

B Tech - Electronics Engineering (Design and Manufacturing)

Modern computers and controllers used in applications ranging from desk top computing to space applications are based on microprocessors, micro controllers, memory and embedded systems which contain millions of transistors in a single semiconductor chip. To stay current with technological advances in this field of engineering, an innovative program leading to undergraduate degree, B Tech - Electronics Engineering (Design and Manufacturing) giving equal importance to design, testing and realization of analog and digital circuits and systems, power electronics and industrial drives and control and instrumentation systems is introduced.

The graduates are expected to design and test circuits that use resistors, capacitors, inductors, diodes and transistors to achieve a particular functionality. Students need to design integrated circuits by constructing circuit schematics and layouts using Electronic Design Automation (EDA). This curriculum also includes topics such as Digital Signal Processing (DSP), Computer Organization and Computer Networking.

The *practice based learning approach* and modern course contents will enable our graduates to get employed in many engineering industries. The graduates can pursue higher education in Electrical, Electronics Engg or Engineering Management.

B Tech - Electronics Engineering (Design & Manufacturing) Program

Sem 1	Calculus	Basic Thermal Engineering	Physics I Theory and Practice	Digital Logic Design Theory and Practice	Computational Eng. Theory and Practice	Eng. Practice I		
Sem 2	Linear Algebra & Optimization	Technical English	Concepts in Eng. Design	EM Fields and Quantum Mech.	Basic Electrical and Electronics Engg.	Graphic Arts	Engg Graphics	Eng. Practice II
Sem 3	ODE and Complex analysis	Statics and Strength of Materials	Networks and Systems Theory and Practice	Solid State Devices Theory and Practice	Electro Mechanical Energy Conversion Theory and Practice			
Sem 4	Probability and Statistics	Control Engineering Theory and Practice	Principles of Measurements Theory and Practice	Analog Circuits Theory and Practice	Power Electronics and Industrial Drives Theory and Practice			
Sem 5	Ecology and Environment	Electronic Mfg. & Packg. Techniques	Instrumentation Theory and Practice	Analog IC Applications Theory and Practice	Computer Organization & Microprocessor Theory and Lab	Applied DSP Theory and Practice		
Sem 6	Quality and Reliability Management	Elective 1	VLSI Design Theory and Practice	PCB/Prototype Design and Development Theory and Practice	Data Networks Theory and Practice			
Sem 7	Professional Ethics	Elective 2	Elective 3	Embedded Systems Theory and Practice	Industrial Design Practice	Mini Project		
Sem 8	Finance Management	Elective 4	Project					

 Electrical & Electronics Engg

 Humanities & Management

 Theory and Practice Courses

 Electives

 Project

 Practice Courses

 Basic Sciences

 Basic Engineering

 Theory Courses