 2021-22 to evaluate the progress of the project work (EC8811) carried out by the VIII semester B.E. Electronics and Communication Engineering students. To enrich the project assessment process, we are inviting industrial experts for project review for this academic year. In this regard, we invite you as technical expert from industry for conducting project review–II on 28.05.2022 (Saturday). Remuneration will be provided as per our institute norms.

Thanking you,

Yours faithfully,

20/5/22

Dr.S.Periyanayagi
HOD/ECE

20/5/22

Dr.L.Ganesan
Principal

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Circular Project Work Review - II

21.05.2022

The second Project review meeting for the course EC8811 Project Work is scheduled on 28.05.2022 (Saturday) as per the following timings. All the ECE final year students are asked to present their project with following contents.

Venue: ECE – A – ECE Seminar Hall

Date/Day	Timing	Review Members	Batch No.	Assessment Criteria
28.05.2022 (Saturday)	09.30 AM to 12.00 PM	**IV Year ECE A** **External:** Mr.Mohamed Safiyur Rahman Software Project Manager, Robert Bosch Engineering and Business Solutions India Pvt. Ltd., Coimbatore. **Internal:** 1. Mrs.G.Gnana Priya, AP(SG)/ECE 2. Mr.D.Gopinath, AP/ECE 3. Mrs.V.SrirengaNachiyar, AP(SG)/ECE	01 to 08	• Application of engineering principles and concepts (10) • Problem Solving approach/Methodology used (10) • Modern tool usage (10) • Ethics/Social relevance/Environmental consideration during development of project (10) • Team work – Team morale and cohesiveness (5) • Communication & Presentation Skills (5)
	01.30 PM to 04.00 PM		09 to17	

21.5.22 21.5.2022 — **Project Coordinator(s)**

21.5.22 — **HOD/ECE**

21.5.22 — **Vice Principal**

25.5.22 — **PRINCIPAL**

Copy to

- All Review members
- ECE Faculty members
- IV year Class advisor
- IV year ECE Students Via mail
- Notice board
- File

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Circular Project Work Review - I

11.04.2022

The first Project review meeting for the course EC8811 Project Work is scheduled on 13.04.2022 (Wednesday) as per the following timings. All the ECE final year students are asked to present their project with following contents.

Venue: ECE – B - ECE Seminar Hall

Date/Day	Timing	Review Members	Batch No.	Assessment Criteria
13.04.22 (Wednesday)	09.30 AM to 12.00 PM	**IV Year ECE B** **External:** Mr.G.Harri Ram, VLSI Verification Senior Engineer, Mobiveil Technologies Limited, Bangalore. **Internal:** 1. Dr.K.Ragavan, AP(SG)/ECE 2. Dr.A.Azhagu Jaisudhan Pazhani, ASCP/ECE 3. Mrs.R.Ramalakshmi, AP/ECE	01 to 08	• Literature review (10 Marks) • Problem Identification and Project objectives (10 Marks) • Methodology Proposed and work plan (10 Marks) • Resource Planning (10 Marks) • Communication & Presentation Skills (10 Marks)
	01.30 PM to 04.00 PM		09 to16	

11/4/2022 11/4/22 12/4/22 14/4/22 ive 22

Project Coordinator(s) **HOD/ECE** **Vice Principal** **PRINCIPAL**

Copy to

- All Review members
- ECE Faculty members
- IV year Class advisor
- IV year ECE Students Via mail
- Notice board
- File

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Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Even Semester)

CONSTITUTION OF REVIEW COMMITTEE FOR PROJECT WORK

Review Committee	Name of the Faculty Member & Designation Review 1	Name of the Faculty Member & Designation Review 2	Name of the Faculty Member & Designation Review 3
Member 1	Dr.K.Ragavan	Dr.S.Vairaprakash	Dr.K.Ragavan
Member 2	Dr.A.Azhagu Jaisudhan Pazhani	Mrs.S.Jeeva	Mr.B.Kannan
Member 3	Mrs.R.Ramalakshmi	Mrs.R.Ramalakshmi	Mrs.R.Ramalakshmi
Industrial Expert	-	Mr.Mutharasu Beemarajan, Deputy Manager, Metier Hardware, Valeo India Pvt. Ltd., Chennai.	-
Alumni	Mr.G.Harri Ram, VLSI Verification Senior Engineer, Mobiveil Technologies Limited, Banglore.	-	-

5/4/2022 — **Project Co-ordinator**

5/4/22 — **HOD**

Vice Principal

PRINCIPAL

Note:

Project Guidelines Prescribed by Anna University

- Project work may be allotted to a single student or to a group of students not exceeding 3 per group
- The Head of the Institution shall constitute a review committee for project work for each branch of study
- There shall be three reviews during the semester by the review committee.
- The student shall make presentation on the progress made by him / her before the committee
- The total marks obtained in the three reviews shall be reduced for 20 marks (as per the scheme given by Anna University)
- If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-enrol for the same in a subsequent semester.

Copy to

- HOD/Final year Class Advisors
- Members
- Department Notice Board
- File

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Even Semester)

CONSTITUTION OF REVIEW COMMITTEE FOR PROJECT WORK

Review Committee	Name of the Faculty Member & Designation Review 1	Name of the Faculty Member & Designation Review 2	Name of the Faculty Member & Designation Review 3
Member 1	Dr.S.Periyanayagi	Mrs.G.Gnana Priya	Dr.A.Lakshmi
Member 2	Dr.A.Lakshmi	Mr.D.Gopinath	Dr.R.Rajalakshmi
Member 3	Mrs.V.SrirengaNachiyar	Mrs.V.SrirengaNachiyar	Mrs.V.SrirengaNachiyar
Industrial Expert	-	Mr.Mohamed Safiyur Rahman Software Project Manager Robert Bosch Engineering and Business Solutions India Pvt. Ltd., Coimbatore.	-
Alumni	Mr. P. Siva Chidambaram, Test Engineer, Tessolve Semiconductor Pvt. Ltd., Bangalore.	-	-

A. Lakshmi
Project Co-ordinator

5/4/22
HOD

Vice Principal

8/4/22
PRINCIPAL

Note:

Project Guidelines Prescribed by Anna University

- Project work may be allotted to a single student or to a group of students not exceeding 3 per group
- The Head of the Institution shall constitute a review committee for project work for each branch of study
- There shall be three reviews during the semester by the review committee.
- The student shall make presentation on the progress made by him / her before the committee
- The total marks obtained in the three reviews shall be reduced for 20 marks (as per the scheme given by Anna University)
- If a candidate fails to submit the project report on or before the specified deadline, he/she is deemed to have failed in the Project Work and shall re-enrol for the same in a subsequent semester.

Copy to

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Circular Project Work Review - I

11.04.2022

The first Project review meeting for the course EC8811 Project Work is scheduled on 13.04.2022 (Wednesday) as per the following timings. All the ECE final year students are asked to present their project with following contents.

Venue: ECE – A – IV Year Class Room – C3R05

Date/Day	Timing	Review Members	Batch No.	Assessment Criteria
13.04.22 (Wednesday)	09.30 AM to 12.00 PM	**IV Year ECE A** **External:** Mr. P. Siva Chidambaram, Test Engineer, Tessolve Semiconductor Pvt. Ltd., Bangalore. **Internal:** 1. Dr.S.Periyanayagi, HOD/ECE 2. Dr.A.Lakshmi, ASCP/ECE 3. Mrs. V.SrirengaNachiyar, AP(SG)/ECE	01 to 08	• Literature review (10 Marks) • Problem Identification and Project objectives (10 Marks) • Methodology Proposed and work plan (10 Marks) • Resource Planning (10 Marks) • Communication & Presentation Skills (10 Marks)
	01.30 PM to 04.00 PM		09 to17	

11/4/22 — 11/4/22 — 12/4/22 — 12/4/22 — 12/4/22

Project Coordinator(s) **HOD/ECE** **Vice Principal** **PRINCIPAL**

Copy to

- All Review members
- ECE Faculty members
- IV year Class advisor
- IV year ECE Students Via mail
- Notice board
- File

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Department of Electronics and Communication Engineering
Academic Year: 2021-2022 EVEN Semester
PROJECT ASSESSMENT FORM FOR REVIEW 1

Project Title: Synthesis and Low-Temperature Sintering of Copper Nanoparticle Pastes for Microelectronic Packaging

Domain Specification: Nano Technology

Project Group details:

S.No	Register. No	Name(s) of the Student(s)	Name of the Supervisor
1	953618106028	KIRUTHIKA T	RAGAVAN K
2	953618106301	HARINIDURGA I	

Details of the Laboratory facilities to be Utilized:

Type of Project:

Scope of Interdisciplinary Project: Yes/No **Industry/External Project: Yes/No**

Expected Outcome: (Tick the option)

International Conference [ ] Journal [ ] Patent [ ]
Sponsorship [ ] Product [ ]

Assessment details:

Project Assessment Criteria	Project Group students	
	1	2
Literature review(10)	9	9
Problem Identification and Project objectives(10)	9	9
Methodology Proposed and work plan (10)	10	10
Resource Planning (10)	10	10
Communication & Presentation Skills(10)	9	9
Total(50)	45	45

Comments:

Mechanism for synthesis should be explained properly Clarity in related work should be given.
1. Journal name to be mentioned in literature review. 2. Mechanism for synthesizing for copper at low should be defined clearly. 3. Micro Electronic packaging justification needed?
Literature review inference need to include continuity was missing - should improve Need more explanation
1. Synthesis of nanoparticles from flowers 2. Good market value 3. plan to apply for patent.

Signature of Review Committee Members with date

Supervisor Internal & External (if applicable)	Member 1	Member 2	Member 3
	7/7/22	M. Lakshmi	

Complied by Project Coordinator on:

Signature of Project Coordinator: A. Lakshmi

User: **LAKSHMI A**

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Department of Electronics and Communication Engineering
Academic Year: 2021-2022 EVEN Semester
PROJECT ASSESSMENT FORM FOR REVIEW 1

Project Title: Colon Cancer Image Segmentation Using Deep Learning Techniques

Domain Specification: Artificial Intelligence

Project Group details:

S.No	Register. No	Name(s) of the Student(s)	Name of the Supervisor
1	953618106001	AARTHI K	DEIVANAYAGAM R
2	953618106034	MIRRA S	

Details of the Laboratory facilities to be Utilized:

Type of Project:

Scope of Interdisciplinary Project: Yes/No

Industry/External Project: Yes/No

Expected Outcome: (Tick the option)

International Conference [ ] Journal [ ] Patent [ ]

Sponsorship [ ] Product [ ]

Assessment details:

Project Assessment Criteria	Project Group students	
	1	2
Literature review(10)	9	9
Problem Identification and Project objectives(10)	9	9
Methodology Proposed and work plan (10)	9	9
Resource Planning (10)	9	9
Communication & Presentation Skills(10)	10	10
Total(50)	45	45

Comments:

Suggested to analyze the data set for deep learning algorithm.
Objective should be clearly defined Justification for CNN is needed
1. Objective should be confined 2. Justification for CNN 3. How many images for training? 4. Define the use of padding in preprocessing? 5. Order of the slide presentation to be changed? 6. Problem identified in the literature review.
1. Work should be initiated. 2. Real time images should be considered.

Signature of Review Committee Members with date

Supervisor Internal & External (if applicable)	Member 1	Member 2	Member 3
	7/7/22	A. Lakshmi	

Complied by Project Coordinator on: 17.06.22 Signature of Project Coordinator: A. Lakshmi

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021-2022 (Odd Semester)

RIT/ CSE/GE3151 - Problem Solving and Python Programming-CM/2021-2022/01

Date: 10.12.2021

CIRCULAR

The **First** course committee meeting for the course code and Title: **GE3151 - Problem Solving and Python Programming** will be held on **13.12.2021**. All the Faculty members handling the courses for the Problem Solving and Python Programming and student representatives are requested to attend the meeting; in the CC I at 11.00 AM without fail.

10/12/21

Course committee Chair Person

Principal

Course Committee Members:

Sl.No	Faculty Members	Signature
1.	Dr.S.Vimal, ASP/AD	
2.	Dr.M.Gomathy Nayagam, ASP/CSE	
3.	Dr.R.Venkatesh, AP(SG)/CSE	
4.	Ms.S.Manjula, AP/CSE	
5.	Ms. G. Sakthi Priya, AP/CSE	
6.	Mr.N.Ganesh, AP(SG)/EEE	13/12/2021
7.	Mr.R.Deiva Nayagam, AP/~~ECE~~ EEE	

Sl.No	Student Members	Signature
1.	MUTHULAKSHMI M (21AD035)	
2.	SIDDARTH A (21AD054)	
3.	PORKODI V (21CE029)	
4.	SANJAYKUMAR G (21CE032)	
5.	SHOBIKA R (21CS043)	
6.	VISHNU A (21CS060)	
7.	ANITHA K (01-05-2004) (21EE005)	
8.	JOEL ANANTH S (21EE027)	
9.	ENIYA M (21EC019)	
10.	KALYANASUNDARAM K (21EC037)	
11.	SHREE HARISH R (21EC098)	
12.	RAJA KEERTHIKA G (21EC078)	
13.	HARISH KRISHNAN R (21ME014)	
14.	NIVETHA H (21ME029)	

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CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(odd Semester)

Department of ECE

Year/Semester:II / III - ECE B Section

			Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8351 - Electronic Circuits- I	SRIRENGANACHIYARV	9.58	9.78	9.64	9.64	9.89	9.73	9.76	9.79	97.4
2	EC8392 - Digital Electronics	GOPINATH D	9.91	9.89	9.84	9.86	9.89	9.84	9.91	9.87	98.75
3	EC8391 - Control Systems Engineering	VENKATESH P	9.73	9.75	9.59	9.57	9.61	9.8	9.73	9.72	96.94
4	EC8352 - Signals and Systems	HARINI SHRIRAM S	9.27	9.34	9.23	9.3	9.27	9.41	9.43	9.48	93.68

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5	MA8352 - Linear Algebra and Partial Differential Equations	MANIMARAN T	9.75	9.77	9.7	9.75	9.75	9.8	9.75	9.82	97.72
6	EC8393 - Fundamentals of Data Structures in C	ANUSUYA V	9.51	9.67	9.81	9.6	9.67	9.53	9.72	9.78	96.86

Class Adviser

22/10/21

HoD

22/10/21

Principal

29.10.21

RAMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(odd Semester)

Department of ECE

Year/Semester:II / III - ECE A Section

			Teaching Effectiveness(40)					Maturity Level (30)				
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8391 - Control Systems Engineering	DEEPA LAKSHMI B	9.07	8.95	8.91	9.16	9.02	9.2	9.2	9.18	91.06
2	EC8352 - Signals and Systems	GNANA PRIYA G	8.98	8.93	9.07	9.05	9.09	9.14	9.36	9.18	91.17
3	EC8351 - Electronic Circuits- I	SRIRENGANACHIYAR V	8.84	9	8.93	9.18	8.98	9.09	9.32	9.19	90.91
4	EC8392 - Digital Electronics	VIJAYAKUMAR S	8.93	8.7	8.93	8.98	8.98	9.02	8.86	8.79	88.76

Form No. AC 17c Rev.No. 00 Effective Date: 18.01.2016

29.10.21

5	MA8352 - Linear Algebra and Partial Differential Equations	SELVAGANESH T	9.43
6	EC8393 - Fundamentals of Data Structures in C	JOTHI THILAGA P	9.12

Class Adviser

4-11-2021

9.73	9.57	9.68	9.45	9.61	9.59	9.72	96.22
9.23	9.28	9.37	9.33	9.35	9.33	9.39	93.17

HoD

22/10/21

Principal

RAMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(even Semester)

Department of ECE

Year/Semester:II / IV - ECE A Section

			Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	MA8451 - PROBABILITY AND RANDOM PROCESSES	SELVAGANESH T	9.78	9.82	9.78	9.82	9.76	9.78	9.76	9.81	97.93
2	EC8452 - ELECTRONIC CIRCUITS II	VAIRAPRAKASH S	9.49	9.29	9.27	9.27	9.43	9.31	9.2	9.39	93.44
3	EC8491 - COMMUNICATION THEORY	GNANA PRIYA G	9.59	9.59	9.67	9.57	9.43	9.67	9.47	9.53	95.58
4	EC8451 - ELECTROMAGNETIC FIELDS	JEEVA S	9.55	9.47	9.61	9.59	9.45	9.67	9.63	9.61	95.81
5	EC8453 - LINEAR INTEGRATED CIRCUITS	RAJALAKSHMI R	9.12	9.14	8.86	9.06	8.94	9.22	9.04	9.14	90.81
6	GE8291 - ENVIRONMENTAL SCIENCE AND ENGINEERING	KANTHIMATHI G	9.31	9.37	9.29	9.31	9.29	9.24	9.35	9.33	93.16

7/5/2022
Class Adviser

7/5/22
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AMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(even Semester)

Department of ECE

Year/Semester:II / IV - ECE B Section

			Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	MA8451 - PROBABILITY AND RANDOM PROCESSES	MANIMARAN T	9.39	9.25	9.02	9.06	9.29	9.2	9.24	9.18	92
2	EC8452 - ELECTRONIC CIRCUITS II	SRIRENGANACHIYAR V	9.82	9.86	9.71	9.84	9.94	9.82	9.9	9.81	98.32
3	EC8491 - COMMUNICATION THEORY	RAGAVAN K	9.69	9.69	9.61	9.59	9.75	9.59	9.71	9.65	96.57
4	EC8451 - ELECTROMAGNETIC FIELDS	RADHIKA S A	9.61	9.55	9.24	9.37	9.63	9.39	9.53	9.46	94.69
5	EC8453 - LINEAR INTEGRATED CIRCUITS	LAKSHMI A	9.41	9.27	9.31	9.2	9.35	9.33	9.27	9.63	94.02
6	GE8291 - ENVIRONMENTAL SCIENCE AND ENGINEERING	VENKATESH PERUMAL M	9.84	9.82	9.88	9.78	9.84	9.82	9.86	9.59	97.62
7	EC8461 - CIRCUITS DESIGN AND SIMULATION LABORATORY	HARINI SHRIRAM S	9.69	9.8	9.67	9.78	9.9	9.73	9.67	9.65	97.18

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:DIVYA (1991) R
Designation:AP/ECE
Experience in RIT:5 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by Intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8751 - Optical Communication IV / VII - ECE A Section	9.93	9.9	9.83	9.8	9.87	9.9	9.93	9.78	98.49
2	OMT751 - MEMS and NEMS IV / VII - MECH A Section	9.33	9.25	9.67	9.33	9.42	9.42	9.58	9.5	94.5
3	OMT751 - MEMS and NEMS IV / VII - MECH B Section	8.91	9	9	8.82	8.91	8.91	9	8.94	89.37

R. Divya 29/10/21
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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:GOPINATH D
Designation:AP/ECE
Experience in RIT:5 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8701 - Antennas and Microwave Engineering IV / VII - ECE A Section	8.6	8.57	8.63	8.6	8.6	8.6	8.63	8.59	86
2	EC8392 - Digital Electronics II / III - ECE B Section	9.91	9.89	9.84	9.86	9.89	9.84	9.91	9.87	98.75

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:RAMESH BABU A
Designation:AP/ECE
Experience in RIT:4 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	CS8351 - Digital Principles and System Design II / III - CSE	9.59	9.5	9.57	9.48	9.68	9.54	9.54	9.59	95.67

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:VENKATESH P
Designation:AP/ECE
Experience in RIT:3 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	CS8082 - Machine Learning Techniques IV / VII - ECE A Section	10	9.95	9.95	9.9	10	10	9.95	9.85	99.3
2	EC8391 - Control Systems Engineering II / III - ECE B Section	9.73	9.75	9.59	9.57	9.61	9.8	9.73	9.72	96.94

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:SIVAKUMAR G
Designation:AP/ECE
Experience in RIT:4 years, 3 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8791 - Embedded and Real Time Systems IV / VII - ECE A Section	9.77	9.73	9.6	9.73	9.77	9.7	9.7	9.68	97.03
2	EC8551 - Communication Networks III / V - ECE B Section	9.76	9.68	9.63	9.66	9.73	9.66	9.76	9.63	96.78

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:GUNASEKARAN P
Designation:AP/ECE
Experience in RIT:4 years, 4 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8702 - Adhoc and Wireless Sensor Networks IV / VII - ECE A Section	8.93	9.03	8.83	9	9.03	8.87	8.7	8.93	89.19

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2	EC8501 - Digital Communication III / V - ECE B Section	9.66	9.61	9.61

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9.56	9.61	9.78	9.76	9.72	96.76

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:AZHAGU JAISUDHAN PAZHANI A
Designation:AP(SG)/ECE
Experience in RIT:6 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8691 - Microprocessors and Microcontrollers III / V - CSE	9.63	9.5	9.5	9.46	9.52	9.48	9.63	9.54	95.33
2	EC8552 - Computer Architecture and Organization III / V - ECE B Section	9.41	9.34	9.29	9.37	9.49	9.27	9.44	9.36	93.68

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:GNANA PRIYA G
Designation:AP(SG)/ECE
Experience in RIT:6 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8352 - Signals and Systems II / III - ECE A Section	8.98	8.93	9.07	9.05	9.09	9.14	9.36	9.18	91.17

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STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:JEEVA S
Designation:AP/ECE
Experience in RIT:5 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8553 - Discrete-Time Signal Processing III / V - ECE A Section	9.15	9.1	9.15	9.12	9.07	9.02	9.22	9.07	91.05

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:VAIRAPRAKASH S
Designation:AP/ECE
Experience in RIT:0 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8395 - Communication Engineering II / III - CSE	8.96	8.71	8.68	8.73	8.64	8.86	9.09	9.08	88.92
2	EC8501 - Digital Communication III / V - ECE A Section	9.37	9.17	9.15	9.07	9.2	9.22	9.27	9.27	92.25

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:PERIYANAYAGI S
Designation:Prof./ECE
Experience in RIT:7 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8553 - Discrete-Time Signal Processing III / V - ECE B Section	9.49	9.44	9.49	9.39	9.29	9.44	9.46	9.41	94.22

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:RAGAVAN K
Designation:AP(SG)/ECE
Experience in RIT:8 years, 5 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students In curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8702 - Adhoc and Wireless Sensor Networks IV / VII - ECE B Section	9.54	9.57	9.43	9.46	9.6	9.54	9.6	9.63	95.63

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:RAMALAKSHMI R
Designation:AP/ECE
Experience in RIT:6 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8751 - Optical Communication IV / VII - ECE B Section	9.63	9.6	9.69	9.74	9.83	9.63	9.6	9.7	96.83

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:VIJAYAKUMAR S
Designation:AP/ECE
Experience in RIT:4 years, 10 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8392 - Digital Electronics II / III - ECE A Section	8.93	8.7	8.93	8.98	8.98	9.02	8.86	8.79	88.76
2	OAN551 - Sensors and Transducers III / V - EEE	8.89	8.89	8.56	9.22	9.11	9.33	9	9.3	90.89

3	OAN551 - Sensors and Transducers III / V - MECH A Section	9.33	9.83	9.5
4	OAN551 - Sensors and Transducers III / V - MECH B Section	8.33	8.33	8.5

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9.83	9.33	9.83	9.5	9.78	96.48
8.33	9.33	9	8.33	9.44	88.48

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Principal 29.10.21

Effective Date: 18.01.2016

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:HARINI SHRIRAM S
Designation:AP/ECE
Experience in RIT:0 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8551 - Communication Networks III / V - ECE A Section	8.24	8.1	8.29	8.41	8.32	8.29	8.22	8.15	82.31
2	EC8352 - Signals and Systems II / III - ECE B Section	9.27	9.34	9.23	9.3	9.27	9.41	9.43	9.48	93.68

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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:BALAJI VIGNESH L K
Designation:AP/ECE
Experience in RIT:0 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8094 - Satellite Communication IV / VII - ECE A Section	10	10	10	10	10	10	10	10	100
2	EC8094 - Satellite Communication IV / VII - ECE B Section	10	10	10	10	10	10	10	9.67	99
3	EC8552 - Computer Architecture and Organization III / V - ECE A Section	9.46	9.27	9.44	9.22	9.49	9.39	9.46	9.51	94.27

L.K. Balajignesh 27/10/21
Signature of Faculty

HoD 27/10/21

Principal 29.10.21

Form No. AC 17b

Rev No. 00

Effective Date: 18.01.2016

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:KANNAN B
Designation:AP(SG)/ECE
Experience in RIT:6 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8791 - Embedded and Real Time Systems IV / VII - ECE B Section	9.66	9.71	9.57	9.8	9.74	9.66	9.74	9.71	97.02

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HoD 27/10/21

Principal 22.10.21

Form No. AC 17b Rev.No. 00 Effective Date: 18.01.2016

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:DEIVANAYAGAM R
Designation:AP/ECE
Experience in RIT:4 years, 4 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	CS8082 - Machine Learning Techniques IV / VII - ECE B Section	7.14	7.21	7.07	6.9	7	6.9	7.03	7.03	70.35

R. Deivanayagam 22/10/21
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Form No. AC 17b Rev.No. 00 Effective Date: 18.01.2016

22-10-2021

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:RADHIKA S A
Designation:AP/ECE
Experience in RIT:0 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8701 - Antennas and Microwave Engineering IV / VII - B Section	NAN	NAN	NAN	NAN	NAN	NAN	NAN	NAN	NAN
2	EC8701 - Antennas and Microwave Engineering IV / VII - ECE B Section	9.56	9.52	9.56	9.48	9.63	9.52	9.37	9.31	94.57

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Rev.No: 00

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Effective Date: 18.01.2016

Principal 29.10.21

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(odd Semester)

Name of the Faculty:SRIRENGANACHIYAR V
Designation:AP(SG)/ECE
Experience in RIT:5 years, 11 months

		Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8351 - Electronic Circuits- I II / III - ECE A Section	8.84	9	8.93	9.18	8.98	9.09	9.32	9.19	90.91
2	EC8351 - Electronic Circuits- I II / III - ECE B Section	9.58	9.78	9.64	9.64	9.89	9.73	9.76	9.79	97.4

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Form No. AC 17b Rev.No. 00 Effective Date: 18.01.2016

RAJALAKSHMI INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:AZHAGU JAISUDHAN PAZHANI A
Designation:AP(SG)/ECE
Experience in RIT:7 years, 5 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8691 - MICROPROCESSORS AND MICROCONTROLLERS III / VI - ECE B Section	9.59	9.54	9.56	9.56	9.54	9.63	9.61	9.49	95.49

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RMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:VAIRAPRAKASH S
Designation:AP/ECE
Experience in RIT:1 years, 6 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8452 - ELECTRONIC CIRCUITS II II / IV - ECE A Section	9.49	9.29	9.27	9.27	9.43	9.31	9.2	9.39	93.44

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RAJALAKSHMI INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:RAGAVAN K
Designation:AP(SG)/ECE
Experience in RIT:9 years, 0 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or Interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8491 - COMMUNICATION THEORY II / IV - ECE B Section	9.69	9.69	9.61	9.59	9.75	9.59	9.71	9.65	96.57

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KAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:KANNAN B
Designation:AP(SG)/ECE
Experience in RIT:6 years, 11 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	MG8591 - PRINCIPLES OF MANAGEMENT III / VI - ECE B Section	9.83	9.73	9.73	9.71	9.71	9.71	9.68	9.67	97.12

07/05/2022
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RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:RAMALAKSHMI R
Designation:AP/ECE
Experience in RIT:6 years, 11 months

		Teaching Effectiveness(40)						Maturity Level (30)		
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	GE8076 - PROFESSIONAL ETHICS IN ENGINEERING IV / VIII - ECE B Section	9.65	9.58	9.58	9.68	9.71	9.55	9.58	9.56	96.01
2	EC8652 - WIRELESS COMMUNICATION III / VI - ECE A Section	9.59	9.51	9.46	9.41	9.41	9.51	9.37	9.47	94.67

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AMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:GNANA PRIYA G
Designation:AP(SG)/ECE
Experience in RIT:6 years, 11 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8491 - COMMUNICATION THEORY II / IV - ECE A Section	9.59	9.59	9.67	9.57	9.43	9.67	9.47	9.53	95.58

07/05/22
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AMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:SRIRENGANACHIYAR V
Designation:AP(SG)/ECE
Experience in RIT:6 years, 5 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8452 - ELECTRONIC CIRCUITS II II / IV - ECE B Section	9.82	9.86	9.71	9.84	9.94	9.82	9.9	9.81	98.32

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HoD 7/5/22

Principal 9 5 22

RAMCO INSTITUTE OF TECHNOLOGY

STUDENTS FEEDBACK SUMMARY SHEET

Academic Year: 2021-2022(even Semester)

Name of the Faculty:JEEVA S
Designation:AP/ECE
Experience in RIT:5 years, 11 months

		Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject handled/ Semester/ /Section	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management	Total (100)
1	EC8451 - ELECTROMAGNETIC FIELDS II / IV - ECE A Section	9.55	9.47	9.61	9.59	9.45	9.67	9.63	9.61	95.81

7/5/22
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5-5-22
Principal

RAMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(odd Semester)

Department of ECE

Year/Semester:III / V - ECE B Section

			Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	ORO551 - RENEWABLE ENERGY SOURCES	THANGAM E	10	10	10	10	10	10	10	10	100
2	OME551 - Energy Conservation and Management	SUJIN N.L	9.71	9.71	9.57	9.57	9.86	9.86	9.86	9.81	97.57
3	OCE551 - Air Pollution and Control Engineering	KANTHIMATHI G	9.5	9.42	9.5	9.5	9.42	9.5	9.5	9.5	94.84

29.10.21

2021 - 2022

4	OIT551 - DATABASE MANAGEMENT SYSTEMS	VENKATESH R	9.58
5	OMF551 - Product Design and Development	SANTHANA MARUTHUPANDIAN M	8
6	EC8553 - Discrete-Time Signal Processing	PERIYANAYAGI S	9.49
7	EC8552 - Computer Architecture and Organization	AZHAGU JAISUDHAN PAZHANI A	9.41
8	EC8501 - Digital Communication	GUNASEKARAN P	9.66
9	EC8551 - Communication Networks	SIVAKUMAR G	9.76
10	CS8392 - Object Oriented Programming	VIJAYALAKSHMI B	9.78

Class Adviser

22/7/2024

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9.58	9.58	9.5	9.5	9.42	9.58	9.53	95.32
9.33	9.33	9.33	9	9.33	9.33	9.44	91.98
9.44	9.49	9.39	9.29	9.44	9.46	9.41	94.22
9.34	9.29	9.37	9.49	9.27	9.44	9.36	93.68
9.61	9.61	9.56	9.61	9.78	9.76	9.72	96.78
9.68	9.63	9.66	9.73	9.66	9.76	9.63	96.78
9.61	9.63	9.71	9.63	9.68	9.73	9.67	96.79

HoD

22/10/21

Principal

29/10/21

Effective Date: 18.01.2016

22-10-2021

RAMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(even Semester)

Department of ECE

Year/Semester:III / VI - ECE A Section

			Teaching Effectiveness(40)					Maturity Level (30)			
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8691 - MICRO PROCESSORS AND MICROCONTROLLERS	GOPINATH D	9.39	9.22	9.32	9.22	9.46	9.37	9.41	9.38	93.54
2	EC8095 - VLSI DESIGN	SUBHASHINI G	9.51	9.37	9.54	9.37	9.49	9.44	9.32	9.3	93.94
3	EC8652 - WIRELESS COMMUNICATION	RAMALAKSHMI R	9.59	9.51	9.46	9.41	9.41	9.51	9.37	9.47	94.67
4	MG8591 - PRINCIPLES OF MANAGEMENT	BALAJI VIGNESH L K	9.39	9.59	9.44	9.54	9.39	9.56	9.32	9.46	94.6
5	EC8651 - TRANSMISSION LINES AND RF SYSTEMS	VENKATESH P	9.46	9.37	9.34	9.46	9.37	9.32	9.22	9.2	93.15
6	CS8792 - CRYPTOGRAPHY AND NETWORK SECURITY	RAMESH BABU A	9.71	9.43	9.86	9.57	10	9.57	9.71	9.43	96.14
7	EC8004 - WIRELESS NETWORKS	GUNASEKARAN P	9.16	9.26	9.21	9.26	9.42	9.26	9.11	9.26	92.47
8	GE8075 - INTELLECTUAL PROPERTY RIGHTS	PRABU RAM G	9.53	9.6	9.47	9.73	9.47	9.6	9.6	9.47	95.4

7/5/22

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7/5/22

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RAMCO INSTITUTE OF TECHNOLOGY

CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2021-2022(even Semester)

Department of ECE

Year/Semester:III / VI - ECE B Section

			Teaching Effectiveness(40)				Maturity Level (30)				
Sl.No	Name of the subject	Faculty handled	Level of preparedness (whether adequately prepared for class or not) (10)	Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10)	Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10)	Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10)	Ease of maintenance of order/ Class control (without threatening or punishment) (10)	Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10)	Intellectual stature (commands respect of students by Intellectual and maturity levels) (10)	Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10)	Total (100)
1	EC8691 - MICROPROCESSORS AND MICROCONTROLLERS	AZHAGU JAISUDHAN PAZHANI A	9.59	9.54	9.56	9.56	9.54	9.63	9.61	9.49	95.49
2	EC8095 - VLSI DESIGN	RAMESH BABU A	9.63	9.59	9.59	9.68	9.63	9.71	9.61	9.58	96.17
3	EC8652 - WIRELESS COMMUNICATION	HARINI SHRIRAM S	9.71	9.66	9.61	9.63	9.63	9.59	9.54	9.55	96.03
4	MG8591 - PRINCIPLES OF MANAGEMENT	KANNAN B	9.83	9.73	9.73	9.71	9.71	9.71	9.68	9.67	97.12
5	EC8651 - TRANSMISSION LINES AND RF SYSTEMS	GOPINATH D	9.51	9.37	9.24	9.27	9.37	9.39	9.37	9.24	93.25
6	CS8792 - CRYPTOGRAPHY AND NETWORK SECURITY	RAMESH BABU A	9.64	9.64	9.57	9.36	9.57	9.57	9.5	9.45	95.21
7	EC8004 - WIRELESS NETWORKS	GUNASEKARAN P	10	10	10	10	10	10	10	10	100
8	GE8075 - INTELLECTUAL PROPERTY RIGHTS	PRABU RAM G	9.58	9.42	9.42	9.42	9.32	9.47	9.42	9.32	94

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Sandeep Jain

Mr. Sandeep Jain
Founder & CEO, GeeksforGeeks

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कौशल भारत - कुशल भारत

Nikhil Bharsikar
Director

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IIMB तेजस्वि नावधीतमस्तु
NSR CEL
Goldman Sachs

CERTIFICATE OF COMPLETION

This is presented to

AJITHA R

for successfully completing

Descriptive Analytics

Dated 19 February 2022

WiseTechSource

WTS/2021/08/0463 **Monday, 30 August 2021**

LETTER OF PARTICIPATION

TO WHOMSOEVER IT MAY CONCERN

We are glad to inform that **Mr/ Ms. SIVASANKAR M** has participated in a two weeks of skill development program called **iLogiPAD** – Individual Logical Programming Approach & Development conducted in **Java - Basics** by **WiseTech Source Pvt. Ltd**.

We wish you success in your career.

For **WiseTech Source Pvt. Ltd**.

Authorized Signatory

** This letter cannot be considered as a competent letter for any offer / appointment **

CERTIFICATE NUMBER - 012021XXX0695

GK GROUP OF COMPANY

CERTIFICATE OF COMPLETION

THIS CERTIFICATE AWARD TO

MATHEESH G

For effectively finishing the 10 days internship as a CAMPUS AMBASSADOR at GK GROUP OF COMPANY from 05-08-2021 to 15-08-2021 with a model exhibition. The assistant showed great showcasing abilities and system with the self-inspired mentality to acquire the new ability and has added to the imaginative thoughts, web-based media advertising, group executives and other specialized abilities GK GROUP OF COMPANY wish the occupant accomplishment in the future undertaking.

BATCH - V
ISSUED DATE - 16-08-2021

GOPALAKRISHNAN G
CEO & HR DIRECTOR

Certificate of Internship

Microsoft Partner

This is to certify that

THILOTHAMAI K

of **RAMCO INSTITUTE OF TECHNOLOGY**

Has successfully undergone a summer training & internship of 6 weeks on

CYBER SECURITY AND ETHICAL HACKING

Along with project on

MrRobot 1

From **14.10.2021** to **04.12.2021** with Knowledge Solutions India

Knowledge Solutions India

Skill development | Certification | Placement prep

Ref KSI-CSEH-1410-0412-84

Date of Issue
05/1/2022

Authorized Signatory
Kumar lala

Suven Consultants & Technology Pvt. Ltd.

Official member to HackerRank shine ERA Executive Recruiters Association www.era.org.in

CERTIFICATE OF INTERNSHIP

This is to certify that **matheesh g** has successfully completed **2 weeks (or 70 hrs) PHP-MySQL** Coding Internship.

1) Designing a social Networking app
2) Creating a Simple Calender

The projects were assessed by AI Engine trained by mentors as listed on **https://mentor.suvenconsultants.com**

Your performance was **Enviable** - in the Online Internship. Wishing you all the best for more internships and a great career.

Your Internship Profile can be viewed on https://internship.suvenconsultants.com/user?u=bWF0aGVlc2hnYWphcGF0aHlAc2N0cGw=

Date of Issue: 14-02-2022

This is auto generated by our ai engine

Rocky Jagtiani

Domain Expert: Rocky Jagtiani
Technical Head - SCTPL
https://suvenconsultants.com

Domain Expert: Niraj Sharma
UI/UX expert and Software Engineer
NeoSOFT Technologies

Domain Expert: Tarik Sheth
MCP,HP(AIS),CSTE,CSQA,CSTM
VP(in Investment Banking MNC)

Companies Recruiting ... & Many More

qtech Kingston Technology SPORTZ Interactive IT'S THOUGHTFUL. IT'S Rustomjee GRAAND PRIX Bespoke Luxury Ken Blanchard Companies iksula Tech Mahindra Deloitte.

RAMCO INSTITUTE OF TECHNOLOGY

(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)
NAAC Accredited and An ISO 9001:2015 certified institution

RIT/CSE/VAC/2021/02

16.09.2021

To
The Director,
Centre for Academic Courses,
Anna University,
Chennai – 600 025.

Sir,

Sub: Requesting approval – Value Added Courses – Syllabus and Schedule – Reg.
Ref: Affiliated Institutions – Guidelines for conducting Value Added Courses – Anna University Regulations 2017.

With reference to the above, we have proposed to offer the following value added course to our V Semester B.E Computer Science and Engineering Students for the academic year 2021 – 2022 (ODD Semester) by getting the suggestions from faculty members, Industry persons and alumni to improve the employability of the students.

Sl. No.	Course Code	Course Name	Credits
1	CSVAC XXX	MERN Stack	2

The syllabus and schedule (contains the details of course handling faculty, sessions of theory and practical, assessment procedure and evaluation team) of the proposed value added courses are formulated based on the guidelines AU – R2017 and enclosed the same for your kind approval.

Hereby, we request your kind approval and consent to offer this value added course to our V semester students.

Thanking you,

Yours faithfully,

HOD/CSE **Vice Principal** **Principal**

Cc:
The Chairman,
Faculty of Information and Communication Engineering,
Center for Academic Courses,
Anna University

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.
Virudhunagar District, Tamil Nadu. Tel : 04563 233400
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

Off: 22357077 / 73
22357074
Fax / Dir : 22352272

CENTRE FOR ACADEMIC COURSES
ANNA UNIVERSITY
CHENNAI – 600 025

Dr. S.HOSIMIN THILAGAR
DIRECTOR
Letter No.3814/AU/VA/CAC/FICE/2021 22.10.2021

INSTITUTE OF TECHNOLOGY 27 OCT 2021 RAJAPALAYAM - 626 117.

To

The Controller of Examinations
Anna University
Chennai - 25.

Sir,

Sub: A.U. - CAC - Affiliated Institutions - Value Added Courses - Reg.
Ref : Letter No. RIT/CSE/VAC/2021/02, date:16.09.2021.

******

With references to the letter cited, the following Value Added Course offered by Ramco Institute of Technology, Affiliated Institutions is allotted the course code as detailed below.

SI. NO.	CODE ALLOTTED	TITLE	CREDITS			
			L	T	P	C
1.	IVA086	MERN Stack	1	0	2	2

This is for your kind information and necessary action at your end.

Yours faithfully

DIRECTOR

Copy to:

1. The Principal, Ramco Institute of Technology, Rajapalayam – 626 117, Virudhunagar District.
2. The Chairperson, Faculty of Information and Communication Engineering, A.U., Chennai -25.
3. The Stock File.

RAMCO INSTITUTE OF TECHNOLOGY
(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)
NAAC Accredited and An ISO 9001:2015 certified institution

RIT/CSE/VAC/2022/02

01.04.2022

To
The Director,
Centre for Academic Courses,
Anna University,
Chennai – 600 025.

Sir,

Sub: Requesting conduction – Value Added Courses –Schedule – Reg.
Ref: Affiliated Institution –Guidelines for conducting Value Added Courses-Anna University Regulations 2017
Letter No. 3814/AU/VA/CAC/FICE/2021 dated 22.10.2022

With reference to the above, we had proposed to offer the value added course "MERN Stack- IVA086" with the schedule and got the approval for the same to our V Semester B.E Computer Science and Engineering Students for the academic year 2021 – 2022 on 27.10.2021. Due to time constraints, we could not conduct the same in V semester itself. We have planned to conduct in VI Semester. The updated schedule (contains the details of course handling faculty, sessions of theory and practical, assessment procedure and evaluation team) of the proposed value added courses are submitted for your reference.

Hereby, we request your kind approval to conduct this value added course to our VI semester students as per the schedule attached.

Thanking you,

Yours faithfully,

01/04/2022
HOD/CSE

Vice Principal

Principal

List of Encl:
1. Requisition Letter for VAC
2. Approval letter for VAC from Anna University
3. Name list of the students
4. New schedule for both theory and practical sessions
5. Previous Schedule for both theory and practical sessions.

Cc:
The Chairman,
Faculty of Information and Communication Engineering,
Center for Academic Courses,
Anna University

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.
Virudhunagar District, Tamil Nadu. Tel : 04563 233400
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

VALUE ADDED COURSE DETAILS

Title of the Course: **MERN stack**
Year / Branch / Semester: III / Computer Science and Engineering / V
Course Handling Faculty:
Industry:

1. **Mr.Vinodh Rajan, Software Engineer, Tech Mahindra**
2. **Ms. C. Nandhini, MERN Developer, Ramco Systems**
3. **Mr.G. Ponkumaresan, Team Leader, Infoview Pvt Technologies Ltd.,**

Internal Faculty:

1. **Mrs. B.Vijayalakshmi , AP(SG)/CSE**
2. **Mrs.N.Nithya, AP/CSE**
3. **Mr.C.A Yogaraja, AP/CSE**
4. **Mr.K.Vignesh Saravanan, AP/CSE**

Hour	Date/Day	THEORY	PRACTICAL
UNIT I : Basics of Full Stack			
1	15.04.2022 (Friday)	Need for MERN -Server-Less MERN Components - React (1 period)	Server Setup- Setting up MERN environment. (1 period)
3		MongoDB- Node.js- Express-nvm- Node.js- Npm. (1 period)	Hello World - Simple programs in MERN environment. (2 periods)
5	16.04.2022 (Saturday)	-	
Assessment I	16.04.2022 (Saturday)	Online Quiz	
UNIT II : React			
6	17.04.2022 (Sunday)	React Introduction - Components -React Classes (1 period)	REACT based programming (2 period)
9	17.04.2022 (Sunday) & 18.04.2022 (Monday)	Composing Components - Passing Data- Dynamic Composition (2 period)	Build Blog using React. Designing components- React Forms- Building a basic Forms using React (2 period)
13	23.04.2022 (Saturday)	React state -Setting State - Async State Initialization (1 period)	React CSS - React SaaS Designing components with React CSS and SaaS (3 periods)
15		Event Handling Communicating from Child to	

		Parent - Stateless Components (1 period)	
Assessment II	24.04.2022 (Sunday)	Online Quiz	-
UNIT III : NodeJs			
18	24.04.2022 (Sunday)	Node.js basics - Local and Export Modules- Node Package Manager (1 period)	Hands on session on Node.js basics (2 periods)
21	25.04.2022 (Monday)	Node.js web server Node.js File system (1 period)	-
22	01.05.2022 (Saturday)	Node Inspector- Node.jsEventEmitter (1 period)	Hands on session on Frameworks for Node.js (1 period) Handling of various APIs associated with Node.js (2 periods)
Assessment III	01.05.2022 (Sunday)	Online Quiz	
UNIT IV : Express			
26	08.05.2022 (Saturday)	Express.js Web App - Serving Static Resource - Node.js Data Access (1 period)	Node and Express based web development Handling of various APIs associated with Node.js (2 periods)
29	09.05.2022 (Sunday)	Express REST APIs – REST- Resource Based - HTTP Methods as Actions - JSON- Routing (1 period)	Programs using JSON- Express -Handler Function Hands on session on Using the List API (1 period)
31		Middleware - The List API - Automatic Server Restart – Testing- The Create API - Error Handling Engine – Template (1 period)	Using the Create API (1 period)
33	10.05.2022 (Monday)	-	Application backend development with Node.js and Express. (2 periods)
Assessment IV	14.05.2022 (Saturday)	Online Quiz	
UNIT V :Database			
35	14.05.2022 (Saturday)	MongoDB - MongoDB Basics – Documents- Collections -	Installation- The mongo Shell and

36	15.05.2022 (Sunday)	Query Language - Schema Initialization- MongoDB Node js Driver Reading from MongoDB - Writing to MongoDB - CRUD operations - projections - Indexing Aggregation - Replication - Shading. Creating backup – Deployment (2 period)	
			Hands on session on MongoDB basics commands (3 periods)
40	22.05.2022 (Sunday)	-	Handling NoSQL data using MongoDB and manipulating data and management. (2 periods)
			Dice Roller game using React Build Blog using React.(2 periods)
44	23.05.2022 (Monday)	-	Add API Authentication to Blog App. (2 periods)
45	28.05.2022 (Saturday)	-	
Assessment V	29.05.2022 (Sunday)	Online Quiz	
Assessment VI	29.05.2022 (Sunday)	Final Exam	

Note: The assessment for the above course will be conducted by considering all the criteria of rubrics method and will be assessed by Head of the department and senior faculty members.

Course Designer & Coordinator **HOD/CSE** **VICE PRINCIPAL**

1. **Mrs.N.Nithya, AP/CSE**
2. **Mr.C.A.Yogaraja, AP/CSE**
3. **Dr.I.Gethzi Ahila Poornima, AP/CSE**

PRINCIPAL

RAMCO INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering
Academic Year: 2021- 2022 (Even Semester)
PORTAL ENTRY
Attendance & Mark Statement
VI Semester B.E Computer Science and Engineering

Name of the Faculty member: Mr.C.A.Yogaraja
Course Code & Course Title: IVA086 MERN Stack
No. of Periods Conducted: 25

Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Marks
1.	953619104001	ABHINAV R	22	82
2.	953619104002	AJITHA R	24	85
3.	953619104003	AKILA G	23	93
4.	953619104004	ANNLYN SARAH J P	24	89
5.	953619104005	ASWINKUMAR M	22	85
6.	953619104006	ATHIVIGNESHKUMAR N	24	92
7.	953619104007	BHUJA SHRI R	23	90
8.	953619104008	CHANDHRU R	24	80
9.	953619104009	DHARINI B	25	95
10.	953619104010	DHARSANA R	23	88
11.	953619104011	DINESH KUMAR M	25	90
12.	953619104012	GIFTY SHARON K	25	98
13.	953619104013	GOPI SANKAR P	25	98
14.	953619104014	HARIHARAN M	21	89
15.	953619104015	HARINI M	24	96
16.	953619104016	IVARAJ C	25	81
17.	953619104017	JAYA DHARSHINI G	24	99
18.	953619104018	JAYARANI M	23	86
19.	953619104019	JAYA SHRI K K	22	96
20.	953619104020	KANTHIMATHINATHAN A	20	89
21.	953619104021	KAVITHANJALI K	23	92
22.	953619104022	KISHORE KUMAR S	25	96
23.	953619104023	KRISHNA K	23	97
24.	953619104024	KRISHNA SRINIVAS P	21	88
25.	953619104025	LAVANYADEVI K	23	88
26.	953619104026	LOKESHWARAPPAN A	22	80
27.	953619104027	MALINI M	24	93
28.	953619104028	MATHESHWARAN N	21	92
29.	953619104029	MOHAMED SHEHIN S	21	80
30.	953619104030	MUTHUARUNA C	20	90
31.	953619104031	PRASATH A	25	88
32.	953619104032	RATHESH PRAVEEN P	20	84
33.	953619104033	SAHANA SRI R	21	89
34.	953619104034	SAKTHISWATHI A	24	98

Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Marks
35.	953619104035	SANGEETHA P	24	95
36.	953619104036	SARAVANAKUMAR K	23	97
37.	953619104037	SHRIYA R	25	92
38.	953619104038	SOPHIASREE K	22	99
39.	953619104039	SRIRAM K	24	91
40.	953619104040	SRI RAMAKRISHNAN J	22	85
41.	953619104041	SWATHIKA B	20	92
42.	953619104042	SWATHY SANTHOSH	22	88
43.	953619104043	THARINI K	20	90
44.	953619104044	THARUNKUMAR B	20	85
45.	953619104045	ULAGESWARAN T	21	93
46.	953619104046	VAISHNAVI V S	21	95
47.	953619104047	VAISHNAVIRAJAM R	22	90
48.	953619104048	VIDHYA V	24	92
49.	953619104049	VIGNESH A	20	88
50.	953619104050	VIJAIBALAJI N	22	80
51.	953619104051	VIJAY AADHITHYA M	25	98
52.	953619104052	VIJAYALAKSHMI R	25	92
53.	953619104053	VISWAJITH SAAIRAM S K	25	88
54.	953619104054	VITHYA THARANI M	22	90
55.	953619104055	YUVAASRI R K	22	90
56.	953619104301	JAYA RAMA SANKARA MOORTHI J	24	85
57.	953619104302	KOWSHIK R	24	90

Faculty Coordinators

HOD/CSE

RAMCO INSTITUTE OF TECHNOLOGY
Department of Computer Science and Engineering

Academic Year: 2021- 2022 (Even Semester)

PORTAL ENTRY

Attendance & Mark Statement

VI Semester B.E Computer Science and Engineering

Name of the Faculty member: Mr.C.A.Yogaraja

Course Code & Course Title: IVA086 MERN Stack

No. of Periods Conducted: 20

Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Marks
1.	953619104001	ABHINAV R	19	80
2.	953619104002	AJITHA R	18	86
3.	953619104003	AKILA G	19	93
4.	953619104004	ANNLYN SARAH J P	20	82
5.	953619104005	ASWINKUMAR M	20	88
6.	953619104006	ATHIVIGNESHKUMAR N	20	95
7.	953619104007	BHUJA SHRI R	20	96
8.	953619104008	CHANDHRU R	20	86
9.	953619104009	DHARINI B	19	91
10.	953619104010	DHARSANA R	20	94
11.	953619104011	DINESH KUMAR M	19	93
12.	953619104012	GIFTY SHARON K	20	94
13.	953619104013	GOPI SANKAR P	16	88
14.	953619104014	HARIHARAN M	20	78
15.	953619104015	HARINI M	20	85
16.	953619104016	IVARAJ C	16	79
17.	953619104017	JAYA DHARSHINI G	18	94
18.	953619104018	JAYARANI M	20	80
19.	953619104019	JAYA SHRI K K	16	83
20.	953619104020	KANTHIMATHINATHAN A	18	75
21.	953619104021	KAVITHANJALI K	20	78
22.	953619104022	KISHORE KUMAR S	19	86
23.	953619104023	KRISHNA K	19	83
24.	953619104024	KRISHNA SRINIVAS P	19	83
25.	953619104025	LAVANYADEVI K	18	91
26.	953619104026	LOKESH IYYAPPAN A	20	89
27.	953619104027	MALINI M	16	94
28.	953619104028	MATHESHWARAN N	16	85
29.	953619104029	MOHAMED SHEHIN S	19	89
30.	953619104030	MUTHUARUNA C	20	92
31.	953619104031	PRASATH A	20	90
32.	953619104032	RATHESH PRAVEEN P	19	85
33.	953619104033	SAHANA SRI R	19	87
34.	953619104034	SAKTHISWATHI A	18	95

Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Marks
35.	953619104035	SANGEETHA P	20	90
36.	953619104036	SARAVANAKUMAR K	20	92
37.	953619104037	SHRIYA R	16	89
38.	953619104038	SOPHIASREE K	18	98
39.	953619104039	SRIRAM K	18	82
40.	953619104040	SRI RAMAKRISHNAN J	20	78
41.	953619104041	SWATHIKA B	19	89
42.	953619104042	SWATHY SANTHOSH	20	80
43.	953619104043	THARINI K	19	86
44.	953619104044	THARUNKUMAR B	19	83
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46.	953619104046	VAISHNAVI V S	19	85
47.	953619104047	VAISHNAVIRAJAM R	20	88
48.	953619104048	VIDHYA V	20	93
49.	953619104049	VIGNESH A	19	79
50.	953619104050	VIJAIBALAJI N	18	77
51.	953619104051	VIJAY AADHITHYA M	16	94
52.	953619104052	VIJAYALAKSHMI R	19	86
53.	953619104053	VISWAJITH SAAIRAM S K	20	92
54.	953619104054	VITHYA THARANI M	20	86
55.	953619104055	YUVAASRI R K	16	88
56.	953619104301	JAYA RAMA SANKARA MOORTHI J	19	78
57.	953619104302	KOWSHIK R	16	83

10/6/22

Faculty Coordinators

HOD/CSE

for

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: **MA 6624519** **Folio No.** AUK5139712

NAME OF THE CANDIDATE	ABHINAV R					REGISTER NO.	953619104001
DATE OF BIRTH	19-MAR-2002	GENDER	MALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	A+	9	PASS
06	CS8651	Internet Programming	3	A	8	PASS
06	CS8691	Artificial Intelligence	3	B+	7	PASS
06	HS8581	Professional Communication	1	A+	9	PASS
06	GE8075	Intellectual Property Rights	3	A	8	PASS
06	CS8662	Mobile Application Development Laboratory	2	B+	7	PASS
06	CS8611	Mini Project	1	A	8	PASS
06	CS8602	Compiler Design	4	B+	7	PASS
06	CS8601	Mobile Computing	3	A	8	PASS
06	CS8603	Distributed Systems	3	B+	7	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	A+	9	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						25				
Credits Earned						25				
Grade Points Earned						78				
Grade Point Average (GPA)						7.640				

Cumulative Credits Earned	147	Cumulative Grade Point Average (CGPA)	7.56	Medium of Instruction : ENGLISH

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai - 600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

CONTROLLER OF EXAMINATIONS

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: **MA 6624520** **Folio No.** AUK5175546

NAME OF THE CANDIDATE	AJITHA R					REGISTER NO.	953619104002
DATE OF BIRTH	06-JUL-2002	GENDER	FEMALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	A+	9	PASS
06	CS8602	Compiler Design	4	A	8	PASS
06	GE8076	Professional Ethics in Engineering	3	A+	9	PASS
06	CS8603	Distributed Systems	3	A	8	PASS
06	CS8075	Data Warehousing and Data Mining	3	A	8	PASS
06	CS8662	Mobile Application Development Laboratory	2	O	10	PASS
06	HS8581	Professional Communication	1	A+	9	PASS
06	CS8691	Artificial Intelligence	3	A	8	PASS
06	CS8651	Internet Programming	3	A	8	PASS
06	CS8611	Mini Project	1	O	10	PASS
06	CS8601	Mobile Computing	3	A+	9	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	A+	9	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						28				
Credits Earned						28				
Grade Points Earned						96				
Grade Point Average (GPA)						8.536				

Cumulative Credits Earned	150	Cumulative Grade Point Average (CGPA)	8.76	Medium of Instruction : ENGLISH

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai - 600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

CONTROLLER OF EXAMINATIONS

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: MA 6624521 **Folio No.** AUK5264899

NAME OF THE CANDIDATE	AKILA G					REGISTER NO.	953619104003
DATE OF BIRTH	14-JUL-2001	GENDER	FEMALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	A	8	PASS
06	CS8603	Distributed Systems	3	B+	7	PASS
06	CS8651	Internet Programming	3	B+	7	PASS
06	CS8691	Artificial Intelligence	3	B+	7	PASS
06	HS8581	Professional Communication	1	A	8	PASS
06	GE8075	Intellectual Property Rights	3	A	8	PASS
06	CS8662	Mobile Application Development Laboratory	2	A	8	PASS
06	CS8611	Mini Project	1	A+	9	PASS
06	CS8601	Mobile Computing	3	B	6	PASS
06	CS8602	Compiler Design	4	B+	7	PASS
06	GE8076	Professional Ethics in Engineering	3	A	8	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	O	10	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						28				
Credits Earned						28				
Grade Points Earned						83				
Grade Point Average (GPA)						7.357				
Cumulative Credits Earned	150	Cumulative Grade Point Average (CGPA)				7.85	Medium of Instruction : ENGLISH			

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai - 600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

CONTROLLER OF EXAMINATIONS i/c

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: **MA 6624522** **Folio No.** AUK5193463

NAME OF THE CANDIDATE	ANNLYN SARAH J P					REGISTER NO.	953619104004
DATE OF BIRTH	29-NOV-2001	GENDER	FEMALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	A+	9	PASS
06	CS8611	Mini Project	1	O	10	PASS
06	CS8662	Mobile Application Development Laboratory	2	O	10	PASS
06	HS8581	Professional Communication	1	A+	9	PASS
06	GE8075	Intellectual Property Rights	3	A	8	PASS
06	CS8691	Artificial Intelligence	3	A	8	PASS
06	CS8651	Internet Programming	3	A	8	PASS
06	CS8603	Distributed Systems	3	B+	7	PASS
06	CS8602	Compiler Design	4	A	8	PASS
06	GE8076	Professional Ethics in Engineering	3	A	8	PASS
06	CS8601	Mobile Computing	3	A	8	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	A+	9	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						28				
Credits Earned						28				
Grade Points Earned						93				
Grade Point Average (GPA)						8.214				

Cumulative Credits Earned	150	Cumulative Grade Point Average (CGPA)	8.24	Medium of Instruction : ENGLISH

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai - 600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

P. Santhosh

CONTROLLER OF EXAMINATIONS

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: **MA 6624523** **Folio No.** AUK5229190

NAME OF THE CANDIDATE	ASWINKUMAR M					REGISTER NO.	953619104005
DATE OF BIRTH	06-JUL-2002	GENDER	MALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	A	8	PASS
06	CS8602	Compiler Design	4	B+	7	PASS
06	CS8603	Distributed Systems	3	B	6	PASS
06	CS8651	Internet Programming	3	B	6	PASS
06	CS8691	Artificial Intelligence	3	U	0	RA
06	GE8075	Intellectual Property Rights	3	B+	7	PASS
06	HS8581	Professional Communication	1	A	8	PASS
06	CS8662	Mobile Application Development Laboratory	2	B+	7	PASS
06	CS8611	Mini Project	1	A	8	PASS
06	CS8601	Mobile Computing	3	B	6	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	A+	9	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						25				
Credits Earned						22				
Grade Points Earned						63				
Grade Point Average (GPA)						6.773				

Cumulative Credits Earned	144	Cumulative Grade Point Average (CGPA)	7.22	Medium of Instruction : ENGLISH

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai -600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

CONTROLLER OF EXAMINATIONS

ANNA UNIVERSITY, CHENNAI - 25
B.E. DEGREE EXAMINATIONS
GRADE SHEET

Sl.No: **MA 6624524** Folio No. AUK5229191

NAME OF THE CANDIDATE	ATHIVIGNESHKUMAR N					REGISTER NO.	953619104006
DATE OF BIRTH	28-FEB-2002	GENDER	MALE	MONTH & YEAR OF EXAMINATION	APR 2022	DATE OF PUBLICATION	18-SEP-2022
COLLEGE OF STUDY	RAMCO INSTITUTE OF TECHNOLOGY					REGULATIONS	2017(CBCS)
PROGRAMME & BRANCH	B.E. Computer Science and Engineering						

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	RESULT
06	CS8661	Internet Programming Laboratory	2	O	10	PASS
06	CS8601	Mobile Computing	3	A	8	PASS
06	CS8611	Mini Project	1	A+	9	PASS
06	CS8651	Internet Programming	3	A	8	PASS
06	HS8581	Professional Communication	1	O	10	PASS
06	CS8691	Artificial Intelligence	3	B+	7	PASS
06	CS8662	Mobile Application Development Laboratory	2	O	10	PASS
06	CS8075	Data Warehousing and Data Mining	3	B+	7	PASS
06	CS8603	Distributed Systems	3	B+	7	PASS
06	GE8076	Professional Ethics in Engineering	3	A	8	PASS
06	CS8602	Compiler Design	4	A	8	PASS
		Value Added Course(s)				
06	IVA086	MERN Stack	2	O	10	PASS

* * * End of Statement * * *

Semester	I	II	III	IV	V	VI	VII	VIII	IX	X
Credits Registered						28				
Credits Earned						28				
Grade Points Earned						92				
Grade Point Average (GPA)						8.071				
Cumulative Credits Earned	150	Cumulative Grade Point Average (CGPA)				8.77	Medium of Instruction : ENGLISH			

RA - Reappearance is Required W-Withdrawal SE - Sports Exemption * Absent for University Examination

Controller of Examinations Chennai 600 025 Anna University

Chennai - 600 025.
Date : 02-12-2022

SIGNATURE OF THE CANDIDATE

CONTROLLER OF EXAMINATIONS i/c

ABOUT THE COLLEGE

Ramco Institute of Technology was founded by Shri P.R.Ramasubrahmaneya Rajha, founder Chairman of Ramco Group in 2013 with a vision to impart high quality engineering education. It is situated at the foothills of Western Ghats, 5 kms from Rajapalayam Bus stand in Ayyanar Kovil Road. The College provides world-class infrastructure and facilities to both the students and staff members. It has a very good learning atmosphere facilitated by high quality teaching by well-qualified and experienced faculty members, e-learning modules with smart classrooms thereby emulating IIT system of education.

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 2013. Currently, it offers a 4-year Bachelor of Engineering degree programme in Electrical and Electronics Engineering following Anna University curriculum. The curriculum broadly covers important fields such as Power System, Control System, Electromagnetic Fields, Analog and Digital Eectronics, Power Electronics, Electrical Machines and Drives, and High Voltage Engineering. The department has dedicated and state-of-the-art laboratories to cater to the academic and research activities. The laboratories are well equipped with computational facilities and resources both in terms of hardware and software. The department has on its roll well qualified and experienced faculty members, supporting staff and modern infrastructure in the form of elegant and smart classrooms, spacious laboratories, latest machinery and equipment.

OBJECTIVE OF THE COURSE

The objective of the course is to:

To understand the concept of PLC, SCADA and its industrial applications.

COURSE CONTENTS

The following topics will be covered:

- PLC system : applications of PLC, PLC modules, I/O module
- Installation of hardware and software components of given PLC system
- PLC timer functions, PLC counter functions, PLC simple arithmetic and logical functions
- PLC ladder logic diagram, Advanced PLC functions like SKIP, Master control relay, Jump with non-return, jump with return, Sequencer function
- PLC applications: Bottling filling plant, Material handling elevator, 2-axis robot with sequencer control, level control, Trouble shooting
- Introduction to DCS, concept of DCS, hierarchy of DCS, function of each level of DCS
- Introduction to supervisory control and data acquisition system, SCADA architecture
- Interfacing SCADA and PLC
- Induction motor drive: V/F control, direct torque control
- Introduction to AC drive interfacing technique
- Introduction to Stepper motor drives
- Introduction to DC Servo motor drives

Ramco Institute of Technology
Rajapalayam – 626117

Value Added Course
on
"Industrial Automation using PLC and SCADA"

Organized by
Department of Electrical & Electronics Engineering,
RAMCO INSTITUTE OF TECHNOLOGY
Rajapalayam - 626 117
Tel: +91 4563 233 400, 413
Website: www.ritrjpm.ac.in

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RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electrical and Electronics Engineering
Academic Year: 2022 – 2023 (Odd Semester)
Value Added Course Name list

Degree, Semester & Branch: V Semester B.E. EEE
Course Code & Name: EVA009 -Industrial Automation Using PLC and SCADA

Sl. No.	Reg.No.	Name of the Students
1.	953620105001	ABISHEK BEBITO A
2.	953620105002	BALASUBRAMANIAM M
3.	953620105003	CHANDRU R
4.	953620105004	DHANA BHARATHI LAKSHMI G
5.	953620105005	GAYATHREE P G
6.	953620105006	JEYAKRISHNABABU M
7.	953620105007	JEYAPADMA B
8.	953620105008	KALAI ARUN BALU R
9.	953620105009	KAYALVIZHI P
10.	953620105010	KEERTHIAN V
11.	953620105011	LAKSHMI NARAYANAN S
12.	953620105012	LEELAPRASADH A
13.	953620105013	MOHAMED NIKIL M
14.	953620105014	MUTHU HAREESH S
15.	953620105015	MUTHUPANDI P
16.	953620105016	PONSELVAM U
17.	953620105017	PRAVEEN SELVAMANI M
18.	953620105018	RAJKUMAR M
19.	953620105019	SABARISHA V
20.	953620105020	SAKTHI KARUPPASAMY K
21.	953620105021	SATHISH SIDDARTH V
22.	953620105022	SURYAPRAKASH P
23.	953620105023	UDHAYA T
24.	953620105024	VARUN GANESH M
25.	953620105025	VIJAY ANANDH S
26.	953620105026	YUVAPRIYA N
27.	953620105301	ABISHEK KUMAR J
28.	953620105302	ALAGARSAMY YASVANTH T R
29.	953620105303	ALAGENDRA R
30.	953620105304	ARUNKUMAR.S
31.	953620105305	ASHWATH ARJUN T
32.	953620105306	ASWIN S
33.	953620105307	AYYANAR A
34.	953620105308	BALARAMAN G
35.	953620105309	BHUVANESH G
36.	953620105310	GOKUL G

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Sl. No.	Reg.No.	Name of the Students
37.	953620105311	GOKUL N
38.	953620105312	GOKUL R
39.	953620105313	JEYASAKTHI M
40.	953620105314	KANNAN A S
41.	953620105315	KARPAGARAJ M
42.	953620105316	KASIRAJAN P
43.	953620105317	KISHORE P
44.	953620105318	NIKIL DEV
45.	953620105319	NITHISH ARJUN S K
46.	953620105320	RAJESH V
47.	953620105321	RAJKUMAR K
48.	953620105322	RAMGANESH N
49.	953620105323	SABARIVASA R
50.	953620105324	SAKTHI ARAVINTH M
51.	953620105325	SANGILIGURU R
52.	953620105326	SANTHOSH M
53.	953620105327	SASIKARUPPYA M
54.	953620105328	SENTHIL KUMAR M
55.	953620105329	SENTHIL MURUGAN J
56.	953620105330	SIVAGURUTHATCHINAMOORTHY G
57.	953620105331	SIVARAM R
58.	953620105332	SURYA KUMAR T
59.	953620105333	VAIRAMANI M
60.	953620105334	VIGNESHKUMAR G

7/11/22
VAC - Incharge

7/11/22
Course Coordinator

S. K 07/11/22
HoD/EEE
[S.KANNAN]

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RAMCO INSTITUTE OF TECHNOLOGY
Department of Electrical and Electronics Engineering

Report on Value Added Course

Title of the Value Added Course: EVA009 Industrial Automation using PLC & SCADA

Class for whom it was conducted: III Year B.E. EEE

Date of commencement and no. of days: 21.07.2022 to 27.07.2022 and 6 days

Venue: Control and Instrumentation Laboratory

Name, Designation and Address of the Resource Person(s) / Speaker(s):

1. Mr. E. Thangam, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam
2. Mr. S. Meenakshisundaravel, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam

The following topics are covered:

- Need and benefit of automation, PLC system : applications of PLC, PLC modules, I/O module, Communication module, PID module, Input analog and digital devices, Output analog and digital devices, PLC registers
- Installation of hardware and software components of given PLC system and Check it's working by running a sample program.
- PLC timer functions, PLC counter functions, PLC simple arithmetic and logical functions
- Identification of intelligent PID, Input, Output, Communication Module.
- Wire inputs, outputs via PLC input output modules
- Wire intelligent, PID, Communication module with PLC
- PLC ladder logic diagram, Advanced PLC functions like SKIP, Master control relay, Jump with non-return, jump with return, Sequencer function
- Develop and Implement ladder logic to realize D, RS, JK, T flip-flop
- PLC applications: Bottling filling plant, Material handling elevator, 2-axis robot with sequencer control, level control, Trouble shooting
- Introduction to DCS, concept of DCS, hierarchy of DCS, function of each level of DCS
- Simulate industrial application of PLC on Delay Timer
- Check the delay timer operation using actual PLC
- Check the UP/DOWN Counter operation using actual PLC
- Check the Subtraction function using actual PLC.
- Introduction to supervisory control and data acquisition system, SCADA architecture
- Introduction to supervisory control and data acquisition system, SCADA architecture
- Simulate the Bottle filling process operation on PLC simulator
- Simulate the material handling elevator operation on PLC simulator
- Interfacing SCADA and PLC
- Induction motor drive: V/F control, direct torque control
- Testing of DCS and SCADA, Set up a SCADA configuration
- Testing of induction motor drive.

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- Introduction to AC Servo motor drives, DC motor drives
- Testing of AC drives and Vector control modes of operation of AC drive.
- Introduction to AC drive interfacing technique
- Interfacing AC drive with PLC.
- Introduction to Stepper motor drives
- Introduction to DC Servo motor drives
- Testing of stepper motor drive
- Testing of servo drive and position control
- On the final day of course, assessment were made on following two topics
    - ✓ The students are asked to develop and implement a ladder logic PLC program of a given problem.
    - ✓ The students are asked to develop and implement an industrial SCADA system for a given problem

Event photos:

Feedback:

- ❖ The overall feedback about the course is good.
- ❖ All the students would like to have another program from same resource person.
- ❖ The topics like timer, ladder logic using PLC, Updown counter, automation paint mixture, Conveyor, burglar alarm are liked by students

27/07/22

Signature of Faculty Coordinator

S.K 27/07/22

HOD

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RAMCO INSTITUTE OF TECHNOLOGY

(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)
NAAC Accredited and An ISO 9001:2015 certified institution

RIT/EEE/VAC/2022/02 18.07.2022

To

The Controller of Examination,

Anna University,

Chennai – 600 025.

Sir,

Sub: Requesting permission – to offer the approved Value Added Courses –Academic Year 2022-2023 (ODD Semester)–Reg.

1. Ref: Affiliated Institutions – Guidelines for conducting Value Added Courses – Anna University Regulations 2017
2. Approval copy of Value Added Courses.

With reference to the above, in the academic year 2021-2022 (odd semester) the following approved value added courses listed in Center for Academic Courses, Anna University, Chennai and the same was offered to the students.

Sl.No.	Code Allotted	Title	Credits
1	EVA009	Industrial Automation using PLC and SCADA	2

Now we wish to offer the above approved course (EVA009) to the V Semester B.E. Electrical and Electronics Engineering students of this academic year 2022-2023 (odd semester). Hereby, we request your kind permission and consent to offer the same approved value added course for this Academic year 2022-2023 (odd semester). Expecting your reply in this regard to proceed further

Thanking you,
Yours faithfully,

HoD/EEE **Vice Principal** **Principal**

Cc:
The Chairman,
Faculty of Electrical Engineering,
Center for Academic Courses,
Anna University

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.
Virudhunagar District, Tamil Nadu. Tel : 04563 233400
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

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Off: 22357077 / 73
INT - 22357074
Fax / Dir : 22352272

CENTRE FOR ACADEMIC COURSES
ANNA UNIVERSITY
CHENNAI – 600 025

Dr. S.HOSIMIN THILAGAR
DIRECTOR

Letter No:2828/AU/EVA/CAC/2021 — 04.08.2021

To
The Controller of Examinations
Anna University
Chennai - 25.

Sir,

Sub : A.U. - CAC – Affiliated Institutions – Value Added Courses – Reg.

Ref: (i) Letter No. RIT/EEE/VAC/2021/01, dated: 27.07.2021.
(ii) Mail received from the Head, Department of EEE, Ramco Institute of Technology, dated. 02.08.2021.

.....

With reference to the letter cited above, course code is allotted for the Value Added Course as mentioned below:

S.No	Code Allotted	Title	L T P C
1.	EVA009	Industrial Automation using PLC & SCADA	1 0 2 2

This is for your kind information and necessary action at your end.

Yours faithfully,

4/8/2021

DIRECTOR

Copy to:
1. The Chairperson, Faculty of Electrical Engineering, Anna University, Chennai - 25.
2. The Principal, Ramco Institute of Technology, North Venganallur, Ayyankovil Road, Rajapalayam – 626 117, Tamilnadu.
3. The Stock File.

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RAMCO INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

Value Added Course Attendance details

Title of the Programme: EVA009 Industrial Automation using PLC & SCADA
Date and Venue: PSS Lab
Class for whom it was conducted: III year B.E. EEE
Name, Designation and Address of the Resource Person / Speaker :

1. Mr. E. Thangam, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam
2. Mr. S. Meenakshisundaravel, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam

Details of Participants:

Sl.No.	Name of the Participant	Signature of Participants									
		Day 1 21.07.22		Day 2 22.07.22		Day 3 23.07.22		Day 4 25.07.22		Day 5 26.07.22	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	Abishek Bebito A										
2.	Balasubramaniam M										
3.	Chandru R										
4.	Dhana Bharathi Lakshmi G										
5.	Gayathree P G										
6.	Jeyakrishnababu M										
7.	Jeyapadma B										
8.	Kalai Arun Balu R										
9.	Kayalvizhi P										
10.	Keerthian V										
11.	Lakshmi Narayanan S										
12.	Leelaprasadh A										
13.	Mohamed Nikil M										
14.	Abishek Kumar J										
15.	Alagarsamy Yasvanth T R										
16.	Alagendra R										
17.	Arunkumar.S										
18.	Ashwath Arjun T										

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Sl.No.	Name of the Participant	Signature of Participants									
		Day 1 21.07.22		Day 2 22.07.22		Day 3 23.07.22		Day 4 25.07.22		Day 5 26.07.22	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
19.	Aswin S										
20.	Ayyanar A										
21.	Balaraman G										
22.	Bhuvanesh G										
23.	Gokul G										
24.	Gokul N										
25.	Gokul R										
26.	Jeyasakthi M										
27.	Kannan A S										
28.	Karpagaraj M										
29.	Kasirajan P										
30	Kishore P										
31.	Nikil Dev										
32.	Muthu Hareesh S										
33.	Muthupandi P										
34.	Ponselvam U										
35.	Praveen Selvamani M										
36.	Rajkumar M										
37.	Sabarisha V										
38.	Sakthi Karuppasamy K										
39.	Sathish Siddarth V										
40.	Suryaprakash P										
41.	Udhaya T										
42.	Varun Ganesh M										
43.	Vijay Anandh S										
44.	Yuvapriya N										
45.	Nithish Arjun S K										
46.	Rajesh V										
47.	Rajkumar K										
48.	Ramganesh N										
49.	Sabarivasa R										

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Sl.No.	Name of the Participant	Signature of Participants									
		Day 1 21.07.22		Day 2 22.07.22		Day 3 23.07.22		Day 4 25.07.22		Day 5 26.07.22	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
50.	Sakthi Aravinth M										
51.	Sangiliguru R										
52.	Santhosh M										
53.	Sasikaruppya M										
54.	Senthil Kumar M										
55.	Senthil Murugan J										
56.	Sivaguruthatchinamoorthy G										
57.	Sivaram R										
58.	Surya Kumar T										
59.	Vairamani M										
60.	Vigneshkumar G										

27/07/22

Signature of Faculty Coordinator

27/07/22

HOD

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RAMCO INSITIUTE OF TECHNOLOGY, RAJAPALAYAM
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
VALUE ADDED COURSE DETAILS

Title of the Course : EVA009 Industrial Automation using PLC & SCADA
Year / Branch / Semester : III / EEE / V

Course Handling Faculty :
1. Mr. E. Thangam, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam
2. Mr. S. Meenakshisundaravel, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam

Session	Date/Day	Theory/Practical	Topics Covered
I	01.08.2022 (Monday)	Theory (2 Periods)	Need and benefit of automation, PLC system : applications of PLC, PLC modules, I/O module, Communication module, PID module, Input analog and digital devices, Output analog and digital devices, PLC registers
		Practical (2 Periods)	Installation of hardware and software components of given PLC system and Check it's working by running a sample program.
II	02.08.2022 (Tuesday)	Theory (2 Periods)	PLC timer functions, PLC counter functions, PLC simple arithmetic and logical functions
		Practical (2 Periods)	Identification of intelligent PID, Input, Output, Communication Module. Wire inputs, outputs via PLC input output modules Wire intelligent, PID, Communication module with PLC
III	03.08.2022 (Wednesday)	Theory (1 Periods)	PLC ladder logic diagram, Advanced PLC functions like SKIP, Master control relay, Jump with non-return, jump with return, Sequencer function
		Practical (2 Periods)	Develop and Implement ladder logic to realize D, RS, JK, T flip-flop
IV	04.08.2022 (Thursday)	Theory (1 Periods)	PLC applications: Bottling filling plant, Material handling elevator, 2-axis robot with sequencer control, level control, Trouble shooting
		Practical (2 Periods)	Simulate industrial application of PLC on Delay Timer Check the delay timer operation using actual PLC
V	05.08.2022 (Friday)	Theory (1 Periods)	Introduction to DCS, concept of DCS, hierarchy of DCS, function of each level of DCS
		Practical (3 Periods)	Check the UP/DOWN Counter operation using actual PLC Check the Subtraction function using actual PLC.
VI	06.08.2022 (Saturday)	Theory (1 Periods)	Introduction to supervisory control and data acquisition system, SCADA architecture
		Practical (3 Periods)	Simulate the Bottle filling process operation on PLC simulator

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Session	Date/Day	Theory/Practical	Topics Covered
VII	07.08.2022 (Sunday)	Theory (1 Periods)	Introduction to supervisory control and data acquisition system, SCADA architecture
		Practical (3 Periods)	Simulate the material handling elevator operation on PLC simulator
VIII	08.08.2022 (Monday)	Theory (1 Periods)	Interfacing SCADA and PLC
		Practical (2 Periods)	Testing of DCS and SCADA, Set up a SCADA configuration
Assessment I	09.08.2022 (Tuesday)	The students are asked to develop and implement a ladder logic PLC program of a given problem.	
IX	10.08.2022 (Wednesday)	Theory (1 Periods)	Induction motor drive: V/F control, direct torque control
		Practical (2 Periods)	Testing of induction motor drive.
X	11.08.2022 (Thursday)	Theory (1 Periods)	Introduction to AC Servo motor drives, DC motor drives
		Practical (2 Periods)	Testing of AC drives and Vector control modes of operation of AC drive.
XI	12.08.2022 (Friday)	Theory (1 Periods)	Introduction to AC drive interfacing technique
		Practical (3 Periods)	Interfacing AC drive with PLC.
XII	13.08.2022 (Saturday)	Theory (1 Periods)	Introduction to Stepper motor drives
		Practical (2 Periods)	Testing of stepper motor drive.
XIII	14.08.2022 (Sunday)	Theory (1 Periods)	Introduction to DC Servo motor drives
		Practical (2 Periods)	Testing of servo drive and position control
Assessment II	15.08.2022 (Monday)	The students are asked to develop and implement an industrial SCADA system for a given problem.	

Note: The assessment for the above course will be conducted by considering all the criteria of rubrics method and will be assessed by evaluation committee constituted by the Head of the department.

Course Designer & Coordinator

HoD/EEE

Vice-Principal

Principal

Evaluation Team Members:

1. Head of the Department
2. One senior faculty Member Handling the course
3. One senior faculty Member Nominated by Head of the Institution

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RAMCO INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

Academic Year: 2022 - 2023 (Odd Semester)

PORTAL ENTRY

Attendance & Mark Statement

V Semester B.E Electrical and Electronics Engineering

Name of the Faculty member : Mr. E. Thangam & Mr. S. Meenakshi Sundaravel
Course Code & Title : EVA009 Industrial Automation using PLC and SCADA (Value Added Course)
No. of Periods Conducted : 30

Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Internal Marks
1.	953620105001	ABISHEK BEBITO A	30	93
2.	953620105002	BALASUBRAMANIAM M	30	83
3.	953620105003	CHANDRU R	30	92
4.	953620105004	DHANA BHARATHI LAKSHMI G	30	93
5.	953620105005	GAYATHREE P G	30	92
6.	953620105006	JEYAKRISHNABABU M	30	87
7.	953620105007	JEYAPADMA B	30	94
8.	953620105008	KALAI ARUN BALU R	30	78
9.	953620105009	KAYALVIZHI P	30	72
10.	953620105010	KEERTHIAN V	30	90
11.	953620105011	LAKSHMI NARAYANAN S	30	87
12.	953620105012	LEELAPRASADH A	30	94
13.	953620105013	MOHAMED NIKIL M	30	65
14.	953620105014	MUTHU HAREESH S	30	74
15.	953620105015	MUTHUPANDI P	30	79
16.	953620105016	PONSELVAM U	30	90
17.	953620105017	PRAVEEN SELVAMANI M	30	85
18.	953620105018	RAJKUMAR M	30	83
19.	953620105019	SABARISHA V	30	75
20.	953620105020	SAKTHI KARUPPASAMY K	30	91
21.	953620105021	SATHISH SIDDARTH V	30	81
22.	953620105022	SURYAPRAKASH P	30	83
23.	953620105023	UDHAYA T	30	70
24.	953620105024	VARUN GANESH M	30	62
25.	953620105025	VIJAY ANANDH S	30	91
26.	953620105026	YUVAPRIYA N	30	72
27.	953620105301	ABISHEK KUMAR J	30	92
28.	953620105302	ALAGARSAMY YASVANTH T R	30	100

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Sl. No.	Reg. No.	Name of the Student	No. of Periods attended	Internal Marks
29.	953620105303	ALAGENDRA R	30	82
30.	953620105304	ARUNKUMAR.S	30	94
31.	953620105305	ASHWATH ARJUN T	30	83
32.	953620105306	ASWIN S	30	77
33.	953620105307	AYYANAR A	30	78
34.	953620105308	BALARAMAN G	30	88
35.	953620105309	BHUVANESH G	30	95
36.	953620105310	GOKUL G	30	90
37.	953620105311	GOKUL N	30	66
38.	953620105312	GOKUL R	30	94
39.	953620105313	JEYASAKTHI M	30	86
40.	953620105314	KANNAN A S	30	85
41.	953620105315	KARPAGARAJ M	30	74
42.	953620105316	KASIRAJAN P	30	99
43.	953620105317	KISHORE P	30	95
44.	953620105318	NIKIL DEV	30	90
45.	953620105319	NITHISH ARJUN S K	30	78
46.	953620105320	RAJESH V	30	92
47.	953620105321	RAJKUMAR K	30	80
48.	953620105322	RAMGANESH N	30	75
49.	953620105323	SABARIVASA R	30	76
50.	953620105324	SAKTHI ARAVINTH M	30	96
51.	953620105325	SANGILIGURU R	30	90
52.	953620105326	SANTHOSH M	30	79
53.	953620105327	SASIKARUPPYA M	30	82
54.	953620105328	SENTHIL KUMAR M	30	82
55.	953620105329	SENTHIL MURUGAN J	30	85
56.	953620105330	SIVAGURUTHATCHINAMOORTHY G	30	71
57.	953620105331	SIVARAM R	30	91
58.	953620105332	SURYA KUMAR T	30	83
59.	953620105333	VAIRAMANI M	30	81
60.	953620105334	VIGNESHKUMAR G	30	85

VAC Faculty Incharge

Course Coordinator

HoD/EEE

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant :
Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA
Date and Venue : PSS Lab
Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☐ Very Good ☐ Good ☑ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☐ 85-95% ☑ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most:

m. Any specific feedback:

Date: 26.07.22 **Signature of Participant:**

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant : G. BALARAMAN
Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA
Date and Venue : PSS Lab
Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☑ 85-95% ☐ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most:

m. Any specific feedback:

Date: **Signature of Participant:**

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant : A. Ayyanar.

Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA

Date and Venue : PSS Lab

Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☐ Very Good ☐ Good ☑ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☑ 85-95% ☐ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most:

m. Any specific feedback:

Date: **Signature of Participant:**

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant : V. Rajesh
Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA
Date and Venue : PSS Lab
Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☑ 85-95% ☐ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most:

m. Any specific feedback:

Date: **Signature of Participant:**

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant : VIGNESH KUMAR. G

Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA

Date and Venue : PSS Lab

Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☐ 85-95% ☑ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most: ladder Logic in PLC Simen Software Logo V8

m. Any specific feedback: Nothing

Date: **Signature of Participant:** G. Vignesh

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

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RAMCO INSTITUTE OF TECHNOLOGY
Department of EEE

Training Programme Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant : P. KayalVizhi.
Title of Programme / Course attended : Value added course on Industrial Automation using PLC and SCADA
Date and Venue : PSS Lab
Name of the Resource Person / Speaker : Mr. E. Thangam-AP(SG)/EEE, Mr. S. Meenakshisundaravel-AP(SG)/EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☐ 85-95% ☑ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☐ Very Good ☑ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most: —

m. Any specific feedback: —

Date: **Signature of Participant:** P. KayalVizhi.

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

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RAMCO INSITIUTE OF TECHNOLOGY, RAJAPALAYAM
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
VALUE ADDED COURSE DETAILS

Title of the Course : **EVA009 Industrial Automation using PLC & SCADA**
Year / Branch / Semester : **III / EEE / V**

Course Handling Faculty :
1. Mr. E. Thangam, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam
2. Mr. S. Meenakshisundaravel, Assistant Professor (SG)/EEE, Ramco Institute of Technology, Rajapalayam

Time: **FN: 9.00 A.M. to 12.40 P.M., AN: 1.20 P.M. to 5.00 P.M.**

Venue: **Power System Simulation Laboratory**

Session	Date/Day	Theory/Practical	Topics Covered
I-FN	21.08.2022 (Thursday)	Theory (1 Periods)	Need and benefit of automation, PLC system : applications of PLC, PLC modules, I/O module, Communication module, PID module, Input analog and digital devices, Output analog and digital devices, PLC registers
		Practical (2 Periods)	Installation of hardware and software components of given PLC system and Check it's working by running a sample program.
II- AN	21.08.2022 (Thursday)	Theory (2 Periods)	PLC timer functions, PLC counter functions, PLC simple arithmetic and logical functions
		Practical (2 Periods)	Identification of intelligent PID, Input, Output, Communication Module. Wire inputs, outputs via PLC input output modules Wire intelligent, PID, Communication module with PLC
III- FN	22.08.2022 (Friday)	Theory (1 Periods)	PLC ladder logic diagram, Advanced PLC functions like SKIP, Master control relay, Jump with non-return, jump with return, Sequencer function
		Practical (2 Periods)	Develop and Implement ladder logic to realize D, RS, JK, T flip-flop
IV-AN	22.08.2022 (Friday)	Theory (2 Periods)	PLC applications: Bottling filling plant, Material handling elevator, 2-axis robot with sequencer control, level control, Trouble shooting Introduction to DCS, concept of DCS, hierarchy of DCS, function of each level of DCS
		Practical (2 Periods)	Simulate industrial application of PLC on Delay Timer Check the delay timer operation using actual PLC Check the UP/DOWN Counter operation using actual PLC Check the Subtraction function using actual PLC.

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Session	Date/Day	Theory/Practical	Topics Covered
V-FN	23.08.2022 (Saturday)	Theory (1 Periods)	Introduction to supervisory control and data acquisition system, SCADA architecture Introduction to supervisory control and data acquisition system, SCADA architecture
		Practical (2 Periods)	Simulate the Bottle filling process operation on PLC simulator Simulate the material handling elevator operation on PLC simulator
VI- AN	23.08.2022 (Saturday)	Theory (1 Periods)	Interfacing SCADA and PLC Induction motor drive: V/F control, direct torque control
		Practical (3 Periods)	Testing of DCS and SCADA, Set up a SCADA configuration Testing of induction motor drive.
VII-FN	25.08.2022 (Monday)	Theory (1 Periods)	Introduction to AC Servo motor drives, DC motor drives
		Practical (2 Periods)	Testing of AC drives and Vector control modes of operation of AC drive.
VIII-AN	25.08.2022 (Monday)	Theory (2 Periods)	Introduction to AC drive interfacing technique
		Practical (2 Periods)	Interfacing AC drive with PLC.
IX-FN	26.08.2022 (Tuesday)	Theory (1 Periods)	Introduction to Stepper motor drives Introduction to DC Servo motor drives
		Practical (2 Periods)	Testing of stepper motor drive Testing of servo drive and position control
X-AN Assessment I & II	26.08.2022 (Tuesday)	The students are asked to develop and implement a ladder logic PLC program of a given problem. The students are asked to develop and implement an industrial SCADA system for a given problem.	

18/7/22, 18/7/22, 18/7/22
Course Designer & Coordinator

S.K 18/07/22
HoD/EEE
[S.KANNAN]

Vice-Principal

18/7/22
Principal

Evaluation Team Members:

1. Head of the Department
2. One senior faculty Member Handling the course
3. One senior faculty Member Nominated by Head of the Institution

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ABOUT THE COLLEGE

Ramco Institute of Technology was founded by Shri P.R.Ramasubrahmaneya Rajha, founder Chairman of Ramco Group in 2013 with a vision to impart high quality engineering education. It is situated at the foothills of Western Ghats, 5 kms from Rajapalayam Bus stand in Ayyanar Kovil Road. The College provides world-class infrastructure and facilities to both the students and staff members. It has a very good learning atmosphere facilitated by high quality teaching by well-qualified and experienced faculty members, e-learning modules with smart classrooms thereby emulating IIT system of education.

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 2013. Currently, it offers a 4-year Bachelor of Engineering degree programme in Electrical and Electronics Engineering following Anna University curriculum. The curriculum broadly covers important fields such as Power System, Control System, Electromagnetic Fields, Analog and Digital Eectronics, Power Electronics, Electrical Machines and Drives, and High Voltage Engineering. The department has dedicated and state-of-the-art laboratories to cater to the academic and research activities. The laboratories are well equipped with computational facilities and resources both in terms of hardware and software. The department has on its roll well qualified and experienced faculty members, supporting staff and modern infrastructure in the form of elegant and smart classrooms, spacious laboratories, latest machinery and equipment.

OBJECTIVE OF THE COURSE

The objective of the course is to:
To develop the coding for any type of industrial applications using MATLAB.

COURSE CONTENTS

The following topics will be covered:

- MATLAB commands
- Vectors and matrices
- Importing data
- Indexing into and modifying arrays
- Array calculations
- Calling functions
- Obtaining help
- Plotting data
- MATLAB scripts
- Logical arrays
- Programming

Ramco Institute of Technology
Rajapalayam – 626117

Value Added Course
on
"Application of MATLAB for Electrical Engineering Problems"

MATLAB®

Organized by
Department of Electrical & Electronics Engineering,
RAMCO INSTITUTE OF TECHNOLOGY
Rajapalayam - 626 117
Tel: +91 4563 233 400, 413
Website: www.ritrjpm.ac.in

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
VALUE ADDED COURSE

Academic Year 2021-2022(Odd Semester)

24.01.2022

Submitted to the Principal

Sir,

To improve the employability of II year EEE students in industrial sectors and also for doing their mini and major projects. The skill and knowledge in the areas of MATLAB is very much required. These technical skills will be imparted and strengthened by means of conducting the following value added course to II Year EEE students.

Sl. No	Name of the Department	Year	Date	Name of the course	Resource Person
1	EEE	II	24.01.2022, 25.01.2022, 27.01.2022 to 29.01.2022 and 31.01.2022	Application of MATLAB for Electrical Engineering Problems	Dr. S. Kannan, Prof & Head/EEE Dr. B. Deepalakshmi, Asso. Prof/EEE

By conducting this value added course, the following PO's will be mapped:

Name of Course	PO1 (Engineering Knowledge)	PO2 (Problem analysis)	PO3 (Design/Development of solutions)	PO12 (Lifelong learning)	PSO1	PSO3
Application of MATLAB for Electrical Engineering Problems	3	3	3	3	3	2

In this regard, we request your kind approval for conducting above mentioned value added course to II year EEE students.

24/01/2022
Faculty Coordinator
[A.S.VIGNESHWAR]

24/01/22
HoD/EEE

Vice Principal

Principal
25/1/22

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE

Academic Year 2021-2022(Odd Semester)

CIRCULAR

22.01.2022

This is to inform you that, Value Added Course is planned to conduct on "Application of MATLAB for Electrical Engineering Problems" for II-year B.E EEE Students. The students are advised to enhance their knowledge by attending the value added course.

Date: 24.01.2022, 25.01.2022, 27.01.2022 to 29.01.2022 and 31.01.2022

Platform: Google Meet

Time: 10.00 AM – 5.00 PM

22/01/2022

Faculty Coordinator

22/01/22

HOD/EEE

Copy to:
1) Department Notice Board
2) Circulate to all the Faculty Members
3) File

RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001:2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VALUE ADDED COURSE

Academic Year 2021-2022(Odd Semester)

Date: 22.01.22

To improve the employability of II year EEE students in industrial sectors, the skill and knowledge in the areas of MATLAB is very much required. These technical skills will be imparted and strengthened by means of conducting the following relevant value added course by internal faculty members –Dr. S. Kannan, Prof/Head-EEE & Dr. B. Deepalakshmi, Asso. Prof./EEE. For the above said reasons, the following value added course is going to be organised:

Sl.No.	Year	Name of the course	Description
1.	II	Application of MATLAB for Electrical Engineering Problems	• This course is used to understand the basic concepts of MATLAB. • It is used to provide the knowledge about how to solve real time engineering problems using MATLAB.

22/01/2022
Faculty In-Charge
(Value Added Course)

S. Kannan 22/01/22
HoD/EEE

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

Value Added Course Attendance details

Title of the Programme: Application of MATLAB for Electrical Engineering Problems
Date : 24.01.2022, 25.01.2022, 27.01.2022 to 29.01.2022 and 31.01.2022
Class for whom it was conducted: II year B.E. EEE
Name, Designation and Address of the Resource Person / Speaker : Dr. S. Kannan, Prof. & Head/EEE and Dr. B. Deepalakshmi, Asso. Prof./EEE

Details of Participants:

Sl.No.	Name of the Participant	Signature of Participants											
		24.01.2022		25.01.2022		27.01.2022		28.01.2022		29.01.2022		31.01.2022	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	ABISHEK BEBITO A	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
2.	BALASUBRAMANIAM M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
3.	CHANDRU R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
4.	DHANA BHARATHI LAKSHMI G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
5.	GAYATHREE P G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
6.	JEYAKRISHNABABU M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
7.	JEYAPADMA B	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
8.	KALAI ARUN BALU R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
9.	KAYALVIZHI P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
10.	KEERTHIAN V	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
11.	LAKSHMI NARAYANAN S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
12.	LEELAPRASADH A	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
13.	MOHAMED NIKIL M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
14.	ABISHEK KUMAR J	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
15.	ALAGARSAMY YASVANTH T R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
16.	ALAGENDRA R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
17.	ARUNKUMAR.S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
18.	ASHWATH ARJUN T	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
19.	ASWIN S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
20.	AYANAR A	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Sl.No.	Name of the Participant	Signature of Participants											
		24.01.2022		25.01.2022		27.01.2022		28.01.2022		29.01.2022		31.01.2022	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
21.	BALARAMAN G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
22.	BHUVANESH G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
23.	GOKUL G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
24.	GOKUL N	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
25.	GOKUL R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
26.	JEYASAKTHI M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
27.	KANNAN A S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
28.	KARPAGARAJ M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
29.	KASIRAJAN P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
30.	KISHORE P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
31.	NIKIL DEV	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
32.	MUTHU HAREESH S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
33.	MUTHUPANDI P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
34.	PONSELVAM U	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
35.	PRAVEEN SELVAMANI M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
36.	RAJKUMAR M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
37.	SABARISHA V	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
38.	SAKTHI KARUPPASAMY K	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
39.	SATHISH SIDDARTH V	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
40.	SURYAPRAKASH P	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
41.	UDHAYA T	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
42.	VARUN GANESH M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
43.	VIJAY ANANDH S	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
44.	YUVAPRIYA N	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
45.	NITHISH ARJUN S K	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
46.	RAJESH V	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
47.	RAJKUMAR K	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
48.	RAMGANESH N	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
49.	SABARIVASA R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
50.	SAKTHI ARAVINTH M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
51.	SANGILIGURU R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

Sl.No.	Name of the Participant	Signature of Participants											
		24.01.2022		25.01.2022		27.01.2022		28.01.2022		29.01.2022		31.01.2022	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
52.	SANTHOSH M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
53.	SASIKARUPPYA M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
54.	SENTHIL KUMAR M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
55.	SENTHIL MURUGAN J	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
56.	SIVAGURUTHATCHINAMOORTHY G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
57.	SIVARAM R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
58.	SURYA KUMAR T	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
59.	VAIRAMANI M	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
60.	VIGNESHKUMAR G	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
61.	YOGESWARAN G R	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present

31/01/22

Signature of Faculty Coordinator

S.K 31/01/22

HOD

[S.KANNAN]

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Vijay Anandh S

has successfully completed **100%** of the self-paced training course

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DIRECTOR, TRAINING SERVICES

25 January 2022

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Jeyapadma B

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

02 December 2022

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Course Completion Certificate

GAYATHREE P.G

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

25 November 2022

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Dhana Bharathi Lakshmi G

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

28 January 2022

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A.Leela Prasadh

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

26 January 2022

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Course Completion Certificate

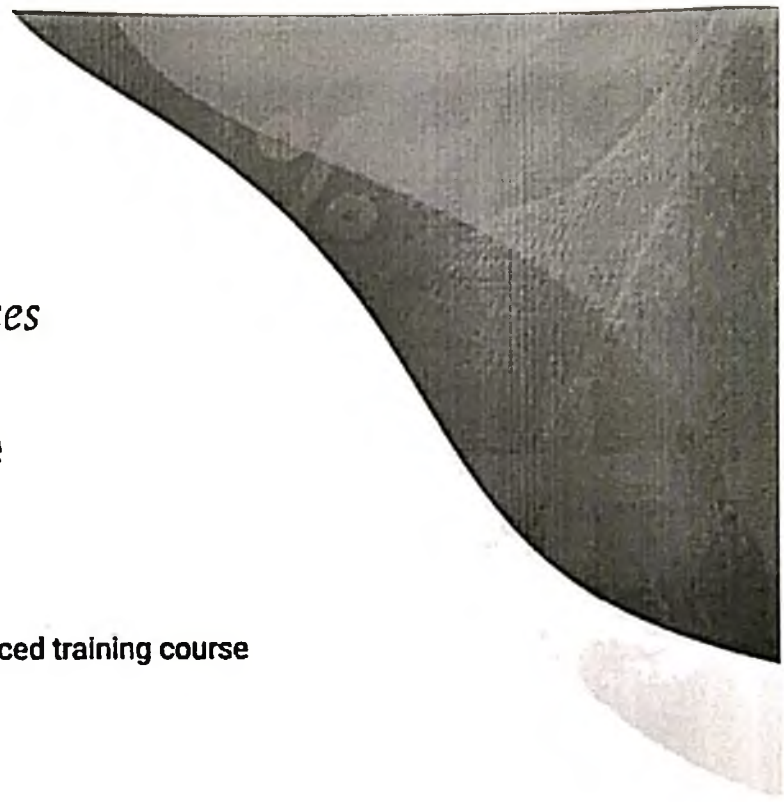
Chandru R

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

25 January 2022



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Lakshmi Narayanan

has successfully completed **100%** of the self-paced training course

MATLAB Onramp

DIRECTOR, TRAINING SERVICES

29 January 2022

RAMCO INSTITUTE OF TECHNOLOGY
Department of Electrical and Electronics Engineering

Value Added Course Feedback Form

(Please fill-up the form to help us improve and maintain the quality of the programme)

Name of the Participant (Optional) : R. Chandru.
Title of Programme / Course attended : Application of MATLAB for Electrical Engineering Problems
Date and Venue : 24.01.2022, 25.01.2022, 27.01.2022 to 29.01.2022,31.01.2022
Name of the Resource Person/Speaker : Dr. S. Kannan, Prof. & Head/EEE and Dr. B. Deepalakshmi, Asso. Prof./EEE

(Please ✓ in appropriate box)

a. How do you feel about the programme / course content?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

b. How do you rate the lecture sessions / presentations? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

c. How do you rate the practical sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

d. How do you rate the interactive sessions? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

e. How do you rate the quality of course material given to you? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

f. How do you rate the usefulness of programme in improving your skills?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

g. To what extent you have improved your knowledge / skills after attending the programme?

☑ 85-95% ☐ 75-85% ☐ 50-75% ☐ 25-50%

h. How do you rate the timely communication in all aspects of the programme? (if relevant)

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

i. How do you rate the overall arrangement and conduct of the programme / course?

☑ Very Good ☐ Good ☐ Satisfactory ☐ Poor

j. Whether the contents discussed were relevant to the topics planned? Yes / No

k. Would you like to have another programme by the same Resource person? Yes / No

l. Name the specific topic or session, which you liked most: MATLAB onramp

m. Any specific feedback: thanks for the program

Date: 31.01.22 Signature of Participant: R. Chandru

Form No. TP 04 Rev.No. 00 Effective Date: 18.01.2016

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Odd Semester)

RIT/ ECE/CCM/2021-2022/03 Date: 18.11.2021

CIRCULAR

The **Third** class committee meeting for the **Second Year Electronics and Communication Engineering 'B' section** will be held on **19th November, 2021.** All the Faculty members handling the theory and laboratory courses for the above class and student representatives are requested to attend the meeting, in the **ECE Seminar Hall** at **10.00 AM** without fail.

Chair Person 18/11/2021

HOD 18/11/21

Class Committee Members:
Class Adviser: Ms.S.Harini Shriram
Mentor: Dr.S.Vairaprakash & Mr.P.Venkatesh

S.No.	Faculty Members	Course Code & Title	Signature
1.	Dr.T.Maniamran	MA8352 - Linear Algebra and Partial Differential Equations	18/11/21
2.	Dr.V.Anusuya	EC8393 - Fundamentals of Data Structures in C	18/11/21
3.	Mrs.V.SrirengaNachiyar	EC8351 - Electronic Circuits I	
4.	Ms.S.Harini Shriram	EC8352 - Signals and Systems	
5.	Mr.D.Gopinath	EC8392 - Digital Electronics	
6.	Mr.P.Venkatesh	EC8391 - Control Systems Engineering	
7.	Dr.V.Anusuya & Ms.P.Jothi Thilaga	EC8381 - Fundamentals of Data Structures in C Laboratory	18/11/21 18/11/21
8.	Mrs.V.SrirengaNachiyar & Mr.P.Venkatesh	EC8361 - Analog and Digital Circuits Laboratory	
9.	Dr.R.Naganathan	HS8381 - Interpersonal Skills/Listening & Speaking	

S.No.	Student Members	Signature
1.	Ms.S.Monica	
2.	Mr.R.Rangith	
3.	Mr.M.Santhosh	Santhosh.M
4.	Ms.R.Shrinithi	R.Shrinithi
5.	Mr.U.Sudharsanakumar	U. Sudharsanakumar
6.	Ms.S.Suruthi	Suruthi

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Odd Semester)

202

Minutes of Class Committee Meeting III

Class: III Semester B.E. ECE B **Date & Time: 19.11.2021 & 10.00 AM**

Members present:

Chair Person: Mr.K.Ragavan Class Adviser Ms.S.Harini Shriram

Faculty members:
1. Dr. T.Maniamran
2. Dr.V.Anusuya
3. Mrs.V.SrirengaNachiyar
4. Ms.S.Harini Shriram
5. Mr.D.Gopinath
6. Mr.P.Venkatesh
7. Dr R.Naganathan
8. Ms.P.Jothi Thilaga

Student Representatives:
1. Ms.S.Monica
2. Mr.R.Rangith
3. Mr.M.Santhosh
4. Ms.R.Shrinithi
5. Mr.U.Sudharsanakumar
6. Ms.S.Suruthi

Points discussed	Target Date	Responsibility	Remarks
1. Chairperson welcomed the Class Committee members and reviewed the progress of previous meeting held on 06.10.2021	Continuous	All the students	-
2. **Internal Assessment Test II (IAT II) Performance:** The student's performance on the Internal Assessment Test II, as well as their CO2 and CO3 outcome achievement, were reviewed by the Chairperson. ➢ MA8352 - 51% ➢ EC8393 - 74% ➢ EC8352 – 27.66%	Continuous	All the students	-

➢ EC8391 - 96% ➢ EC8392 – 46.94% ➢ EC8351 – 39.58% ➢ Overall pass (%) = 17.65% • In four subjects, the pass percentage has been observed to be low. The students were asked about the reasons for their poor performance and encouraged to perform well in IAT III. • The students were also advised to be attentive in the class.			
3. **Teaching Learning Progress (TLP) after CCM II:** **a. Status of syllabus completion** • The Chairperson inquired about the status of the syllabus. Four units had been completed and the fifth had begun in all of the courses. **b. Preparedness level for IAT III:** • The students were instructed to study hard for IAT III in order to improve their internal marks, which would help them achieve a higher CO attainment. **c. Input required for end semester exam:** • The students were questioned about the input needed for the end-of-semester examination. If students think a course is difficult to study, they should consult with the faculty member in charge to clear up any doubts and ensure good preparation.	Continuous	Faculty Members & All the Students	-
4. **Student support services and Effectiveness of Mentoring:** The students were asked about the conduct of the mentor meeting, and they were advised that they should bring up any issues they had at that meeting for their betterment	Continuous	Mentors & All the Students	-
5. **Outcome of Internship:** The chairperson advised the students to go for internship, which is required in R2017, and they were instructed to use what they learn from the internship to their mini-projects.	Continuous	Internship coordinator & All the Students	-
6. **Feedback from students on each course:** • The students have given good feedback for all the courses.	Continuous	All the students	-

a. **Content beyond Syllabus suggestion:** The students were asked if they had any suggestions for content beyond the curriculum that they thought would be relevant for their mini projects or laboratory courses b. **Suggestion on TLP:** They were also asked for suggestions on how to improve the teaching learning process, and they answered all was well and that they had none.			
7. **Guidelines for end semester examination:** • Since the students have more than enough time to study for the end-of-semester examinations, they were encouraged to take use of it and get high CGPAs. They were also asked to provide a xerox copy of the previous year's university question papers, as well as the two marks with answers material provided by the subject faculty members	Continuous	Faculty members & All the students	-
8. **Training and Placement Activities:** The chairperson encourage the students to utilize the training and placement hours effectively to learn the basic aptitude and programming languages.	Continuous	All the students	-
9. **Appreciation of students' positive achievements:** The students were inquired about any achievements they had done. They were encouraged to participate in both co-curricular and extra-curricular activities since it would benefit their resumes.	Continuous	All the Faculty members & Students	-
10. **Any other matter: Discipline maintenance:** They were advised to maintain discipline inside the college campus and they should not involve in any indisciplinary activities.	Continuous	All the students	-

23/11/2021

Chair Person

23/11/21

HOD

Copy circulated among all members of Class Committee
Copy submitted to the Principal office
Copy to File

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering
Academic Year: 2021 - 2022 (Even Semester)

RIT/ ECE/CCM/2021-2022/02

Date: 27.04.2022

CIRCULAR

The **Second** class committee meeting for the **Second Year Electronics and Communication Engineering 'A' section** will be held on **28th April, 2022.** All the Faculty members handling the theory and laboratory courses for the above class and student representatives are requested to attend the meeting, in the **ECE Seminar Hall** at **03.00 PM** without fail.

27/4/2022

Chair Person **HOD**

Class Committee Members:
Class Adviser: Mr.G.Sivakumar
Mentor: Dr.A.Lakshmi & Mr.B.Kannan

S.No.	Faculty Members	Course Code & Title	Signature
1.	Mr.T.Selvaganesh	MA8451- Probability and Random Processes	
2.	Dr.S.Vaira Prakash	EC8452 - Electronic Circuits II	
3.	Mrs.G.Gnana Priya	EC8491 - Communication Theory	28/4/22
4.	Mrs.S.Jeeva	EC8451 - Electromagnetic Fields	
5.	Dr.R.Rajalakshmi	EC8453 - Linear Integrated Circuits	28/4/22
6.	Dr.G.Kanthimathi	GE8291 - Environmental Science and Engineering	
7.	Mrs.G.Gnana Priya & Dr.S.Vaira Prakash	EC8461 - Circuits Design and Simulation Laboratory	25/4/22
8.	Dr.R.Rajalakshmi & Mrs.S.Jeeva	EC8462 - Linear Integrated Circuits Laboratory	28/4/22
9.	Mr.G.Sivakumar	Placement Training	27/4/22

S.No.	Student Members	Signature
1.	Ms. G. Anusuya	
2.	Mr. A. Dilipkumar	A-Dilipkumar
3.	Mr. I. Harris	I.Harris
4.	Mr. R. Karrupasamy	
5.	Mr. R. Madhan	R.Madhan
6.	Mr. A. Manikanda Prabhu	

RAMCO INSTITUTE OF TECHNOLOGY

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Department of Electronics and Communication Engineering

Academic Year: 2021 - 2022 (Even Semester)

Minutes of Class Committee Meeting II

Class: IV Semester B.E. ECE A **Date & Time: 28.04.2022 & 03.00 PM**

Members present:

Chair Person: Dr.K.Ragavan Class Adviser Mr.G.Sivakumar

Faculty members:

1. Mr.T.Selvaganesh
2. Dr.S.Vaira Prakash
3. Mrs.G.Gnana Priya
4. Mrs.S.Jeeva
5. Dr.R.Rajalakshmi
6. Dr.G.Kanthimathi
7. Mr.G.Sivakumar

Student Representatives:

1. Ms. G. Anusuya
2. Mr. A. Dilipkumar
3. Mr. I. Haaris
4. Mr. R. Karrupasamy
5. Mr. R. Madhan
6. Mr. A. Manikanda Prabhu

Points discussed	Target Date	Current Status	Responsibility
1. The Chairperson welcomed the Class Committee members and reviewed the progress of the previous meeting held on 16.03.2022.	Continuous	-	All the students
2. **Internal assessment Test-I Performance** • **Results percentage subject wise and for Class** The results of the Internal Assessment Test-I			

were reviewed by the Chairperson. ➢ MA8451 - 50% ➢ EC8452 – 18.4% ➢ EC8491 – 28.9% ➢ EC8451 – 26.8% ➢ EC8453 – 23.1% ➢ GE8291 – 62.2% ➢ Overall pass (%) = 2.04% Students were questioned about their poor performance in IAT-I. Students reported that preparing for and taking the offline test was difficult. Students also acknowledged to not having fully prepared for the IAT-I. **Outcome Attainment in CO1 and CO2** The Chairperson and Faculty members emphasised the importance of CO attainment to the students and informed most of the courses had poor CO1 and CO2 outcomes. Students were instructed to do well on all retests. • **Measures to be taken to improve attainment level** Students must use the retest option effectively in order to improve their grades and CO attainment.	Continuous	-	All the students
3. **Feedback submission on TLP** • The Chairperson enquired about the progress of the academic year 2021-2022 (Even semester) feedback submission. All the students said they had completed the feedback.	Continuous	-	All the students
• **TLP Progress after CCM I** • The Chairperson asked about the syllabus completion. Students said that two units had been finished and a third unit had been taught in the most of subjects. • The Chairperson inquired about course specific grievances. The students asked to explain the concepts and derivations of EC-I for better understanding of Electronic Circuits-II. The students were advised to review the basic concepts of Electronic	Continuous	The faculty members will resolve the grievances addressed by the students	Faculty members & All the students

Circuits – I subject, as it is not possible to derive all the derivations of EC-I in the class. • The student said they were unable to follow LIC class and requested the faculty to handle the subject slowly. Remaining subjects there were no difficulties, according to the students. • Students were encouraged by faculty and chairman to study hard for their Internal Assessment Test-II and get good marks in all subjects			
4. **Assessment Methods** Faculty members were notified about the assignment, and quizzes and tutorial grades were utilized to measure outcomes. Chairperson advised the students to complete and submit assignments on time.	Continuous	-	Faculty members & All the students
5. **Identification of students on learning abilities** **a. Method followed for identification** • The chairperson requested faculty members to select students based on their learning abilities and IAT-I performance, with a key attention on slow learners. • To develop bright student's talents, the faculty members should be allotted projects and other co-curricular activities that are related to their curriculum. **b. Strategies to be followed for different categories of students.** • More example problems to the slow learners. • Revising the important topics. • Discussing university questions.	Continuous	-	All the Faculty members & Students
6. **Review of attendance/ Identification of irregular students** • Class Advisor and Faculty members advised the students to attend the class regularly. Students who have less than 75% attendance will not be permitted to take university examinations.	Continuous	-	Class Advisor & All the students

• The chairperson and faculty members advised the students to maintain the timing and dress code for their classes • The chairperson insisted that the students give their morning presentations between 8.50 and 9.00 a.m. in order to strengthen their communication and presenting skills. • The students were instructed to maintain discipline inside and outside the college campus.			
7. **Inter college participation** Chairperson advised the students to participate in various extracurricular and co-curricular events conducted through professional society and clubs in various Engineering colleges in order to develop their technical skills and knowledge.	Continuous	-	Class Advisor & Mentor and All the students
8. **End Semester Results Discussion** Faculty members and the Chairperson discussed the end-of-semester examination results from the previous semester; due to the pandemic, the end-of-semester examinations were conducted online, with good results. Students were instructed to study attentively in preparation for their coming End-of-Semester Examinations.	Continuous	-	Class Advisor, Mentors & All the students
9. **Career Guidance Awareness** The chairperson and faculty members encouraged the students to attend GATE Coaching and Other Language Learning classes.	Continuous	-	Faculty Incharge & All the students
10. **Student's involvement in Professional societies & Engineering events/ Dept. Newsletter contribution / Participations** • For improving the skill development, chairperson and faculty members asked the students to participate in engineering activities through professional societies like IETE, IE(I) and ISTE. • The chairperson encouraged the students to participate in the preparation of the Department Magazine and Newsletter	Continuous	-	All the students & Faculty members

11. **Status of project** Students were asked to start the mini-project work since the mini-project will consider for CO attainment.	Continuous	-	Students and Faculty Members
12. **Feedback about infrastructure and others** • The class adviser and chairperson discussed the infrastructure with students. There are no problems, according to the students. • Students have requested that the whiteboard be cleaned on a regular basis.	Continuous	-	All the students and Class Adviser
13. **Any other matter** The students were insisted to be interactive during class hours. Chairperson asked the students regarding their health, mental stress, meditation, etc. He has advised to be safe during this pandemic, and advised all the students to maintain a healthy body and peaceful mind.	Continuous	-	All the students

Plan for Next Meeting / Follow-up in the Next Meeting	
1.	CCM II follow-up on feedback (if any)
2.	Internal Assessment Test – II Performance and CO Attainment
3.	Status of syllabus completion
4.	Effectiveness of Mentoring
5.	Feedback from students on each course
6.	Guidelines for end semester examination
7.	Appreciation of students' positive achievements

Prepared by:	**Reviewed by:**	**Verified by:**	**Approved by:**
6/5/22 6/5/2022 **Chair Person**	9/5/22 **Academic Coordinator (R-2017)**	9/5/22 **HOD**	10/5/22 **Principal**

Copy circulated among all members of Class Committee
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RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021-2022 (Odd Semester)

RIT/ CSE/GE3151 - Problem Solving and Python Programming-CM/2021-2022/01

Date: 10.12.2021

CIRCULAR

The **First** course committee meeting for the course code and Title: **GE3151 - Problem Solving and Python Programming** will be held on **13.12.2021**. All the Faculty members handling the courses for the Problem Solving and Python Programming and student representatives are requested to attend the meeting; in the CC I at 11.00 AM without fail.

10/12/21

Course committee Chair Person

Principal

Course Committee Members:

Sl.No	Faculty Members	Signature
1.	Dr.S.Vimal, ASP/AD	
2.	Dr.M.Gomathy Nayagam, ASP/CSE	
3.	Dr.R.Venkatesh, AP(SG)/CSE	
4.	Ms.S.Manjula, AP/CSE	
5.	Ms. G. Sakthi Priya, AP/CSE	
6.	Mr.N.Ganesh, AP(SG)/EEE	13/12/2021
7.	Mr.R.Deiva Nayagam, AP/ECE	

Sl.No	Student Members	Signature
1.	MUTHULAKSHMI M (21AD035)	
2.	SIDDARTH A (21AD054)	
3.	PORKODI V (21CE029)	
4.	SANJAYKUMAR G (21CE032)	
5.	SHOBIKA R (21CS043)	
6.	VISHNU A (21CS060)	
7.	ANITHA K (01-05-2004) (21EE005)	
8.	JOEL ANANTH S (21EE027)	
9.	ENIYA M (21EC019)	
10.	KALYANASUNDARAM K (21EC037)	
11.	SHREE HARISH R (21EC098)	
12.	RAJA KEERTHIKA G (21EC078)	
13.	HARISH KRISHNAN R (21ME014)	
14.	NIVETHA H (21ME029)	

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021- 2022 (Odd Semester)

Course Committee

Course Code and Title: GE3151 - Problem Solving and Python Programming

Date: 10.12.2021

Course Committee Chair Person: Dr.R.Venkatesh, AP (SG)/CSE

Faculty members:

1. Dr.S.Vimal, ASP/AD
2. Dr.M.Gomathy Nayagam, ASP/CSE
3. Dr.R.Venkatesh, AP (SG)/CSE
4. Ms.S.Manjula, AP/CSE
5. Ms. G. Sakthi Priya, AP/CSE
6. Mr.N.Ganesh, AP (SG)/EEE
7. Mr.R.Deiva Nayagam, AP/ECE

Student Representatives:

1. MUTHULAKSHMI M (21AD035)
2. SIDDARTH A (21AD054)
3. PORKODI V (21CE029)
4. SANJAYKUMAR G (21CE032)
5. SHOBIKA R (21CS043)
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11. SHREE HARISH R (21EC098)
12. RAJA KEERTHIKA G (21EC078)
13. HARISH KRISHNAN R (21ME014)
14. NIVETHA H (21ME029)

HOD 10/12/2021

Principal 10.12.21

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Computer science and Engineering

Academic Year: 2021- 2022 (Odd Semester)

Minutes of Course Committee Meeting I

Course Code and Title: GE3151 - Problem Solving and Python Programming
Date & Time: 13.12.2021 & 11:00 A.M

Members present:

Course committee Chair Person: Dr.R.Venkatesh, AP(SG)/CSE

Faculty members:

1. Dr.S.Vimal, ASP/AD
2. Dr.M.Gomathy Nayagam, ASP/CSE
3. Dr.R.Venkatesh, AP(SG)/CSE
4. Ms.S.Manjula, AP/CSE
5. Ms. G. Sakthi Priya, AP/CSE
6. Mr.N.Ganesh, AP(SG)/EEE
7. Mr.R.Deiva Nayagam, AP/ECE

Student Representatives:

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9. ENIYA M (21EC019)
10. KALYANASUNDARAM K (21EC037)
11. SHREE HARISH R (21EC098)
12. RAJA KEERTHIKA G (21EC078)
13. HARISH KRISHNAN R (21ME014)
14. NIVETHA H (21ME029)

Points discussed	Target Date	Current Status	Responsibility
1. Chairperson welcomed the members for the first course committee meeting and explained the purpose and functions of course committee meeting by projecting Anna University Regulations 2021.	--	--	--
2. Chairperson detailed the Anna University Academic schedule, RIT academic schedule and schedule of Internal Assessment Test I and II.	--	--	--

13.12.21

3. The chairperson enquired about the completion of the syllabus. All students are advised to start preparing from the very beginning.	Continuous	-	All the Students
4. Chairperson enquired about the understanding level of problem solving and python programming subject with the students.	Continuous	Students said that the faculty members explained the concepts in an easy understandable way.	All the Students
5. Chairperson enquired about the understanding level of subject for biology group students.	-	Students replied that the faculty members taught clearly and, hence, they could understand clearly.	-
6. Chairperson ensured about the availability of textbooks, materials and two marks questions with answers.	-	Students said that they have received all the soft copy of learning materials, question bank and need to receive text books.	-
7. Chairperson enquired about creation of Learning Management System (LMS) for all theory and practical courses to faculty members concerned and verified with the students. Chairperson asked the students about the availability of material to all the students in LMS	-	Yes. Created and uploaded all the study materials in LMS.	-
8. Chairperson insisted all the faculty members to use the suitable innovative teaching methodologies for teaching learning process.	Continuous	-	All the faculty members
9. Chairperson enquired about the status of Outcome correlation, measurement, attainment, target calculation, CO - PO, PSO mapping.	18.12.2021	Yes, faculty members said that it is prepared and needs to be refined.	All the faculty members
10. Chairperson insisted all the faculty members identify and plan content beyond syllabus to fill the curriculum gap and its mapping.	-	Yes, faculty members said that it is prepared.	All the faculty members
11. The chairperson insisted all the faculty members plan and conduct unit tests for all five units based on their convenience.	Continuous	-	All the faculty members

12. As per Regulation 2021. Individual Assignment /Case Study/Seminar/Mini Project will have 40 marks as internal for the theory subject. As a result, the chairperson insisted that all faculty members plan for the Individual Assignment/Case Study/Seminar/Mini Project based on the performance of their students.	Continuous	Faculty members assured and prepared the assignment individual sheets and prepared the Mini Project Problem Statements to be shared with the students.	All the faculty members
13. The chairperson advised all students to maintain more than 80% attendance for all subjects.	Continuous	-	All the Students
14. Chairperson and Faculty members advised the students to be regular in submitting the Quiz and assignments in canvas.	Continuous	Students replied that they individually present their assignments in class timing or Lab timing.	All the Students
15. Chairperson advised all the students to practice the additional programs regularly in Terv, Skillrack, hacker rank website which will be very useful for them in placement aspects.	-	-	All the Students
16. The Chairperson insisted the students communicate only in English with the faculty members and students, and the Chairperson insisted the students continue their morning 10 minute (8.50AM to 09.00AM) presentation to improve their technical skills as well as their communication skills and. Chairperson requested the Class adviser mentor to ensure that the presentation happens daily.	Continuous	Students assure that they communicate only in English and continued the morning presentation.	All the faculty members / Students
17. The Chairperson informed the students about the importance of co-curricular activities such as the National Cadet Corps (NCC) and National Service (NSS/NSO/YRC/Science Club/Literary Club/Fine Arts Club), etc. Every student is required to attend at least 75% of the training sessions and all club camps and events. During the first year of the program, the training and camp or club events must be completed as per Regulation 2021.	Continuous	-	All the Students

18. Chairperson insisted about the importance of continuous learning. She advised the students to do hard work and motivated them to write the python programs by their own.	Continuous	-	All the students
19. Chairperson encourages students to take many online courses from EDX, Coursera, and Udemy etc., related to programming to enrich the programming skills.	Continuous	Students are assured that they will do.	All the Students
20. Chairperson advised the students to be actively participated in the class in order to make the classes lively.	Continuous	-	All the students
21. The chairperson insisted all the faculty members follow the common setting and common scheme of evaluation for internal tests and plan accordingly.	Continuous	-	All the faculty members
22. Chairperson informed the students, if there are any grievances / suggestions, the student can approach the concerned faculty member/ Class Advisor / HOD for remedy, and they need not wait until the class committee meeting to be conducted	-	-	All the faculty members/ students

Plan for Next Meeting / Follow-up in the Next Meeting	
1.	Performance of students after Unit Test and IAT I

Prepared by:	**Reviewed by:**	**Verified by:**	**Approved by:**
16/12/21	16/12/21	18/12/2021	19/12/21
Chair Person	**Academic Coordinator (R-2021)**	**HOD**	**Principal**

Copy circulated among all members of Course Committee
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RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021 - 2022 (Odd Semester)

Course Committee

Course Code and Title: CS8392- Object Oriented Programming Date: 27.08.2021

Course Committee Chair Person: Dr.S.Vimal, Asso.Prof /CSE

Faculty members:
1. Mr.D.Lakshmanan,AP(SG)/CSE
2. Mrs.K.Nithya, AP/CSE
3. Dr.Gethzi Ahila Poornima, AP/CSE

Student Representatives:
1. DHIRAJ N - II Year CSE
2. SRINIDHI R - II Year CSE
3. ABINAYASRI S - III Year EEE
4. JEYASURIYA S- III Year EEE
5. ELAVARASI A – III Year ECE
6. SAI VISHNU L – III Year ECE

HOD / CSE 27/8/2021

Principal 27.8.21

27/8/2021

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Academic Year: 2021- 2022 (Odd Semester)

RIT/ (Department)/Course-CM/2021-2022/02 Date: 20.10.2021

CIRCULAR

The Second course committee meeting for the course code and Title: CS8392- Object Oriented Programming will be held on 21.10.2021. All the Faculty members handling the courses for the CS8392- Object Oriented Programming and student representatives are requested to attend the meeting at 3.00 PM at AI and IOS Lab.

22/10/2021

Course committee Chair Person

Dr. S. VIMAL, AP(SG)/CSE

Principal

Course Committee Members:

S.No	Faculty Members	Signature
1.	Ms.B.Vijayalakshmi, AP(SG)/CSE	21/10/21
2.	Mrs.K.Nithya, AP/CSE	21/10/21
3.	Dr.Gethzi Ahila Poornima, AP/CSE	21/10/21

S.No	Student Members	Signature
1.	DHIRAJ N - II Year CSE	
2.	SRINIDHI R - II Year CSE	
3.	ABINAYASRI S - III Year EEE	
4.	JEYASURIYA S- III Year EEE	
5.	ELAVARASI A – III Year ECE	
6.	SAI VISHNU L – III Year ECE	

RAMCO INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Academic Year: 2021- 2022 (Odd Semester)

Minutes of Course Committee Meeting II

Course Code and Title: CS8392- Object Oriented Programming

Date & Time: 21.10.2021 & 3.00 P.M

Members present:

Course committee Chair Person: Dr.S.Vimal, Asso.Prof /AI & DS

Faculty members:

1. Mrs.B.Vijayalakshmi, AP(SG)/CSE
2. Mrs.N.Nithya, AP/CSE
3. Dr.I.Gethzi Ahila Poornima, AP/CSE

Student Representatives:

1. DHIRAJ N - II Year CSE
2. SRINIDHI R – II Year CSE
3. ABINAYASRI S – III Year EEE
4. JEYASURIYA S - III Year EEE
5. ELAVARASI A – III Year ECE
6. SAI VISHNU L – III Year ECE

Points discussed	Target Date	Responsibility	Remarks
1.The chair person highlighted the purpose of the meeting to bring an inline with the course handling faculty and students in a common stream and the academic schedule were discussed with the corresponding UG regulation R 2017	-	-	-
2. The Chairperson collected the feedback during the meeting with the students from ECE, EEE and CSE based on the career aspects and also about the take away after the completion of the course.	-	Course Handling Faculty	The students feel that this course will be a baseline for entry in to software field so the ECE students opted this as elective paper and EEE students insisted that they are enhancing their placement skills through this course.CSE students insisted as it's a base course for getting acquainted with higher level courses and for generating project ideas.
3. The chairperson asked the faculties about the LMS created and sharing of	-	Course handling Faculty and	The faculties suggested that they have created CANVAS and posted all relevant material for

resources pertaining to the course		Chairperson	the course including the application program and some website to learn on self practice during their leisure hours like GitHub, Codechef, Hackerrank and Stackoverflow
4.The chairperson discussed the conduct of Targets for the course, CO-PO mapping, pedagogies planned, assignments, content beyond the syllabus and other assessment for the course	-	Course handling Faculty	The course Handling Members conveyed that due to the previous result yet to be published the target setting is still under evaluation. The assignments has been planned using the TERV, Skillrack, GitHub and code chef to the students and all assignments are based on problem solving approach perspective. As far as the Content beyond the syllabus is concerned more application programs has been planned with industry perspective and modern tools usage is been planned. Debugging type of questions is planned with quiz and other assessments. Apart from that Chairperson has conveyed to utilize more best practices to make students to get in line with the course and students are also happy for new learning.
5. The chairperson discussed the IAT 1 Result and pass percentage	-	Course handling Faculty	The IAT1 result and analysis were discussed. The result for CSE department is above 80%, EEE department is in the midrange of 60%, ECE department is having a result percentage of around 50%. The students are advised to concentrate more on the Result orientation and getting mere pass mark will not help them to enhance their career. The faculties handling ECE and EEE are advised to make them involve more in problem solving skills through online Lab compilers to practice the programs. The students are advised to concentrate more for IAT II and get very good marks above 70% to maintain the internal marks

6. Syllabus completion and pedagogies usage	-	Course Handling Faculty and Mentors	range. Pedagogies and methodologies are asked to improve in the respective course to make more inline with the students. Around Three Units has been completed for CSE, ECE and EEE and also 60% of lab components has been completed.
7. Any Other Matter	-	Course Handling Faculty and Mentors	Chair person announced that the GitHUb campus wide license has been acquired for one year free of cost so students are asked to inform their peers and get benefitted. Students are advised to use the TERV platform to practice the coding challenges. Also faculties are advised to carry out assessment to make students to get more involved to reach the maximum CO attainment level.

28/11/2021

Course Committee Chair Person

(Dr. S. Vimal)

18/11/21

Principal

Copy circulated among all members of Course Committee
Copy to the Principal office
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No:ATAL/2021/1620467180

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Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training And Learning (ATAL) Academy

Certificate

This is certified that **KANNAN B**, **Assistant Professor** of **Ramco Institute of Technology** participated & completed successfully AICTE Training And Learning (ATAL) Academy **Online Elementary** FDP on "**Artificial Intelligence and its Applications**" from **2021-06-07** to **2021-06-11** at **Government college of engineering, Nagpur**.

Director ATAL Academies

Coordinator

No: ATAL/2021/1620467494

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

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Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

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OF PARTICIPATION

Participating Institute
NITK
Surathkal

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Mr. KANNAN B

Ramco Institute of Technology

for participating in the One Week Online Faculty Development Program on "LEARNING THROUGH VIRTUAL LABS FOR TECHNICAL INSTITUTIONS" held from 18th -22nd October 2021, organized by the Department of Mechanical Engineering, Lendi Institute of Engineering & Technology, in association with National Institute of Technology Karnataka, Surathkal

EVOLVE

Dr. Satish Pujari	Dr. V.V. Rama Reddy	Mr, Daniel Silas Kumar.M
Convenor, VLABS 2021	***Head of the Institute***	***VLABS N.C. Coordinator***

Students Online Laboratory through Virtual Experimentation
The Virtual Lab @ NITK

VLABS-3435

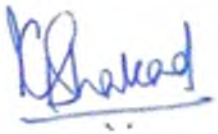
Microsoft edunet foundation SAP

Certificate

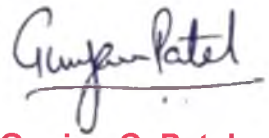
This is to certify that

Bala Kannan

Has successfully completed Microsoft India & SAP India led Faculty Development Program on “Artificial Intelligence” under TechSaksham Program from “24th Jan. 2022 – 29th Jan. 2022”.



Keshav Dhakad
General Counsel,
Microsoft India Corporate,
External & Legal Affairs (CELA)



Gunjan C. Patel
Regional Director and Head of CSR,
SAP Indian Subcontinent,

Nagesh Singh
Executive Director
Edunet Foundation

Certificate

This is to certify that ***B.KANNAN*** has successfully completed the AICTE-ISTE approved Orientation/Refresher Programme on ***"Medical Data Analytics with Python"*** held during **04.01.2022** to **10.01.2022** organized by ***Anna Unviersity Regional Campus, Tirunelveli, Tamilnadu.***

Director (FDC) **AICTE, ND**	**Executive Secretary** **ISTE, ND**	**Program Coordinator** **AURC, Tirunelveli**	**Dean** **AURC, Tirunelveli**

SAVEETHA SCHOOL OF ENGINEERING
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The Institution of Engineering and Technology

CERTIFICATE OF PARTICIPATION

is presented to

Mr.B.KANNAN

Ramco Institute of Technology

INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

for participating in the workshop

Deep Learning and Data Analytics

on 29th December 2021 organized by

Department of Artificial Intelligence in Association with IET

Institute of Computer Science and Engineering,

Saveetha School of Engineering, Chennai-602105, Tamil Nadu, INDIA

Date: 29-12-2021

HOD/ AI

Program Director/
INSTITUTE OF CSE

501

CERTIFICATE OF PARTICIPATION

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTRE

Student Chapter OSA JECRC Foundation Jaipur

On the occasion of

"IETE Student Day"

Department of Electronics & Communication Engineering,
Jaipur Engineering College and Research Centre, Jaipur

in association with

IETE Rajasthan Centre

hereby recognizes that

B.KANNAN

Ramco Institute of Technology, Rajapalayam.

Has actively participated in Two days National Seminar on **"Demystifying the role of AI & Cyber Security for Industry 5.0"** during February 2-3, 2022.

Dr. Jaiverdhan
SDO ECE
JECRC Jaipur

Prof. Sandeep Vyas
HOD ECE
JECRC Jaipur

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North Venganallur Village, Rajapalayam-626 117, Tamil Nadu

Certificate of Participation

This is to certify that

B.KANNAN, Assistant Professor of

Ramco Institute of Technology

has actively participated in a webinar on "Applications of AI and ML in Industry 4.0" which is organized by RIT AI Research Group, Ramco Institute of Technology, Rajapalayam on 02nd October, 2021.

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E-Certificate, No Authorized Signature is required

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AWX294-CE000187

CERTIFICATE OF PARTICIPATION

This is to certify that B.KANNAN, Assistant Professor (SG)/ECE *from* Ramco Institute of Technology *has actively participated in the one day symposium on "Advanced Materials for Sustainable Future" in virtual mode, organized by the Department of Physics in association with the Department of Chemistry, Research Council & Institution Innovation Council of Ramco Institute of Technology, Rajapalayam on 08.01.2022.*

Conveners | IIC Coordinator | RC Coordinator | Vice-Principal | Principal

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Theme: "Soft Computing for Smart Nation"

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B.KANNAN

from **Ramco Institute of Technology**

has participated in 2021 3rd International Conference on Soft Computing and its Engineering Applications (icSoftComp2021) held at Smt. Chandaben Mohanbhai Patel Institute of Computer Applications, Charotar University of Science & Technology (CHARUSAT), Changa, India during December 10-11, 2021.

Dr. Atul Patel
(General Chair)

Dr. K. K. Patel
(Technical Program Chair)

CHAR-icSoftComp2021Att109

RAMCO INSTITUTE OF TECHNOLOGY

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International Conference on Smart Technologies and Applications-2022 (ICSTA 2022)

(Sponsors: AICTE, NABARD and BAI)

Certificate of Participation

It is hereby confirmed that MrB.KANNAN, RAMCO INSTITUTE OF TECHNOLOGY has participated in the International conference organized by Ramco Institute of Technology, on 11th & 12th March, 2022 through online.

Organizing Secretary	Vice-Principal	Principal
Dr.K.Vijayalakshmi	Dr.S.Rajakarunakaran	Dr.L.Ganesan