

# DEGREE ROAD MAP – R20

## 1-1

MA101BS  
Mathematics-I

PH102BS  
Applied Physics

CS103ES  
Programming for  
Problem Solving

ME104ES  
Engineering  
Graphics

PH105BS  
Applied Physics  
Lab

CS106ES  
Programming  
for Problem  
Solving Lab

MC107ES  
Environmental  
Science

MC108  
Business English

## 1-2

MA201BS  
Mathematics-II

CH202BS  
Engineering  
Chemistry

EE203ES  
Basic Electrical  
Engineering

ME205ES  
Engineering  
Workshop

EN205HS  
English

CH206BS  
Engineering  
Chemistry Lab

EN207HS  
English Language  
& Communication  
Skills lab

EE208ES  
Basic Electrical  
Engineering Lab

MC209  
Python  
Programming

MC210  
Aptitude &  
Reasoning

## 2-1

EC301PC

Electronic  
Devices and  
Circuits

EC302PC

Network  
Analysis and  
Transmission  
Lines

EC303PC  
Switching  
Theory and Logic  
Design

EC304PC

Signals and  
Systems

EC305ES

Probability  
Theory and  
Stochastic  
Processes

EC306PC

Electronic  
Devices and  
Circuits Lab

EC307PC

Digital Logic  
Design Lab

EC308PC

Basic Simulation  
Lab

MC309HS

Constitution of  
India

MC310EC

Fundamentals of  
Data Structures

MC311

Advanced  
Python  
Programming

## 2-2

MA402BS

Numerical  
Methods,  
Complex  
Variables &  
Statistical  
Inference

EC402PC

Electromagnetic  
Fields and Waves

EC403PC

Analog and  
Digital  
Communications

EC404PC

Analog and Pulse  
Circuits

EC405PC

Linear and Digital  
Integrated  
Circuits

EC406PC

Analog and  
Digital  
Communications  
Lab

EC407PC

Analog and  
Pulse Circuits  
Lab

EC408PC

Linear and  
Digital  
Integrated  
Circuits Lab

MC409HS

Gender  
Sensitization Lab

MC410EC

Electronic Circuit  
Design Lab

## 3-1

EC501PC

Microprocessors  
&  
Microcontrollers

CS502ES

Data  
Communications  
and Networks

EE503ES

Control Systems

SM504MS

Business Economics  
& Financial Analysis

Professional  
Elective-I

EC505PC

Microprocessors  
& Microcontrollers  
Lab

EC506PC

Data  
Communications  
and Networks Lab

EN508HS

Advanced English  
Communication  
Skills Lab

MC509

Intellectual  
Property Rights

MC510EC

Fundamentals of  
Cyber Security

MC511EC

Internship in  
industry

## 3-2

EC601PC

Antennas and  
Propagation

EC602PC

Digital Signal  
Processing

EC603PC

VLSI Design

Professional  
Elective-II

Open Elective-I

EC604PC

Digital Signal  
Processing Lab

EC605PC

e – CAD Lab

EC605PC

Scripting Languages  
Lab

MC601EC

Numerical Ability &  
Reasoning

MC602EC

Fundamentals of  
Artificial Intelligence

## 4-1

EC701PC

Microwave and  
Optical  
Communications

Professional  
Elective-III

Professional  
Elective-IV

Open Elective-II

SM701MS

Professional  
Practice, Law&  
Ethics

EC703PC

Project Stage-I

EC704PC

Microwave and  
Optical  
Communications  
Lab

EC705PC

Industrial  
Oriented Mini  
Project/Summer  
Internship

EC706PC

Seminar

## 4-2

Open Elective-III

Professional  
Elective-V

Professional  
Elective-VI

EC801PC

Project Phase-II