POORNIMA
COLLEGE OF ENGINEERING

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A REPORT ON ALUMNI SESSION

TITLE AND DURATION: An Alumni Session on "Scope Design & Development in Mechanical Engineering" on May 17, 2024.

ORGANIZER(S): Department of Mechanical, Poornima College of Engineering, Jaipur.

EXPECTED OUTCOMES:

Activity-1.1	Students will be able to apply insights and advice from alumni to develop a clearer career roadmap and professional growth plan.
Activity-1.2	Students will be able to integrate practical knowledge shared by alumni into their academic projects and assignments.
Activity-1.3	Students will be able to build a professional network by connecting with alumni, enhancing their career prospects and opportunities.

MAPPINGS WITH PO&PSO:

CO-PO-PSO Mapping: Mapping Levels: 1- Low, 2- Moderate, 3-Strong

CO	PO												PSO		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	3	-	-	-	-	-	-	2	3	2
CO2	-	-	-	-	-	-	-	-	3	-	-	-	2	3	2
CO3	-	-	-	-	-	-	-	-	-	-	-	3	2	3	2

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FLYER / POSTER:

BRIEF BIODATA OF RESOURCE PERSON: Mr. Hememdra Kumawat has graduated in 2022 as a mechanical engineer from Poornima College of Engineering. He is currently working as Design Engineer, NBC, Jaipur. He is expertise in Mechanical Designing Software's.

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BRIEF OF THE SESSION:

Introduction

On 17th May 2024 our Mechanical Engineering department had the privilege of hosting an interactive session with one of our distinguished alumni. The session was attended by 2nd and 3rd-year students and focused on the scope and opportunities in design and development within mechanical engineering. This report summarizes the key points discussed during the session and highlights the valuable insights shared by our alumnus.

Objective of the Session

The primary objective of the session was to provide students with a comprehensive understanding of the design and development process in mechanical engineering, highlighting career opportunities, industry trends, and essential skills. The session aimed to:

Introduce Design and Development: Explain the significance of design and development in Mechanical Engineering.

Highlight Career Opportunities: Discuss various roles and opportunities within the design and development sector.

Understand Industry Trends: Provide insights into the current trends and advancements in design and development technologies.

Offer Practical Guidance: Advise on the necessary skills, tools, and educational pathways to succeed in this field.

Overview of the Session

The session began with a warm welcome and introduction of our alumnus, who has extensive experience in mechanical design and development. The alumnus is currently working with a leading engineering firm, specializing in product design and innovation.

Key Points Discussed

1. Significance of Design and Development in Mechanical Engineering

The alumnus highlighted the critical role of design and development in mechanical engineering:

Innovation: Emphasized the importance of innovative thinking in creating new products and improving existing ones. Design and development drive technological advancements and industry growth.

Problem-Solving: Discussed how mechanical engineers use design principles to solve complex engineering problems, enhance functionality, and improve user experience.

Economic Impact: Highlighted how effective design and development can reduce costs, improve efficiency, and contribute to economic growth.

2. Opportunities in Design and Development

The alumnus outlined various opportunities within the design and development sector for Mechanical Engineers:

Product Design: Involvement in designing and developing new products, from concept to production. Roles include designing components, creating prototypes, and conducting testing.

Research and Development (R&D): Opportunities in R&D departments to innovate and develop cutting-edge technologies and products.

CAD and Simulation: Roles specializing in computer-aided design (CAD) and simulation, using software tools to create detailed models and perform virtual testing.

Project Management: Managing design projects, coordinating with cross-functional teams, and ensuring projects are completed on time and within budget.

3. Current Trends and Advancements

The alumnus provided insights into the latest trends and advancements in design and development:

Additive Manufacturing: Discussed the rise of 3D printing and its impact on rapid prototyping, custom manufacturing, and material innovation.

Sustainable Design: Emphasized the importance of designing environmentally friendly products, considering lifecycle analysis, and using sustainable materials.

Automation and AI: Highlighted the increasing role of automation and artificial intelligence in design processes, including generative design and automated testing.

Internet of Things (IoT): Integration of IoT in product design to create smart, connected devices that offer enhanced functionality and user experience.

4. Skills and Tools

The alumnus recommended several key skills and tools for students interested in design and development:

CAD Software: Proficiency in CAD tools such as SolidWorks, AutoCAD, CATIA, and Creo is essential for creating detailed design models.

Simulation Tools: Knowledge of simulation software like ANSYS, MATLAB, and COMSOL for analyzing and optimizing designs.

Prototyping: Skills in prototyping techniques, including 3D printing, CNC machining, and rapid prototyping, are crucial for developing and testing designs.

Project Management: Understanding project management principles and tools like Microsoft Project or Asana to manage design projects effectively.

5. Educational Pathways and Certifications

The alumnus suggested the following educational pathways and certifications to enhance career prospects in design and development:

Advanced Degrees: Pursuing a Master's or PhD in mechanical engineering with a focus on design and development can open up advanced research and leadership roles.

Professional Certifications: Obtaining certifications such as Certified SolidWorks Professional (CSWP) or Project Management Professional (PMP) can enhance professional credibility.

Workshops and Training: Participating in workshops and training programs offered by professional organizations and software vendors.

Student Interaction

During the Q&A session, students asked insightful questions about career paths, industry challenges, and the future of design and development in mechanical engineering. The alumnus provided thoughtful answers, drawing from his own experiences and expertise.

Some of the questions included:

How to start a career in mechanical design and development?

The alumnus suggested internships, co-op programs, and working on personal projects to build a portfolio.

What are the biggest challenges in the design and development process?

He discussed challenges such as balancing innovation with practicality, meeting regulatory standards, and managing project timelines.

Conclusion

The session was highly informative and inspiring for our students. It provided them with a clearer understanding of the opportunities and challenges in design and development, as well as the necessary skills and educational pathways to succeed. We are grateful to our alumnus for taking the time to share his knowledge and experiences, and we look forward to more such enriching interactions in the future.

GLIMPSES:

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LIST OF PARTICIPANTS & ATTANDANCE:

Poornima College of Engineering, Jaipur

Department of Mechanical Engineering

17th May 2024 - Alumni Session.

Sr. No.	Year	Name	Registration No.	Sign
1	3rd Year	AYUSH SAXENA	PCE21ME001	Ayush Saxena
2	3rd Year	BHANU PRATAP	PCE21ME002	Bhanu Pratap
3	3rd Year	FARHAN KHAN	PCE21ME003	ABSENT.
4	3rd Year	HARSH KUMAWAT	PCE21ME004	ABSENT.
5	3rd Year	IBRAHIM .	PCE21ME006	Ibrahim
6	3rd Year	JAYANT SONI	PCE21ME007	Jayant Soni
7	3rd Year	MOHAMMAD AYYAN	PCE21ME008	Ayyan
8	3rd Year	MOHIT JOSHI	PCE21ME009	Mohit Joshi
9	3rd Year	MONU YADAV	PCE21ME010	Monu
10	3rd Year	PRIYA .	PCE21ME011	Priya
11	3rd Year	RAJU KUMAR	PCE21ME013	Raju Kumar
12	3rd Year	RAJVEER SINGH	PCE21ME014	राजवीर सिंह
13	3rd Year	RAMNARESH MATWA	PCE21ME016	Ramnaresh
14	3rd Year	ROBIN SINGH	PCE21ME017	Robin
15	3rd Year	SULABH SAXENA	PCE21ME020	Sulabh Saxena

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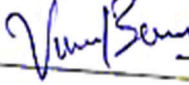
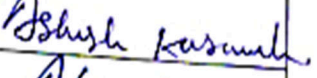
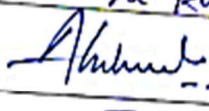
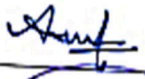
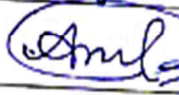
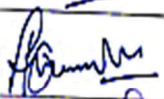
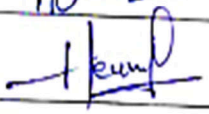
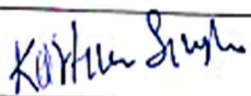
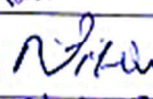
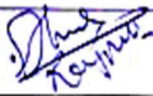
16	3rd Year	TANMAY JANGID	PCE21ME021	
17	3rd Year	UTKARSH AGRAWAL	PCE21ME022	
18	3rd Year	VIVEK BAIRWA	PCE21ME023	
19	3rd Year	ASHISH KUSHWAH	PCE22ME801	
20	2nd Year	ABHINAV ANAND	PCE22ME002	
21	2nd Year	ABHISHEK ANAND	PCE22ME003	
22	2nd Year	ABHISHEK YADAV	PCE22ME004	
23	2nd Year	ANIL KUMAR MEENA	PCE22ME005	
24	2nd Year	ANIL SINGH	PCE22ME006	
25	2nd Year	ASHISH KUMAR	PCE22ME007	
26	2nd Year	BHUVNESH SARASWAT	PCE22ME008	
27	2nd Year	GAURAV JANGID	PCE22ME009	
28	2nd Year	HEERA LAL	PCE22ME010	
29	2nd Year	HITESH PANWAR	PCE22ME011	
30	2nd Year	KARTIKEY SINGH	PCE22ME013	
31	2nd Year	NITIN	PCE22ME015	
32	2nd Year	RAJPUT ANIL NANDKISHOR	PCE22ME016	
33	2nd Year	RISHI RAJ SAINI	PCE22ME017	

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FEEDBACK ANALYSIS:

SESSION FEEDBACK ANALYSIS									
Sr.no.	Attributes	Total Feed Back	Total Feed Back:- 29						
			>80% Objective Achieved, 60 to 79 %- Satisfactory, Below 60%, Need improvement						
1	Do you think session was useful for you?	29	Yes	No	Partial	---	---	Remark	
			24	0	5	0	0	Objective Achieved	82.76
			82.76	0.00	17.24	0.00	0.00		
2	Did you receive all the information you expected by the session?	29	Yes	No	Partial	---	---	Remark	
			28	0	1	0	0	Objective Achieved	96.55
			96.55	0.00	3.45	0.00	0.00		
3	Opinion on Rating the speaker for the session	29	Outstanding	Excellent	Good	Average	Satisfactory	Remark	
			27	1	1	0	0	Objective Achieved - Outstanding & Excellent	96.55
			93.10	3.45	3.45	0.00	0.00		
4	Audience Query Response by the Speaker	29	Outstanding	Excellent	Good	Average	Satisfactory	Remark	
			24	3	1	1	0	Objective Achieved	93.10
			82.76	10.34	3.45	3.45	0.00		
5	Overall experience about the Session	29	Outstanding	Excellent	Good	Average	Satisfactory	Remark	
			22	3	3	1	0	Objective Achieved - Outstanding & Excellent	86.21
			75.86	10.34	10.34	3.45	0.00		
6	Would you like to attend future Alumni Session conducted by the department?	29	Yes	No	---	---	---	Remark	
			28	1	0	0	0	Objective Achieved (Yes)	96.55
			96.55	3.45	0.00	0.00	0.00		

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Notice

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PCE/ME/DO/2023-24/16 **Date: 11-05-2024**

NOTICE

"An Alumni Session on Scope Design & Development in Mechanical Engineering" is being organized by the Department of Mechanical Engineering on **17, May 2024**. The activity will be held at as per the following schedule.

Date : 17, May 2024

Activity Name : An Alumni Session on Scope Design & Development in Mechanical Engineering

Venue : 1B-05

Time : 9:00AM Onwards

The students are required to be present at the venue on time. For further query you may contact the Faculty Coordinator Mr. Sanjay Kumawat.

Dr. N. L. Jain
HoD, ME

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