

Syllabus Structure of M.Tech (Microelectronics & VLSI Design)

Semester –I

No. of credits - 23

Course No	Title of the course	No. of Credits	No. of Contact Hours
MV401	Micro-Nano Fabrication technology	3	3
MV402	Analog and Mixed Signal IC Design	3	3
MV403	Digital VLSI System Design	4	4
MV404	RF and Microwave ICs	3	3
MV407	IC Design Lab-I	3	6
MV408	RF IC Lab	2	4
MV409	Semester Project -I	2	2
MV 410	Semiconductor Device Physics and Modeling	3	3

Semester –II

		No. of credits - 20		
Course No.	Type of Course	Title of the course	Credits	Contact Hours
MV451	Core	Digital IC Design	3	3
MV452	Core	VLSI Signal processing	3	3
MV454	Core	Nano Fabrication Lab	3	6
MV455	Core	IC Design Lab -II	3	6
MV456	Core	Semester Project -II	2	4
	Elective 1	TBA	2	
	Elective 2	TBA	3	3
	Elective 3	TBA	3	3

TBA: To be announced

Semester –III

No. of credits – 24

Course No	Title of the course	No of Credits
MV501	Project work + seminar	24

Semester –IV

No. of credits – 24

Course No	Title of the course	No of Credits
MV 502	Project work + Dissertation +Viva	24

Syllabus Structure of M.Tech (Integrated Circuits Technology)

Semester –I**No. of credits - 23**

Course No	Title of the course	No. of Credits	No. of Contact Hours
IC401	Micro-Nano Fabrication technology	3	3
IC402	Analog and Mixed Signal IC Design	3	3
IC403	Digital VLSI System Design	4	4
IC404	RF and Microwave ICs	3	3
IC407	IC Design Lab-I	3	6
IC408	RF IC Lab	2	4
IC409	Semester Project -I	2	2
IC 410	Semiconductor Device Physics and Modeling	3	3

Semester –II**No. of credits - 22**

Course No.	Type of Course	Title of the course	Credits	Contact Hours
IC451	Core	IC Packaging Technology	3	3
IC452	Core	Semiconductor Device Reliability and Metrology	3	3
IC454	Core	Nano Fabrication Lab	3	6
IC455	Core	IC Design Lab -II	3	6
IC456	Core	Semester Project -II	2	4
	Elective 1	TBA	2	
	Elective	TBA	3	3
	Elective	TBA	3	3

TBA: To be announced**Semester –III****No. of credits – 24**

Course No	Title of the course	No of Credits
IC501	Project work + seminar	24

Semester –IV**No. of credits – 24**

Course No	Title of the course	No of Credits
IC 502	Project work + Dissertation +Viva	24