

# 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 Civil Engineering

Academic Year 2022–2023 (Odd Semester)

Degree, Semester & Branch: III semester B.E Civil Engineering

Course Code & Title: CE8302 & Fluid Mechanics

Name of the Faculty member (s): Mrs.R.Kalaimani

Innovative Practice Description

- Unit / Topic: Unit II / Practical applications of Bernoulli's theorem
- Course Outcome: CO2
- Topic Learning Outcome: TLO8
- Activity Chosen: Theory to Practical
- Justification:  
Practical applications of Bernoulli's theorem are a topic that has the working principle of venturimeter, orifice meter and Pitot tube. Theory to practice (T2P) is one of the best methods to all students for better understanding this topic.
- Time Allotted for the Activity: 15 minutes
- Details of the Implementation:  
Theoretical and practical knowledge are interconnected and complement each other — if one knows exactly HOW to do something, one must be able to apply these skills and therefore succeed in practical knowledge.
- CO – PO / PSO mapping:

CO	PO1	PO2	PO9	PSO2
CO1	3	3	1	3

(1 – Low    2 – Moderate    3 – High)

- PO / PSO mapped:

Innovative practice	PO1	PO2	PSO2
	3	3	3

Justification for correlation

Apply their knowledge of mathematics, science and engineering fundamentals to understand the concept of fluid kinematics and dynamics	By analyzing the data the students should be able to find out the velocity and acceleration of fluids	Calculate the discharge and velocity of fluid through flow metering devices
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- Images / Screenshot of the practice:

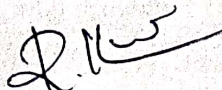


### Reflective Critique:

- ❖ **Feedback of practice from students and other stakeholders:** From this activity, the students have given the feedback as made to see lively the how a venturimeter, orifice meter and Pitot tube work.
- ❖ **Benefit of the practice:** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
  - i. This activity was important to help the students to identify the bridge the gap between oral learning and hands-on experience.
  - ii. The students will be to identifying the components and working principle of venturimeter, orifice meter and pitot tube
- ❖ **Challenges faced in implementation:**  
Initially, I have planned the activity for 15 minute but this activity extended more than 20 minutes to explain the working principle of venturimeter and orifice meter

### References:

- ❖ Jain.A.K., "Fluid Mechanics" (Including Hydraulic Machines), Khanna Publishers, Twelfth Edition, 2016.
- ❖ <https://medium.com/@amandaposthuma/theoretical-vs-practical-knowledge-86cab1113abd>

  
Signature of Faculty Member

  
HOD