

## PROJECT PHASE II

<b>Course Code</b>	19EC3861	<b>Year</b>	IV	<b>Semester</b>	II
<b>Course Category</b>	Project work and Internship	<b>Branch</b>	ECE	<b>Course Type</b>	Practical
<b>Credits</b>	7	<b>L-T-P</b>	0-0-14	<b>Prerequisites</b>	--
<b>Continuous Internal Evaluation:</b>	100	<b>Semester End Evaluation:</b>	100	<b>Total Marks:</b>	200

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## Course Outcomes

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

CO1	Identify real world problems by survey/industrial/research/societal interaction
CO2	Apply pertinent engineering principles and theories to design/ build/ operate/ simulate and analyze the product/system/concept
CO3	Apply advanced techniques and simulation tools to give optimum design/solution
CO4	Implement social/ cultural/environmental regulations in the development
CO5	Plan for the effective utilization of resources and lifelong learning
CO6	Develop technical reports for the results and present for future applications

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## Mapping of course outcomes with Program outcomes (CO/ PO/PSO Matrix)

Note: 1- Weak correlation 2-Medium correlation 3-Strong correlation

\* - Average value indicates course correlation strength with mapped PO

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	3	3	3	3	3	3	3	3	2		3	2	3
CO2	3	3	3	3	3	3	3	3	3	1		1	2	2
CO3	3	1	1	3	3	2	1	3	3	1		1	2	2
CO4	3	3	3	3	3	2	3	3	3	2		2	2	3
CO5	3	3	3	3	3	2	3	3	3	2	1	2	2	3
CO6	1	1	3	2	3	3	1	3	3	3	2	2	2	1

## Objective

Project work play important role in final (8<sup>th</sup>) semester and students have to apply their technical knowledge and skills to develop projects individually with innovative ideas using latest technological tools to solve societal/industrial/research problems.

## Guidelines:

- ❖ This subject will be offered to the all final year Electronics and Communication engineering students during the 8<sup>th</sup> semester.

- ❖ The project work can be in various forms such as experimental work, simulation analysis, Industrial liaison and soon.
- ❖ The project work selection and execution enhances the technical skills of the students and make them fit to industry requirements.
- ❖ Students have to exhibit a high degree of innovation, commitment and team work in executing the project work
- He/she will carry out a minor project by applying the knowledge gained in the areas of Electronics and Communication Engineering to solve societal problems
  - ❖ Communications, Networking and Signal Processing/Machine Learning
  - ❖ System, Control and Robotics
  - ❖ Image processing, wireless sensor networks and antennas
  - ❖ Electromagnetics and Analog/RF/Biomedical Circuits.
  - ❖ IoT and VLSI

#### **Implementation:**

- ❖ A project coordinator is appointed who is responsible for planning, scheduling and execution of all the activities related to the student project work
- ❖ Project presentation is taken twice per semester in the presence of a project panel and students have to meet the concerned project supervisor regularly
- ❖ Students are guided to take up projects related to state of art, industry relevant, hardware, and latest software areas
- ❖ Projects are based on mathematical modelling through simulation to analyze the operation and performance in core and multidisciplinary areas
- ❖ The hardware prototyping through various building blocks are carried out in the respective laboratories/industry

#### **Impact Analysis:**

- ❖ New innovative ideas are born for project work
- ❖ Skills or abilities of students will improve
- ❖ Knowledge on various aspects of project management are developed
- ❖ Confidence level of the students is boosted
- ❖ Team spirit improves
- ❖ Implementation and deployment of the project for social benefits improves
- ❖ Document preparation and presentation skills will improve