JCEI's Jaihind Polytechnic, Kuran

Department Of Mechatronics

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To develop skilled technicians in the rapidly evolving field of Mechatronics to meet societal and industrial needs.



Newsletter

M1: To provide fundamental knowledge in Mechatronics through effective teaching-learning process.

M2: To provide technical skills in Mechatronics through trainings and workshop.

M3: To prepare robust and responsible Mechatronics technocrats through ethical values.

M4: To enhance career opportunities for students through industry interaction, guidance for entrepreneurship and higher education.

HOD's Message....



Mechatronics Engineering also called as mechatronics, is an interdisciplinary branch of engineering that focuses on the integration or combination of Mechanical, Electrical and Electronics engineering systems, and also includes a combination of Robotics, Computer science, Control systems and Automation systems.

In recent, the mechatronic systems are available in our daily life such as washing machines with electronic controls, smart refrigeration, cruise control technology in modern vehicles, etc. are the applications that are worked with such interdisciplinary branches.

Considering the future growth and current trend of innovation and multidisciplinary approach, we have started this branch in our institute from 2023-24. The department intends to provide students with capstone projects, internships, and entrepreneurship opportunities in order to improve their cognitive abilities and their capacity to synthesize blooms taxonomy. The multidisciplinary and experienced faculties are available for guidance and interactive learning. The students will use practical lab experiences to create straightforward and intelligent systems across a range of study areas. We assure that, the students will able to develop new systems which are highly beneficial by solving real life problems through interdisciplinary approach and participate in societal as well as national development.

We welcome passionate learners to enroll in the Mechatronics program to fulfill their ambitions and goals of life, and meet the growing need for advanced technological knowledge of the future.

> Prof. Shinde S.S. HOD Mechatronics

Program Educational Objectives (PEOs)

PEO 1: To prepare a student to inculcate Knowledge of Basic Engineering Sciences and Fundamentals of Mechanical, Electrical and Computer Systems.

PEO 2: To Design, Develop Product and applications in the field of Automation and Mechatronics and be able to use Engineering Tools that will Enhance their Productivity.

PEO 3: To prepare a student with Professional Ethics to Solve broad-based problems of society and Industry individually and as a team member communicating effectively in the world of work.

Program Specific Outcomes (PSOs)

PSO 1: Capacity building with the knowledge of sensors, data acquisition, robotics, PLC, control systems and modern software tools to solve mechanical and electronics related problems.

PSO 2: To create innovative ideas and solutions for real time problems in manufacturing sector by adapting the automation tools and technologies.

Program Outcomes (POs)

- Basic and Discipline specific knowledge: Apply knowledge of basic science, Technological fundamentals and technological specialization to solve the problems based on Mechatronics.
- **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.
- **Design/ development of solutions:** Design solutions for well-defined Technical problems and assist with the design of systems components or processes to meet specified needs.
- **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements in Mechatronics technology.
- Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.

- **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- **Life-long learning:** Ability to analyse individual needs and engage in updating in the context of technological changes.

Departmental Events

Guest Lecture

Expert Lecture No.:-1

Topic Name: "Career Opportunities of Mechanical Engineer"

Guest Name: Mr. Waykar Ishwar Pandurang.

3) Date: 19 /08/ 2023



Expert Lecture No.:-2

Topic Name: "Additive Manufacturing And Industrial Automation Fundamentals"

Mr. Milind Joshi **Guest Name:**

Date: 09/02/2024





Industrial Visit

Company Name: Science Park, Chinchwad, Pune

Date: 09/03/2024

Name of Staff: Mr.Shinde S.S. & Mr.Bhor A.S.

No. of Students: 35 (FY)







Company Name: Vighnahar Sugar Factory, Shiroli, Junnar

Date: 17/02/2024

Name of Staff: Mr. Varhade V.G. & Mr.Bhor A.S.

No. of Students: 35 (FY)



Company Name: "Industrial Visit to ElringKlinger Automotive Components

(India) PVT. LTD.Ranjangaon Tal:- Shirur. "

Date: 20/10/2023

Name of Staff: Mr. Varhade V.G., Mr.Shinde S.S., Mr.Bhosale A.J., Mr.Amale D.K.

No. of Students: 35 (FY)





Faculty Training

Participation in Faculty Training

	Participation in Faculty Training							
Sr.	Name of	Details of Training	Duration of	Organizing Body	Organizing Institute			
No.	faculty /	(Industial / Content	Training					
	staff	Updating / Soft Skill Any	(schedule)					
		Other)						
	Shinde		29/12/2023.To	MSBTE	Department of			
1	Sachin		30/12/2023.		Computer Engg.of			
	Sharad				Jaihind Polytechnic			
2	Bhor Akshay				Kuran			
	Shivaji							
	Bhor	Outcome Base Education in						
3	Ashwini	NBA Accreditation.						
	Shivaji							
	Parkhe Pooja							
4	Sudarshan							
	Bhumkar							
5	Vaishnavi D.							
	Shinde	Dassault Systemes Solidwork	12/01/2024.To	SPPU Course	JCEI's Jaihind			
6	Sachin	2024 Hand on Workshop on	13/01/2024.10	Curriculum	College of			
0	Sharad	FEA/CFD/MBD(Kinematics)	13/01/2024.	Curriculum	Engineering.			
	Sharad	Solid Modeling Assignments			Engineering.			
	Bhor Akshay	Sond Wodering Assignments						
7	•							
	Shivaji							
		Designing Robust	12/02/2024.to	MSBTE	Guru Govind Singh			
	Shinde	Mechatronics System Tools	16/02/2024.		Polytechnic, Nashik.			
0		And Techniques						
8	Sachin	_						
	Sharad							
		Train The Trainer	13/03/2023 To	MSBTE	Bosch Training			
	Shinde		17/03/2023		Center.PUNE			
9	Sachin		.,					
	Sharad							
	Sharau							

Co-curricular Activities

TECHNOLOPHILIA 2K24-Lathe Champion







Student Participation

Sr. No.	Types of Activity & Details (Paper Presentaion / Project / Quiz / Etc.)	Date	Name of Participating Student	Organizing Body And Organizing Institute	Awards (Winner / Participation)
	TECHNOPHILIA- 2K24. QUIZ COMPETITION	07/03/2024.	Amale Shrikrushn Vinayak		Participation
1			Bandawane Darshan Dattatray	JCEI'S Jaihind Polytechnic Kuran.	
			Jadhav Krushnaraj Devidas		
	TECHNOPHILIA- 2K24. LATHE CHAMPION	07/03/2024.	AMALE SHREEKRUSHN VINAYAK		Participation
			Bandawane Darshan Dattatray		
			KALE SHRUTIKA GHANSHYAM		
			KOM ADARSH DIPAK		
2			GAWADE RUTUJA SANJAY	JCEI'S Jaihind Polytechnic	
			KALE AJINKYA JAYWANT	Kuran.	
			JADHAV PIYUSH PRAVIN		
			GADHVE HARSHADA MANIK		
			DOKE YASH DEEPAK		
			KADAM SHRAVANI SANDIP		

Extra-Curricular Activities Zonal Sports-D1 Zone IEDSSA Achievements

Winner Team in Volleyball



Runner-up Team in Chess/Carom



Student Participation

Sr. No.	Types of Activity & Details (Sports / Drama / Social / NSS Etc.)	Date	Name of Participating Student	Organizing Body And Organizing Institute	Awards (Winner / Participation)	Level (State / National / etc.)
1	High Jump	10/02/2024	Mande Sujal Vinod	Zonal Sport Conducted by I.E.D.S.S.A. Government Polytechnic, Pune.	Winner	Zonal Sports
2	Badminton	24/02/2024	Bankar Darshan Avinash	JCEI'S Jaihind Polytechnic Kuran.	Runner-up	College
3	Javelin Throw	24/02/2024	Kale Shrutika Ghanshyam	JCEI'S Jaihind Polytechnic Kuran.	Winner	College
4	Kho-Kho (Boys) Zonal Sport Conducted by I.E.D.S.S.A. JCEI'S Jaihind Polytechnic Kuran Pune.	23/01/2024.	Jadhav Krushnaraj Devidas	JCEI'S Jaihind Polytechnic Kuran.	Runner-up	Zonal Sport

Examination Topper (Winter 2023)

Department of Mechatronics

Winter 2023 Examination Topper List (AY 2023-24)

Course	Rank	Photo	Name of the Candidate	Marks Obtained	Out of	%
	1	Passibilit user Pours Board	BANKAR DARSHAN AVINASH	660	700	77.70
FYMK	2		KADAM SHRAVANI SANDIP	646	700	76.00
	3		KALE SHRUTIKA GHANSHYAM	638	700	75.10

THANKS-