Domain Specific Training

The following are the Industry Oriented Courses identified by the department for the students.

The identified courses will help students to prepare for their future and also help them learn employability-skills.

Sl no.	Domain	Potential recruiters
1	Design Engineering	TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), Mahindra and Mahindra, L & T, Kirloskar, BOSCH, Tech Mahindra, Setty Mech etc..
2	Thermal Engineering	BHEL, L & T, Mercedes Benz Shetty mech Engineers pvt ltd, , Ashok Leyland, power plant industries, General Electronics etc..
3	Manufacturing	TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), L & T, Kirloskar, BOSCH, Setty Mech and all production companies offer SAP, product development
4	Automation/Robotics/ Mechatronics	TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), L & T, Kirloskar, BOSCH, Setty Mech etc..
5	Software Development	Accenture, HCL Technologies, Wipro, TCS, Infosys, IBM, Capgemini, tech Mahindra, cognizant technology solutions

Plan of Action:

Domain: Design Engineering Domain

Mechanical engineering design is an engineering procedure aimed at designing parts, components, products, or systems of mechanical nature, while applying engineering physics and mathematics principles with materials science. During design process a designer addresses the questions how these components are going to work in collaboration and what is the reliability of the system when different components works together, whereas system reliability, maintenance, system modeling, parameter of components are analyzed to decide about the system integrally. For example, designs of various machine elements such as shafts, bearings, clutches, gears, and fasteners fall into the scope of mechanical design.

Sl No.	Semester	Training Mode	Training Institute /Platform	Title Course	Duration	Acquire Skills
1	IV	Offline	In-House/ Industry Trainers	**CAD Software** (CREO / CATIA / Solid works / Unigraphics)	40 Hrs	CAD Design
2	V	Offline	In-House/ Industry Trainers	**FEA Software – 1** (ANSYS / ANSA / PATRAN / FEMGEN)	40 Hrs	Analysis
3	VI	Offline	In-House/ Industry Trainers	**FEA Software - 2** (NASTRAN/SAMCEF/ ABAQUS)_	40 Hrs	Analysis

Potential recruiters
TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), Mahindra and Mahindra, L & T, Kirloskar, BOSCH, Tech Mahindra, Setty Mech etc..

Department of Mechanical Engineering

Plan of Action:

Domain: Thermal Engineering Domain

Thermal engineers use their expertise in the principles of thermodynamics to design heating and cooling systems. They ensure the heat transfer is appropriate to achieve the desired result and is also efficient. A thermal engineer could work in many industries including, heat exchanger manufacturing, automotive, HVAC, and military engineering. Industrial heat transfer occurs in systems as small as a microcomputer or as big as a power generator, so an expert in thermodynamics is needed in many industries.

Sl No.	Semester	Training Mode	Training Institute /Platform	Title Course	Duration	Acquire Skills
1	IV	Offline	In-House/ Industry Trainers	3D CAD modelling, preferably SolidWorks / RIVET/GAMBIT	40 Hrs	CAD Design
2	V	Offline	In-House/ Industry Trainers	Computational fluid dynamics (CFD) software -1 / HVAC	40 Hrs	Analysis
3	VI	Offline	In-House/ Industry Trainers	Computational fluid dynamics (CFD) software – 2 / HVAC	40 Hrs	Analysis

Potential recruiters
BHEL, L & T, Mercedes Benz Shetty mech Engineers pvt ltd, , Ashok Leyland, power plant industries, General Electronics etc..

Plan of Action:

Domain: Manufacturing Domain

Manufacturing engineering is the field of engineering that designs and optimizes the **manufacturing process**, or the steps through which raw materials are transformed into a final product. The manufacturing process begins with the product design, and materials specification. These materials are then modified through manufacturing to become the desired product.

Sl No.	Semester	Training Mode	Training Institute /Platform	Title Course	Duration	Acquire Skills
1	IV	Offline	In-House/ Industry Trainers	Fabrication / Welding Technology / Quality & Inspection / Advanced Manufacturing	40 Hrs	QA Engineer
2	V	Offline	In-House/ Industry Trainers	Rapid prototyping	40 Hrs	Production engineer
3	VI	Offline	In-House/ Industry Trainers	**CAD/CAM** CNC Programming/ CNC Machines	40 Hrs	Program engineer

Potential recruiters
TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), L & T, Kirloskar, BOSCH, Setty Mech and all production companies offer SAP, product development

Plan of Action:

Domain: Automation/Robotics/Mechatronics Domain

Automation includes the use of various equipment and control systems such as machinery, processes in factories, boilers, and heat-treating ovens, switching on telephone networks, steering, and stabilization of ships, aircraft, and other applications and vehicles with reduced human intervention.

Sl No.	Semester	Training Mode	Training Institute /Platform	Title Course	Duration	Acquire Skills
1	IV	Offline	In-House/ Industry Trainers	Mechatronics/ Precision Manufacturing	40 Hrs	Production engineer
2	V	Offline	In-House/ Industry Trainers	Automation (PLC & SCADA) / PLC & Mechatronics / Introduction to Arduino	40 Hrs	Production engineer
3	VI	Offline	In-House/ Industry Trainers	Industrial Robotics/ IOT	40 Hrs	Production engineer

Potential recruiters
TCS, Infosys, Mercedes Benz, Ashok Leyland, Hindustan Petroleum Corporation Limited (HPCL), L & T, Kirloskar, BOSCH, etc

Plan of Action:

Domain: Software Domain

Sl No.	Semester	Training Mode	Training Institute /Platform	Title Course	Duration	Acquire Skills
1	IV	Offline	In-House/ Industry Trainers	Java Full Stack / Web Design / Testing / Data Science - Stage 1	40 Hrs	Software engineer
2	V	Offline	In-House/ Industry Trainers	Java Full Stack / Web Design / Testing / Data Science - Stage 2	40 Hrs	Software engineer
3	VI	Offline	In-House/ Industry Trainers	Java Full Stack / Web Design / Testing / Data Science - Stage 3	40 Hrs	Software engineer

Potential recruiters
Accenture, HCL Technologies, Wipro, TCS, Infosys, IBM, Capgemini, tech Mahindra, cognizant technology solutions