



Project work implementation

Context:

As per the academic regulations 2020, there shall be a Project Work in the IV-year second semester which carries 12 credits. Out of 100 marks allotted for the project work, 40 marks shall be for Internal Evaluation and 60 marks for the End Semester Examination (Viva – Voce). The Viva – Voce shall be conducted by a committee consisting of HOD, Project Supervisor and an External Examiner nominated by the Principal from the panel of examiners recommended by Chairman, BOS. The Evaluation of project work shall be conducted at the end of the IV year – II semester. The Internal Evaluation shall be made by the departmental committee, on the basis of two seminars given by each student on the topic of his project.

Project Allocation process:

- The head of the department coordinates the project allocation, guide allocation and evaluation.
- The members of faculty, their domain expertise, research areas are all communicated to the students through a circular and displayed in the notice board.
- Students are given an option of selecting the project titles after thorough discussion with their mentors
- A maximum of four students are allotted per batch by making a mix of advanced and slow learners in each batch.
- Not more than two batches should be allocated to a project guide.

Types of Projects:

- Application
- Product
- Research
- Review

Mapping to Program Outcomes and Programs Specific Outcomes

The course outcomes of the project course must be mapped with the Program Outcomes and Program Specific Outcomes

Implementation:

- Project slots should be allocated as per the Academic calendar and Time table
- Project laboratory is used for the conduct of the project work unless any other specialized laboratory is required for the conduct of that work
- Periodic interactions between the guide and the students must happen to monitor the progress of the project
- The progress of student project works is discussed in the department meetings
- At the end of the academic year, students will present and demonstrate to internal evaluation team constituted by HOD
- At the end of VIII semester, final viva-voce is conducted and Students should demonstrate their project in front of a panel nominated by the HoD as per the academic regulations
- It is encouraged that every project outcome to be published as a paper in any national/ international journal and presented in any national /international conference or workshop.
- The research papers should be checked with anti-plagiarism software before the submission to the concerned journal or conference.
- A report should be prepared by the Head of the Department comprising all the research papers published and should be made available in the library and soft copies must be put on the website for availability to the students.
- Working prototypes may be exhibited and communicated to the print and electronic media for publicity and nearby schools and colleges for better dissemination of the knowledge to the public without prejudice to the application of patents or publishing papers.

Generic Course outcomes of project work:

After successful completion of the course, the student will be able to

- Extend concepts, principles and laws acquired as knowledge to develop mathematical and computational models and to infer useful **XXXXXXXX** engineering insights. PO1; BL2
- Analyze a situation or '**Domain name**' system and identify possible ideas for practical implementation. PO2; BL5
- Design **XXXXXX** engineering systems and processes to meet the requirements specified in a given application. PO3; BL6
- Formulate protocols and sub-problems for complex situations for quicker and sustainable solutions through appropriate research methodology. PO4; BL6
- Select, employ or devise suitable mathematical, statistical, hardware and software tools/techniques to enhance productivity as a **XXXXXXXX** Engineer PO5; BL6
- Relate the implications of **Project** for societal benefit and application. PO6; BL5
- Undertake the project work in compliance to environment and sustainability. PO7; BL5
- Practice professional and ethical responsibilities for sustainable development of society through the chosen field of **project**. PO8; BL4
- Work effectively and responsibly in a diverse group and lead the group towards successful implementation of the project PO9; BL6
- Communicate clearly, fluently and convincingly both in written and oral contexts PO10; BL3
- Manage finances and sizeable projects by choosing the right blend of common-sense solutions, analytical tools and methods. PO11; BL5
- Identify the future scope of the project and try to engage in self-learning for further development PO12; BL6

Evaluation of the project is based on

- Understanding the objectives of the project.
- Day to day work done by the students (Should be documented)
- Partial/Full completion of the project
- Results and documentation
- The student's presentation and demonstration

- Attained Program Outcomes and Program Specific Outcomes

Rubrics for project evaluation

Review-1

Parameter	Related PO, PSO	Good (5)	Moderate (3)	Inadequate (1)
Selection of Topic	PO1			
Analysis and Synthesis	PO2,3,4			
Literature Survey	PO1, 2			
Ethical Attitude	PO8			
Independent Learning	PO9			
Oral Presentation	PO10			
Report Writing	PO10			
Continuous Learning	PO12			

Review-2

Parameter	Related PO, PSO	Good (5)	Moderate (3)	Inadequate (1)
Analysis	PO2			
Design competence	PO3			
Problem Solving	PO4			
Usage of Techniques & Tools	PO5			
Project work impact on Society	PO6			
Project work impact on Environment	PO7			
Ethical attitude	PO8			
Independent Learning	PO9			
Oral Presentation	PO10			
Report Writing	PO10			
Time and Cost Analysis	PO11			
Continuous learning	PO12			

External Examination

Parameter	Related PO, PSO	Good (5)	Moderate (3)	Inadequate (1)
Selection of Topic	PO1			
Analysis	PO2			
Design competence	PO3			
Problem Solving	PO4			
Usage of Techniques & Tools	PO5			
Project work impact on Society	PO6			
Project work impact on Environment	PO7			
Ethical attitude	PO8			
Independent Learning	PO9			
Oral Presentation	PO10			
Report Writing	PO10			
Time and Cost Analysis	PO11			
Continuous learning	PO12			

