Indian Institute of Technology Goa
B.Tech. Electrical Engineering Curriculum
– 2019 Batch

Semester 1
Computer Programming
Calculus
Quantum Physics
Physical Chemistry
Organic Chemistry & Inorganic Chemistry
National Sports Organisation
Chemistry Lab
Introduction to Profession
Introduction to Manufacturing
Foundation Programme in Humanities

Semester 2
Introduction to Electrical and Electronics Engineering
Linear Algebra
Ordinary Differential Equations
Circuit Theory
Fundamentals of CAD and Manufacturing
National Sports Organisation
Physics Lab
Electricity and Magnetism
Biology

Semester 3
Electronic Devices and Lab
Digital Circuits Lab
Electromagnetic Waves
Signals and Systems
Complex Analysis
Differential Equations II
Open Elective

Semester 4
Analog Circuits and Lab
Analog Communication Systems
Electrical Machines and Lab
Probability and Random Processes
Open Elective

Semester 5
Power Electronics and Lab
Digital Signal Processing and Lab
Digital Communication Systems and Lab
Control Systems and Lab
Open Elective

Semester 6
Power Systems
Embedded Systems and Lab
Program Elective I
Program Elective II
Open Elective

Semester 7
6 MONTHS INTERNSHIP
OR
BTP
Elective 1
Elective 2

Semester 8
BTP Phase 2/ Program Elective 1
Program Elective II
Program Elective III/ Open Elective I
Open Elective II

List of Open Electives offered
Computer Graphics using OpenGL
Numerical Simulation and its applications
Introduction to Quantitative Finance
Language and Society
Aerosol Technology
Machine Learning
Economics

List of Program Electives offered
Analog Integrated Circuit Design
System Identification and Adaptive Control
Insulation in Power Apparatus and System
Power Electronic Converters