Industrial Project-Based Learning (IPBL)

The department is implementing, "Learning through Industrial Projects" and this is also as a key part of our curriculum. This initiative aims to provide students with real-world industry exposure, hands-on experience, and practical problem-solving skills by working on projects in collaboration with industry.

We believe this initiative will significantly enrich the learning experience and prepare students for successful careers.

Industrial projects provide students with hands-on experience, bridging the gap between academic learning and real-world industry applications. Here's what students typically learn:

- Applying theoretical concepts to real-world problems.

- Understanding industry standards, best practices and workflows.

- Identifying and analyzing real industrial challenges.

- Developing innovative and practical solutions.

- Gaining expertise in industry tools, software and technologies.

- Learning about manufacturing processes, product development, automation etc. (depending on the industry).

- Working within deadlines and meeting project milestones.

- Handling multiple tasks while maintaining efficiency.

- Working with professionals, mentors in a structured environment.

- Understanding team dynamics and cross-functional collaboration.

- Writing reports, documentation and proposals.

- Presenting findings, solutions and project outcomes to stakeholders.

- Learning to deal with unexpected challenges and constraints.

- Making data-driven decisions and adapting solutions accordingly.

- Understanding workplace etiquette, discipline and responsibilities.

- Gaining exposure to corporate culture and professional expectations.

- Understanding career paths and industry demands.

2023-24

Sr. No	Title of Project	Guide of project	Type of project
1	Design and Fabrication of Digital Spring Load Testing Machine with Touchscreen Interface	Dr. I. A. Khan	Industrial Project
2	Analysis of wastage material clunning manufacturing of plastic rope at Vijay Polymers Pvt. Ltd. Nagpur	Prof. M. S. Matey	Industrial Project
3	Experimental Analysis and Formulation or Mathematical model For laser cutting operation	Prof. A. S. Nilewar	Industrial Project
4	Time and motion study of a process time with maintaining its Efficiency and Productivity	Prof. S. P. Lokhande	Industrial Project
5	3D Modeling L-Shape Bracket Supper,Gauge and Fixture & part Processing of a Bracket Support Product use a Tractor	Prof. S. P. Lokhande	Industrial Project

2022-23

Sr. No	Title of Project	Guide of project	Type of project
1	Automation of Spring Load Testing Machine.	Dr. I .A. Khan	Industrial Project
2	Implementation of KAIZEN in Effluent Treatment Plant for Process Improvement	Dr. S. R. Ghatole	Industrial Project
3	Bearing Failure Analysis at VKV Engineering Solutions Pvt. Ltd.	Dr. P. S. Chaudhari	Industrial Project
4	Development of Weight Lifting Mechanism	Dr. M. S. Giripunje	Industrial Project
5	Analysis & Diagnosis of Errors Occurring in Punching Machine of Hydraulic Press	Dr. V. M. Sonde	Industrial Project
6	Portable Mango Slicer: An Effortless Machine for Human Being	Prof. S. M. Awatade	Industrial Project
7	Design & Development of Press Tool for Tractor Weight Box	Dr. C. K. Tembhurkar	Industrial Project
8	Problem Analysis in Homogenizer	Prof. P. N. Ramteke	Industrial Project

2021-22

Sr. No	Title of Project	Guide of project	Type of project
1	Optimization of V-Belt base cutting M/C AT PIX Transmission LTD.	Dr. I.A. Khan	Industrial Project
2	Design and Fabrication of Scrap Minimizer machine for waste management in industry.	Dr. I.A. Khan	Industrial Project
3	Industrial Automation Error Detection.	Mr. N. R. Pathare	Industrial Project
4	Study of Design and manufacturing of an Electric vehicle using CAD AND CAE in Collaboration with fmae	Mr. H. K. Dubey	Industrial Project
5	Study and analysis of Efficiency of 510 MW thermal power plant	Mr. S. P. Lokhande	Industrial Project
6	Galvanizing Tank Protecting Insulator At K.E.C. International Pvt.Ltd.	Mr. K. S. Shelke	Industrial Project