

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code: **XXX M.Tech. (Semiconductor Technology)**
 Department: **EC Department of Electronics and Communication Engineering**
 Year: **I**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight(%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester-I (Autumn): @ IIT Roorkee														
1.	PHN-709	Semiconductor Device Physics	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
2.	ECN-573	Digital VLSI Circuit Design	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
3.	ECN-580	High Frequency Analog Integrated Circuits	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
4.	PHN-716	Semiconductor Characterization Lab	PCC	2	0	0	6	0	6	-	50	-	-	50
5.	ECN-599	Microelectronics Fabrication Lab-1	PCC	2	0	0	3	0	3	-	100	-	-	-
6.	PHN-724	Semiconductor Micro-electronic Technology	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
		Total		20										
Semester-II (Spring): Partner University student → @ IIT R / IIT-R student → @ Partner University														
1.	ECN-700	Seminar	SEM	2	-	-	-	-	-	-	-	-	100	-
2.		Program Elective-I	PEC	4	-	-	-	-	-	-	-	-	-	-
3.		Program Elective-II	PEC	4	-	-	-	-	-	-	-	-	-	-
4.		Program Elective-III	PEC	4	-	-	-	-	-	-	-	-	-	-
5.		Program Elective-IV	PEC	4	-	-	-	-	-	-	-	-	-	-
6.		Program Elective-V	PEC	2	-	-	-	-	-	-	-	-	-	-
		Total		20										
Courses to be chosen from partner university with total credits 20														

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Program Code: **XXX M.Tech. (Semiconductor Technology)**
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Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight(%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester-I (Autumn): Partner University student → @ IIT R / IIT-R student → @ Partner University														
1.	ECN-701A	Thesis Stage-I (to be continued next semester)	DIS	12	-	-	-	-	-	-	-	-	100	-
		Total		12										
Note: Students can take 1 or 2 audit courses as advised by the supervisor, if required.														
Semester-II (Spring): @ IIT Roorkee														
1.	ECN-701B	Thesis Stage-II (continued from III semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
		Total		18										

Summary				
Semester	1	2	3	4
Semester-wise Total Credits	20	20	12	18
Total Credits	70			