Indian Institute of Technology Goa

B.Tech. Computer Science and Engineering
Curriculum – 2022 Batch

Semester 1

Introduction to Computing

Calculus

Quantum Physics and Application

Foundation for Humanities and Social Sciences

Physical Chemistry

Organic Chemistry & Inorganic Chemistry

Introduction to Manufacturing

Introduction to Profession

National Sports Organisation

Chemistry Lab

Semester 2

Software Tools

Basic Linear Algebra

Ordinary Differential Equations

Electricity and Magnetism

Introductory Biology

Engineering Graphics and Introduction to Computer-Aided Drawing

Introduction to Electrical and Electronics Engineering

National Sports Organisation

Physics Lab

Semester 3

Data Structures and Algorithms

Digital Systems Design

Discrete Structures

Probability and Statistics for Computer Science

Open Elective

Semester 4

Computer Architecture

Computer Networks

Algorithm Design

Open Elective

Semester 5
Programming Language Paradigms
Operating Systems
Logic in Computer Science
Artificial Intelligence
Open Elective

Semester 6
Machine Learning
Theory of Computation
Compiler Design
Program Elective

Semester 7
BTP PHASE 2/ Program Elective 1
Program Elective 2
Program Elective 3/ Open Elective 1
Open Elective 2
Electives yet to be finalised

Semester 8
6 MONTH INTERNSHIP OR
Program Elective 1
Program Elective 2
Open Elective
Open Elective
Electives yet to be finalised

Electives offered in Semester 3
Signals and Systems
Economics
Real Analysis
Life Art Expressions 2.0 - Studying life through creative practice, critical thinking and creative expression

Electives offered in Semester 4
Introduction to Morphology
Numerical Simulation and its applications
Introduction to Finance
Computer Graphics using OpenGL
Life Art Expressions 2.0 - Studying life through creative practice, critical thinking and creative expression

Electives offered in Semester 5
Geometric Modelling
Introduction to Finance
Language and Society
Bioinspired Engineering
Real Analysis

Electives offered in Semester 6
Computer Graphics using OpenGL
Coding Theory and Cryptography
Optimization: Theory and Algorithms