Fourth Semester Syllabus

Sl No.	Type	Subject Code	Topic	L	T	P	Credit Points
1.	PTI	INT	Dissertation-II/Industrial Project	0	0	32	16
			Total				16

Fourth Semester Syllabus

TITLE OF COURSE: DISSERTATION PHASE – II
COURSE CODE: CED392
L-T-P: 0-0-32
CREDITS: 16

Course Outcomes (CO):
At the end of this course, students will be able to
CO1: Ability to synthesize knowledge and skills gained and applied to an in-depth study and execution of new technical problems.
CO2: Capable to select from different methodologies, methods, and forms of analysis to produce a suitable research design and justify their design.
CO3: Ability to present the findings of their technical solution in a written report.
CO4: Presenting the work in International/ National conferences or reputed journals.

Mapping of Course Outcomes (CO) and Program Outcomes (PO):

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	✓	✓	✓		✓							✓
CO2	✓			✓								✓
CO3	✓	✓	✓									✓
CO4	✓	✓	✓		✓							✓

Course Contents:

The dissertation/project topic should be selected/chosen to ensure the urgent need to establish a direct link between education, national development, and productivity and thus reduce the gap between the world of work and the world of study. The dissertation should have the following

- Relevance to social needs of society
- Relevance to value addition to existing facilities in the institute
- Relevance to industry need
- Problems of national importance
- Research and development in various domain

The student should complete the following:

- Literature survey Problem Definition
- Motivation for study and Objectives
- Preliminary design/feasibility / modular approaches
- Implementation and Verification
- Report and presentation

The dissertation stage II is based on a report prepared by the students on the dissertation allotted to them. It may be based on:

- Experimental verification / Proof of concept.
- Design, fabrication, testing of Communication System.
- The viva-voce examination will be based on the above report and work

Guidelines for Dissertation Phase – II

- As per the AICTE directives, the dissertation is a year-long activity to be carried out and evaluated in two phases, i.e., Phase – I: July to December and Phase – II: January to June.
- The dissertation may be carried out preferably in-house, i.e., department's laboratories and centers, OR in industry allotted through the department's T & P coordinator.
- After multiple interactions with a guide and a comprehensive literature survey, the student shall identify the domain and define dissertation objectives. The referred literature should preferably include IEEE/IET/IETE/Springer/Science Direct/ACM journals in the areas of Computing and Processing (Hardware and Software), Circuits- Devices and Systems, Communication-Networking and Security, Robotics and Control Systems, Signal Processing and Analysis and any other related domain. In industry-sponsored projects, the relevant application notes, papers, and product catalogs should be referred to and reported.
- Student is expected to detail specifications, methodology, resources required, critical issues involved in design and implementation, and phase-wise work distribution. Submitting the proposal within a month from the date of registration.
- During phase – II, student is expected to exert on design, development and testing of the proposed work as per the schedule. Accomplished results/contributions/innovations should be published in terms of research papers in reputed journals and reviewed focused conferences OR IP/Patents.
- Phase – II deliverables: A dissertation report as per the specified format, developed system in the form of hardware and software, A record of continuous progress.
- Phase – II evaluation: Guide along with appointed external examiner shall assess the progress/performance of the student based on report, presentation and Q & A. In case of unsatisfactory performance, committee may recommend for extension or repeating the work