The MTech programme with Microelectronics and VLSI

The core theory courses are (6 credits each)

- 1. Linear Algebra and its applications
- 2. Embedded systems Design (new course)
- 3. Probability and applications
- 4. Multivariable Control Systems

The student has to take at least 3 out of these 4 courses to complete the core theory course requirements.

The core lab courses are (3 credits each)

- 1. Embedded systems Design lab (new course)
- 2. VLSI Simulations Lab (new course)

The student has to take at least 1 out of these 2 lab courses to complete the core lab course requirements.

Semester wise credits distribution

Semester 1	Semester 2	Semester 3	Semester 4
18 core theory			
credits			
3 core lab credits			
4 credits seminar	30 credits of	MTech Project I	MTech Project II
12 credits electives	electives	32 credits	32 credits
P/NP			
Communications			
skills course			

List of electives

Autumn (Odd) semester

Basket: VLSI and Microelectronics	VLSI Design	
	• Physics of Transistors	
	• Analog IC design	
	 Nanoelectronics 	

Spring (Even) semester

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Basket: VLSI and Microelectronics	 Mixed signal VLSI Design
	VLSI Technology
	Power semiconductor devices
	• System Design of Electronic Products
	 VLSI Testing and testability