

## 1. MTech (Microelectronics & VLSI): 3 Year R.A. (For August 2021 Batch Onwards)

<b>Semester 1 (Odd)</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
EE 5181	Semiconductor Device Modelling	3
EE 5182	VLSI Technology	3
EE 5183	Analog IC Design	3
EE5184	Introduction to VLSI Design	2
EE 6116	Thesis Stage 0	2
SS xxxx	English Communication (Soft Skills)	1
	Total	<b>14</b>
<b>Semester 2 (Even)</b>		
EE 5186	Digital IC Design	2
EE 5187	Digital IC Design Lab	1
EE 5188	Analog IC Design Lab	1
EE xxxx	Department Electives	3
EE 6126	Thesis Stage 1	2
SS 5901	EE Industrial Lecture (Soft Skills)	1
	Total	<b>10</b>
<b>Semester 3 (Odd)</b>		
EE 5185	System Design Lab	2
EE xxxx	Department Electives	2
EE 6136	Thesis Stage-2	4
	Total	<b>8</b>
<b>Semester 4 (Even)</b>		
EE xxxx	Department Electives	4
EE 6146	Thesis Stage-3	4
	Total	<b>8</b>
<b>Semester 5 (Odd)</b>		
EE 6156	Thesis Stage-4	4
	Total	<b>4</b>
<b>Semester 6 (Even)</b>		
EE 6166	Thesis Stage-5	8
	Total	<b>8</b>

	<b>Total Credits</b>	<b>52</b>
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List of Electives (There can be additional new elective courses)

EE6120	Nanoelectronics: Principles & Devices	3
EE6150	Nanophotonics and Metamaterials	3
EE5199	Introduction to MEMS	2
EE7117	More than Moore Electronics	2
EE6170	Mesoscopic Device Electronics	3
EE5155	Semiconductor Optoelectronics	2
EE5152	Fundamental of RF Microelectronics	1
EE5153	Design of CMOS RFIC	1
EE5154	Implementation of RFIC CMOS modules	1

Summary:

<b>Course Type</b>	<b>Credits</b>
Department Electives	9
Department Core	13
Soft skills	2
Thesis	24
Labs	4
<b>Total</b>	<b>52</b>

## 2. MTech (Microelectronics & VLSI): 3 Year R.A. (For January 2022 Batch Onwards)

<b>Semester 1</b>		
<b>Course No.</b>	<b>Course Title</b>	<b>Credits</b>
EE 5186	Digital IC Design	2
EE 5187	Digital IC Design Lab	1
EE 5188	Analog IC Design Lab	1
EE xxxx	Department Electives	3
EE 6116	Thesis Stage 0	2
SS 5901	EE Industrial Lecture (Soft Skills)	1
	Total	<b>10</b>
<b>Semester 2</b>		
EE 5181	Semiconductor Device Modelling	3
EE 5182	VLSI Technology	3
EE 5183	Analog IC Design	3
EE 5184	Introduction to VLSI Design	2
EE 6126	Thesis Stage 1	2
SS xxxx	English Communication (Soft Skills)	1
	Total	<b>14</b>
<b>Semester 3</b>		
EE xxxx	Department Electives	4
EE 6136	Thesis Stage-2	4
	Total	<b>8</b>
<b>Semester 4</b>		
EE 5185	System Design Lab	2
EE xxxx	Department Electives	2
EE 6146	Thesis Stage-3	4
	Total	<b>8</b>
<b>Semester 5</b>		
EE 6156	Thesis Stage-4	4
	Total	<b>4</b>

<b>Semester 6</b>		
EE 6166	Thesis Stage-5	8
	Total	<b>8</b>
	<b>Total Credits</b>	<b>52</b>

List of Electives (There can be additional new elective courses)

EE6120	Nanoelectronics: Principles & Devices	3
EE6150	Nanophotonics and Metamaterials	3
EE5199	Introduction to MEMS	2
EE7117	More than Moore Electronics	2
EE6170	Mesoscopic Device Electronics	3
EE5155	Semiconductor Optoelectronics	2
EE5152	Fundamental of RF Microelectronics	1
EE5153	Design of CMOS RFIC	1
EE5154	Implementation of RFIC CMOS modules	1

Summary:

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