NOTICE
Implementation of Project-Based Learning (PBL)

Ref no.: GEHU/CSE/PBL1/25   **Date: 10-02-2025**

The Department of Computer Science & Engineering is implementing Project-Based Learning (PBL) for students in the 4th and 6th semesters. This initiative aims to enhance practical understanding and application of core concepts through real-world projects.

Subjects with PBL Implementation:

4th Semester Core:

- Design & Analysis of Algorithms

Discipline-Specific Electives (DSE):

- Fundamentals of Statistics & AI
- Cyber Security
- Virtualization with Cloud

4th Semester Specializations (AI/ML, AI AND DS, CYBER SECURITY):

- Design & Analysis of Algorithms – for ALL SPECIALIZATION

- Java Programming – for AI / ML

- Introduction To Big Data – for AI AND DS

- Cyber Security – for CYBER SECURITY

6th Semester Core:

- Operating Systems (Software Engineering)
- Compiler Design

6th Semester Specializations (AI/ML, AI & DS, Cyber Security, Cyber & IoT):

- Operating Systems (Software Engineering) - FOR ALL Specialization
- Advanced Machine Learning (AI & ML)

Project-Based Learning: Structure

- **Group Formation:** Group will consist 3-4 members**, with each member from a different section. Students can form their own groups while meeting these conditions.(For Specialization specific subjects students can be from same**

Each Group will have a defined team lead and the form for the group formation will be filled up by the team lead, entering the relevant details of the other members of the group.

- **PBL Mentorship Hours:** Weekly 2-hour mentorship sessions will be allotted.

Modalities of PBL Implementation:

- **Project Allotment:** Faculty Mentors will be assigned to each group. The group will have to coordinate with their mentors through an official medium of communication and will have to float their project ideas, discuss them with their mentor and get them approved. The submission of the Proposal as part of Milestone-1 will have to be completed after their project idea is approved. The deadline for the submission of the various milestones and the associated formats will be shared in due course of time.

- **Mentorship & Checkpoints:** Regular mentor-guided checkpoints will be scheduled to monitor progress on a weekly basis.
- **Milestones & Evaluation:** Projects will be evaluated at multiple stages, including proposal submission, progress reviews, and final demonstration.
- **Submission Requirements:** Students must submit reports, link to code repositories and present their work in a final jury evaluation.
- **Additional Credits:** Extra marks will be awarded for outstanding projects showcased in the project fair.

Phases of Evaluation:

- **Problem Statement** Finalisation by the group in accordance with the mentor.
- **1st Evaluation** (Proposal and Design Review)
- **2nd Evaluation** (Progress Report, Deployment of Projects and Demonstration)
- **Final Evaluation** (Final Jury Demonstration and Report Submission)

Notes

- **Platform for Submission : GITLAB or Gradescope**
- **Separate Google Form will be published shortly for group details. (Only Team Leader will fill the Google Form from a single group).**
- **Groups can be different for different subjects.**