

MSc Electronics with Specilisation in AI Hardware/VLSI/Agri-Food Electronics/Sensors/Applied Materials/IoT and Robotics/Biomedical Electronics/Unconventional Computing/Signal Processing Hardware

Semester 1	C	Semester 2	C	Semester 3	C	Semester 4	C
Digital Access for Community Empowerment (DACE)	3	Verilog programing and Deep Learning lab	3	Elective 1 (ARM courses/Swayam/MOOC etc)	9	Special Topics in Electronics (ARM courses/Swayam/MOOC etc)	5
Digital Experience Laboratory (DEL)	3	VLSI physical design of Neural Processors	5	Group Project	12	Capstone Project	20
Design Thinking and Innovation (DTI)	4	Mixed Signal VLSI physical design lab	3	Mini-project	4		
Basic electronic devices and circuits	5	AI Hardware and Embedded IoT lab	3				
Sensors and transducers for IOT	5	CMOS integrated Operational amplifiers	3				
Linear circuit theory	5	Analog Circuits for Integrated Sensors	3				
		Individual project	5				
Credits	25		25		25		25

MTech Electronics Engineering with Specilisation in Quantum Technology/Semiconductor Manufacturing Technology

Semester 1	C	Semester 2	C	Semester 3	C	Semester 4	C
Digital Access for Community Empowerment (DACE)	3	Digital System Design using Verilog	3	Research Topics in Electronics Engineering (ARM courses/Swayam/MOOC etc)	20	Master Thesis	30
Digital Experience Laboratory (DEL)	4	CMOS Digital VLSI circuit design	3				
Design Thinking And Innovation (DTI)	3	Digital VLSI Physical Design	5				
Graphene and 2D Materials	3	Analog VLSI Physical Design	5				
Cleanroom design	3	UVM and System Verilog	3				
Semiconductor Physics	3	CMOS integrated operational amplifiers	3				
Experimental Methods	3	Device Technology Lab	3				
Modelling Materials	3						
	25		25		20		30