

**M. Tech. (Semiconductor Technology)**  
**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

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
<b>Semester-I @ IIT Roorkee</b>														
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-5xx	High Frequency Analog Integrated Circuits	PCC	4	3	1	0	3	0	20-35	-	20-30	40-50	-
4.	PHN-7xx	Semiconductor Characterization Lab	PCC	2	0	0	6	0	6		50	0	0	50
5.	ECN-5xx	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	12	4	9	12	9					
<b>Semester II: Partner University student → @ IIT R / IIT-R student → @ Partner University</b>														
1.	ECN/PHN-xxx	CAD Lab	PEC	2										
2.	ECN/PHN-xxx	Program Elective-I	PEC	4										
3.	ECN/PHN-xxx	Program Elective-II	PEC	4										
4.	ECN/PHN-xxx	Program Elective-III	PEC	4										
5.	ECN/PHN-xxx	Program Elective-IV	PEC	4										
6.	ECN/PHN-xxx	Seminar	SEM	2										
		Sub Total		20										
Courses to be chosen from partner university with total credits in the range <b>20 – 24</b>														
<b>Semester III: Partner University student → @ IIT R / IIT-R student → @ Partner University</b>														
1.		Dissertation/Thesis Stage-I with credits	DIS	12										
		Total		12										
<b>Semester-IV: @ IIT Roorkee</b>														
1.	ECN-701	Dissertation Stage II	DIS	18	-									
		Total		18										

Semester	I	II	III	IV
<b>Total Credits</b>	<b>20</b>	<b>20-24</b>	<b>12</b>	<b>18</b>
<b>Total Credits</b>	<b>70-74</b>			