

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

<b>Course Code</b>	<b>17I17EC511/17M17EC219/ 17M27EC215/17M17EC222 /17I17EC511</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</b>	2021 - 2022		
<b>Month from</b>	Jan to May		

<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	Dr. Rachna Singh, Dr Kirmender 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

<b>Subject Code</b>	<b>17M11EC129</b>	<b>Semester</b>	<b>Even</b>	<b>Semester 11th Session</b> 2021-22 <b>Month from</b> Jan 22 <b>to</b> Jun 22
<b>Subject Name</b>	<b>Project Based Learning - I</b>			
<b>Credits</b>	2	<b>Contact Hours</b>	2	

<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	Dr. Vivek Dwivedi
	<b>Teacher(s) (Alphabetically)</b>	NA

<b>COURSE OUTCOMES</b>		<b>COGNITIVE LEVELS</b>
<b>C171.1</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 Embedded Systems, Signal Processing, VLSI, Communication, Artificial Intelligence and Machine Learning/Deep Learning etc.	Understanding (Level II)
<b>C171.2</b>	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)
<b>C171.3</b>	Use latest techniques and software tools for achieving the defined objectives.	Evaluating (Level V)
<b>C171.4</b>	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**

<b>Components</b>	<b>Maximum Marks</b>
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Mid Sem Evaluation	40
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Final Evaluation	40
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Report	20
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<b>Total</b>	<b>100</b>
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<b>Course Name</b>	Dissertation		
<b>Credits</b>	M.Tech-4 & 16 DD - 22	<b>Contact Hours</b>	8 & 32
<b>Session</b>	2021 - 2022		
<b>Month from</b>	July to Dec		

<b>Faculty (Names)</b>	<b>Coordinator(s)</b>	Dr. Rachna Singh, Dr Kirmender 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)

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