

Bachelor of Technology in Electronics & Communication Engineering (ECE)

Duration: 4 Years (8 Semesters)

Program Type: Undergraduate Degree Program

Total Credits: 160–180 (varies by university)

Note: Subject codes differ across universities. The following is a standard university-style syllabus with commonly used sample subject codes.

Semester I

Subject Code	Subject Name
ECE101	Engineering Mathematics-I
ECE102	Engineering Physics
ECE103	Engineering Chemistry
ECE104	Basic Electrical Engineering
ECE105	Engineering Graphics
ECE106	Programming for Problem Solving
ECE107P	Physics Laboratory
ECE108P	Programming Laboratory

Semester II

Subject Code	Subject Name
ECE201	Engineering Mathematics-II
ECE202	Electronic Devices and Circuits
ECE203	Network Analysis

Subject Code	Subject Name
ECE204	Digital Logic Design
ECE205	Environmental Studies
ECE206	Basic Mechanical Engineering
ECE207P	Electronic Devices Laboratory
ECE208P	Digital Logic Laboratory

Semester III

Subject Code	Subject Name
ECE301	Signals and Systems
ECE302	Analog Electronic Circuits
ECE303	Electromagnetic Fields
ECE304	Data Structures
ECE305	Probability Theory and Random Processes
ECE306P	Analog Circuits Laboratory
ECE307P	Data Structures Laboratory

Semester IV

Subject Code	Subject Name
ECE401	Communication Systems
ECE402	Microprocessors and Microcontrollers
ECE403	Control Systems

Subject Code	Subject Name
ECE404	Linear Integrated Circuits
ECE405	Digital Signal Processing
ECE406P	Microprocessor Laboratory
ECE407P	Communication Systems Laboratory

Semester V

Subject Code	Subject Name
ECE501	Digital Communication
ECE502	VLSI Design
ECE503	Antenna and Wave Propagation
ECE504	Computer Networks
ECE505	Industrial Management
ECE506P	VLSI Laboratory
ECE507P	Digital Communication Laboratory

Semester VI

Subject Code	Subject Name
ECE601	Wireless Communication
ECE602	Embedded Systems
ECE603	Optical Communication
ECE604	Information Theory and Coding

Subject Code	Subject Name
ECE605	Internet of Things (IoT)
ECE606P	Embedded Systems Laboratory
ECE607P	IoT Laboratory

Semester VII

Subject Code	Subject Name
ECE701	Mobile Communication
ECE702	Satellite Communication
ECE703	Radar Engineering
ECE704	Artificial Intelligence Applications
ECE705	Elective-I
ECE706	Major Project – Phase I
ECE707P	Advanced Communication Laboratory

Semester VIII

Subject Code	Subject Name
ECE801	Professional Ethics and Engineering
ECE802	Elective-II
ECE803	Elective-III
ECE804	Entrepreneurship Development
ECE805	Major Project – Phase II

Subject Code	Subject Name
ECE806	Industrial Training & Seminar
ECE807	Viva Voce