

## B Tech in Electronics Engineering (VLSI Design & Technology)

### CURRICULUM STRUCTURE

SEM	SLOT	COURSE CATEGORY	COURSE CODE	COURSE NAME	L	T	J	P	S	C	CREDIT / SEM
I	A	BST	B250802/MA100A	Mathematics for Electrical Science-1	3	1	0	0	2	3	20
	B	BSE	B250009/EV110B	Fundamentals of Semiconductors	3	0	0	2	3	4	
	C	EST	B250906/CN100C	Engineering Graphics and Computer Aided Drawing	2	0	0	2	2	3	
	D	EST	B250906/CN100D	Introduction to Electrical and Electronics Engineering	4	0	0	0	4	4	
	E	ESE	B250903/CN110E	Programming in Python	2	1	0	2	3	4	
	K	HMT	B250908/CN900K	Life Skills and Professional Communication	1	1	0	0	0	1	
	U	ESL	B250906/CN930U	Basic Electrical and Electronics Engineering Workshop	0	0	0	2	0	1	
	G	SEC		Skill Enhancement Course							
II	A	BST	B250802/MA200A	Mathematics for Electrical Science-2	3	1	0	0	2	3	24
	B	BSE	B250009/EV200B	AI Foundations for Electronics Engineers	3	0	0	2	3	4	
	C	EST	B250009/EV210C	Electronics Devices & Circuits	2	0	0	2	2	3	
	D	EST	B250009/EV210D	Foundations of C Programming	4	0	0	0	4	4	
	E	PCT	B250004/EC200E	Network Theory	3	1	0	0	4	4	
	F	ESB	B250908/CN220F	Entrepreneurship and IPR	2	0	1	0	3	3	
	K	HMT	B250908/CN910K	Health and Wellness	1	0	0	0	0	1	
	U	PCL	B250902/CN230U	Essentials of Embedded and Computing Lab	0	0	0	2	0	1	
	G	SEC		Skill Enhancement Course						1	
III	A	BST		Mathematics for VLSI	3	1	0	0	2	3	25
	B	PCE	B250009/EV310B	Signal Analysis and Processing	3	1	0	3	5	6	
	C	PCE	B250004/EC310C	Logic Circuit Design	3	1	0	3	5	6	
	D	PCB	B250009/EV320D	Solid state Devices	2	1	1	0	4	4	
	E	EST	B250009/EV300E	VLSI fabrication	3	0	0	0	5	4	
	F	HMT	B250908/HU900F	Engineering Economics	3	0	0	0	1	2	
			B250908/CN900F	Management for Engineers							
M	M		Minor	3	1	0	0	4	4		
IV	A	BST	B250009/EV400A	Electromagnetic Foundations for VLSI Design	3	1	0	0	2	3	24
	B	PCE	B250004/EC410B	Analog Integrated Circuits	3	1	0	3	5	6	
	C	PCE	B250004/EC410C	Architecture and Programming of Microcontrollers	3	1	0	3	5	6	
	D	PCB	B250009/EV420D	Analog & Digital Communication	2	1	1	0	4	4	
	E	PET	B250009/EV41*E	Program Elective - Theory	2	1	0	0	3	3	
	F	HMT	B250908/HU900F	Engineering Economics	3	0	0	0	1	2	
			B250908/CN900F	Management for Engineers							
M/H			Minor / Honours	3	1	0	0	4	4		

V	A	PCT	B250009/EV500A	Digital System Design	3	1	0	0	4	4	23
	B	PCE	B250009/EV510B	FPGA based system Design	3	1	0	3	5	6	
	C	PCE	B250009/EV510C	Digital CMOS Design	3	1	0	3	5	5	
	D	PCB	B250009/EV520D	Embedded Systems Design	2	1	1	0	4	4	
	E	PET	B250009/EV51*E	Program/ Industry Linked Elective - Theory	2	1	0	0	3	3	
	K	HMT	B250908/CN500K	Constitution of India	2	0	0	0	0	1	
	M/H	M/H		Minor / Hons	4	0	0	0	4	4	
VI	A	PCT	B250009/EV600A	SOC System Implementation	3	1	0	0	4	4	23
	B	PCE	B250009/EV610B	VLSI Verification and Testing	3	1	0	3	3	5	
	C	PET	B250009/EV61*C	Program/ Industry Linked Elective - Theory	3	1	0	0	2	3	
	D	PCB	B250009/EV620D	Analog VLSI Design	2	1	1	0	4	4	
	E	EST	B250908/CN600E	Design Thinking and Product Development	2	1	1	0	0	2	
	J	OET	B250908/CN6**J	Open Elective - Theory	2	0	0	0	4	3	
	F	PCL	B250004/EC630U	IoT Lab	0	0	0	3	1	2	
M/H	M/H		Minor / Honours					6	3		
VII	A	PET	B250009/EV71*A	Program/ Industry Linked Elective - Theory	3	1	0	0	2	3	17
	B	PET	B250009/EV71*B	Program/ Industry Linked Elective - Theory	3	1	0	0	2	3	
	J	HMT	B250908/CN700C	Engineering Ethics and Sustainable Development	3	0	0	0	1	2	
	K	OET	B250908/CN7**J	Open Elective - Theory	3	0	0	0	3	3	
	L	PSL	B250908/CN700T	Research Seminar	2	0	0	0	2	2	
	P	PSL	B250908/CN740U	Project	0	0	6	0	2	4	
	H	H		Honours					8	4	
VIII	A	PET	B250009/EV81*A	Program Elective - Theory	3	1	0	0	2	3	11
	J	OET	B250908/CN8**J	Open Elective - Theory	3	0	0	0	3	3	
	K	HMT	B250908/CN800K	Organizational Behaviour and Business Communication	2	0	0	0	0	1	
	P	PSL	B250908/CN840U	Project	0	0	6	0	2	4	
Total Earned Credits										167	
Mandatory Student Activities										3	
TOTAL CREDITS										170	
MINOR										15	
HONOURS										15	
MANDATORY TOTAL CREDITS FOR AWARD OF DEGREE										157+3 = 160	