

Curriculum

M.Tech. in MicroElectronics & VLSI

Cat.	Course Number, Course Title		L-T-P	Credits		Cat.	Course Number, Course Title		L-T-P	Credits
I Semester						II Semester				
C	EEL7XX0	Solid State Devices	3-0-0	3		C	EEL7XX0	IC Technology	3-0-2	4
C	EEL7XX0	Digital VLSI Design	3-0-0	3		E	EEL7XX0	Elective	3-0-0	3
C	EEL7XX0	Analog IC Design	3-0-2	4		E	EEL7XX0	Elective	3-0-0	3
E	EEL7XX0	Elective	3-0-0	3		E	EEL7XX0	Elective	3-0-0	3
NG1	HSN7XX0	Non-Graded I	1-0-0	S/X		NG2	HSN7XX0	Non-Graded II	1-0-0	S/X
Total				13		Total				13
III Semester						IV Semester				
T	EET8XX0	Thesis		16		T	EET8XX0	Thesis		16
Total				16		Total				16

Electives

S.No.	Course Number	Course Title		
1	EEL7xx0	<i>Flexible and Printed Electronics</i>	3-0-0	3
2	EEL7xx0	<i>Semiconductor Device Characterization</i>	3-0-0	3
3	EEL7XX0	Physics and Modelling of MOS Transistors	3-0-0/2-0-2	3
4	EEL7xx0	<i>Introduction to Electronics Packaging</i>	3-0-0	3
5	EEL7xx0	VLSI Broadband Communication Circuits	3-0-0	3
6	EEL7XX0	Radio Frequency Integrated Circuit Design	3-0-0	3
7	EEL7XX0	Signal and Power Integrity	3-0-0	3
8	EEL7XX0	Hardware Design for Artificial Intelligence	3-0-0	3
9	EEL7XX0	SoC Testing & Verification	3-0-0	3
10	EEL7XX0	In-memory computing	3-0-0	3
11	EEL7XX0	Mixed Signal Circuit Design	3-0-0	3
12	EEL7xx0	<i>Hardware-Software Co-design</i>	3-0-0	3

S.No.	Category	Course Category Title	Total Courses	Total Credits
1	C	COMPULSORY	4	14
2	E	ELECTIVES	4	12
3	NG	Non-Graded	2	0
3	T	Thesis	2 (16+16)	32
<i>Total</i>				58