

**Detailed Syllabus**  
**Course Outcomes**

<b>Course Code</b>	<b>17I17EC511/17M17EC219/ 17M27EC215/17M17EC222</b>	<b>Semester EVEN</b>	<b>Semester 3<sup>rd</sup>&amp; 4<sup>th</sup> for M.Tech / 11<sup>th</sup> for Dual Degree</b>
<b>Course Name</b>	Dissertation		
<b>Credits</b>	M.Tech-4 & 16 DD - 22	<b>Contact Hours</b>	8 & 32
			<b>Session 2022 - 2023</b>
			<b>Month from Jan to June</b>

<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	Dr. Rachna Singh
	<b>Teacher(s) (Alphabetically)</b>	All faculty of ECE Deptt.

<b>COURSE OUTCOMES</b>		<b>COGNITIVE LEVELS</b>
<b>C213.1</b>	Summarize the contemporary scholarly literature, activities, and explored tools/ techniques/software/hardware for hands-on in the respective project area in various domain of Electronics Engineering.	Understanding Level (C2)
<b>C213.2</b>	Gain knowledge of the State-of-Art in the chosen field of study. Analyze various feasible methods of solving a problem to slot a suitable solution methodology	Analyzing Level (C4)
<b>C213.3</b>	Use latest techniques and software tools for achieving the defined objectives. Evaluate /Validate sound conclusions based on evidence and analysis	Evaluating Level (C5)
<b>C213.4</b>	Demonstrate the oral and written communication skills. Describe the importance of possible future developments in the selected domain	Creating Level (C6)

## **Evaluation Criteria**

**(Dissertation at the end of third semester for M.Tech only)**

<b>Components</b>	<b>Maximum Marks</b>
End Term Viva	60
Day to Day	40
<b>Total</b>	<b>100</b>

**(Dissertation at the end of final semester for M.Tech/DD)**

<b>Components</b>	<b>Maximum Marks</b>
End Term Viva	50
Special Contribution	10
Day to Day	40
<b>Total</b>	<b>100</b>

## Detailed Syllabus

### Lecture-wise Breakup

Subject Code	17M11EC129	Semester	Even	Semester 11th Session 2022-23 Month from Jan to Jun
Subject Name	Project Based Learning - I			
Credits	2	Contact Hours	2	

Faculty (Names)	Coordinator(s)	Dr. Vivek Dwivedi
	Teacher(s) (Alphabetically)	NA

COURSE OUTCOMES		COGNITIVE LEVELS
C171.1	Summarize the contemporary scholarly literature, activities, and explored tools/ techniques/software/hardware for hands-on in the respective project area in various domain of Embedded Systems, Signal Processing, VLSI, Communication, Artificial Intelligence and Machine Learning/Deep Learning etc.	Understanding (Level II)
C171.2	Analyze/ Design the skill for obtaining the optimum solution to the formulated problem with in stipulated time and maintain technical correctness with effective presentation.	Analysing (Level IV)
C171.3	Use latest techniques and software tools for achieving the defined objectives.	Evaluating (Level V)
C171.4	Evaluate /Validate sound conclusions based on analysis and effectively document it in correct language and proper format.	Evaluating (Level V)

**Project Based Learning Component:** Every student will be assigned a project supervisor. The project supervisor will assign 4 different tasks to the student. These tasks will be evaluated by a panel of examiners in the mid and end semester. The students will explore various tools/ techniques/software/hardware for hands-on in the respective project area in various domain of Embedded Systems, Signal Processing, VLSI, Communication, Artificial Intelligence and Machine Learning/Deep Learning etc.

**Evaluation Criteria****Components**                      **Maximum Marks**

Mid Sem Evaluation 40

Final Evaluation      40

Report                                      20

**Total**                                      **100**

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<b>Course Name</b>	Industrial Project		
<b>Credits</b>	M.Tech-4 & 16 DD - 22	<b>Contact Hours</b>	8 & 32
			<b>Session 2022 - 2023</b>
			<b>Month from Jan to June</b>

<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	Dr. Rachna Singh
	<b>Teacher(s) (Alphabetically)</b>	All faculty of ECE Deptt.

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<b>Total</b>	<b>100</b>