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Avinashi Road, Arasur, Coimbatore.

Phone: 0422-2635600 Web: kpriet.ac.in Social: kpriet.ac.in/social **CENTRE OF EXCELLENCE005**

NBA Accredited (CSE, ECE, EEE, MECH, CIVIL)

DESIGN AND DEVELOPMENT OF PUMP COMPONENTS USING FUSION 360				
Event No	CENTRE OF EXCELLENCE005			
Organizing Department	Centre of Excellence			
Associate Dept. NSC	Mechanical Engineering			
Date	10/10/2022			
Time	09:15 AM to 04:15 PM			
Event Type	Workshop			
Event Level	National			
Venue	HPC LAB			
Registration Link	https://bit.ly/3BwqeC7			
Total Participants	48			
Faculty - Internal	5			
Students - Internal	18			

Related SDG



Students - External

Resource Persons

SI	Туре	Name	Designation	Company	Email	Phone
1	Resource Person	BHUVANESAWRI V	Assistant professor (SI.Gr)	1-2828971	bhuvaneswari.v@kpriet.ac.in	xxxxxxxxx
2	Resource Person	B K SARAVANAN	Assistant professor	1-2828971	saravanan.bk@kpriet.ac.in	xxxxxxxxx

Involved Staffs

SI	Name	Role
1	Bhuvaneswari V	Coordinator
2	Saravanan B K	Coordinator

Outcome

EKKI CENTRE in association with department of mechanical engineering Organized a Workshop for students. Students got insight about to find the design solution through software tool.

Event Summary

EKKI- KPRIET International Water technology centre (EIWTC) in association with Department of Mechanical Engineering Organized a Workshop on the topic of "Design and Development of Pump Component Using AUTODESK FUSION 360" on October 10th, 2022. Around 25 participants from various Institutions were attended and 18 from KPRIET were participated. First session was handled by Dr.V.Bhuvaneswari AP/Mech (Sl.Gr). She explained the following topics.

- 1. Introduction to Pump Technology
- 2. Types of pumps
- 3. Evolution of pump
- 4. Difference between Surface and Submersible pump
- 5. Factors involved for pump failure
- 6. Troubleshooting of Pump
- 7. Cut section of pumps
- 8. Role of impeller in pump discharge
- 9. Factors involved for selection of pumps



10. Components of submersible pump

For the first session students were brought to EKKI Centre and seen various types of submersible pump components with their cut sectional view.

Second session was handled by Mr.B.K.Saravanan AP/Mech. He explained the designing of pump components using a software tool "AUTODESK FUSION 360". The following topics were discussed during the session.

- Application bar
- 2. Data panel
- 3. User profile and help
- 4. Workspace
- 5. Tool bar
- 6. Browser
- 7. View cube
- 8. Canvas and marking menu
- 9. Navigation and display settings
- 10. Time life.

Finally, "Impeller design contest" was conducted and three students received the gift for their excellent performance during the contest. From this workshop, students got well practice of finding the design solution to the submersible pump components which can be applied for all constructional requirements in various design sectors.

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