

Indian Institute of Technology Goa

B.Tech. Mechanical 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

Thermodynamics

Fluid Mechanics

Mechanics of Materials

Solid Mechanics Lab

Differential Equations 2

Open Elective

Semester 4

Machine drawing lab

Manufacturing Processes I

Mechanical Measurements & Metrology

Engineering Metallurgy

Numerical Analysis

Open Elective

Semester 5
Applied Thermodynamics
Kinematics and Dynamics of Machines
Manufacturing Processes II
Manufacturing Processes Lab
Open Elective
Open Elective

Semester 7
Yet to be finalized
Program Electives offered:
Computational Heat and Fluid Flow
Fundamentals of Combustion
Introduction to Interfacial Sciences and Nano Technology
Reliability Based Design
Finite Element Method
Microscale transport Phenomena and Microfluids
Gas Dynamics
Thermo-fluids Engineering
Mathematical Methods

Semester 6
Heat Transfer
Machine Design
Digital Manufacturing Lab
Program Elective 1
Program Elective 2
Open Elective
Semester 8
6 MONTH INTERNSHIP OR
Program Elective 1
Program Elective 2
Open Elective
Open Elective
<i>*Electives yet to be finalised</i>

Open Electives offered:
Computer Graphics using OpenGL
Numerical Simulation and its applications
Introduction to Quantitative Finance
Language and Society
Principles and Applications of
Electrochemistry
Sensors and Actuators: Fabrication and
Applications
Elementary Number Theory

