



Shreemati Nathibai Damodar Thackersey Women's University
1, Nathibai Thackersey Road, New Marine Lines, Mumbai-400020, Maharashtra (India)

Program Structure Scheme

For

Post Std 10+2,
4 Year(s) Bachelor Degree Program in

Faculty of Science and Technology

Bachelor Of Technology(B.Tech.)
(Credits System)

(Revised 2019-Regular)
Electronics & Communication
Program Code: -
For Academic Year 2021-2022

Publisher's Note

This Shreemati Nathibai Damodar Thackersey Women's University has great Pleasure in publishing this program structure for Post Std 10+2 program for 4 Year(s) Bachelor Degree Program as "Bachelor Of Technology" (Revised 2019 - Regular) (Electronics & Communication) under the Faculty of "Faculty of Science and Technology".

On behalf of the University, I thank experts and authorities of the University for the interest taken and the whole hearted co-operation extended by them in bringing out this publication.

Date: 1/1/2022 11:21:26 AM

Shreemati Nathibai Damodar Thackersey Women's
University ,1, Nathibai Thackersey Road, New Marine
Lines, Mumbai-400020, Maharashtra (India)

Registrar

Program Objective(s)

The Bachelor Of Technology Consists of following 4 program part(s):

Sr.No.	Program Part Name	Program Part Abbreviation	Examination Pattern
1	First Year	FY	Semester
2	Second Year	SY	Semester
3	Third Year	TY	Semester
4	Final Year	Final Year	Semester

The Bachelor Of Technology is available in following medium of instruction/s:

1. English

Program Part: FY Separate Passing Head: No, Min: 0, Max: 1050, Total Credits: 38.00

Term: Sem I Separate Passing Head: No, Min Courses: 8, Max Courses: 8, Min:0,Max:450, Total Credits: 17.50

The papers for FY - Sem I are classified into following groups:

1.Compulsory Group (Min Papers: 8, Max Papers: 8, Separate Passing Head: No, Max. Marks: 450) Select minimum 8 paper(s) Select maximum 8 paper(s) Papers:	
110011	Applied Science (Physics and Chemistry)
110012	Mathematics-I
120011	Basic Electrical Engineering
120012	Engineering Graphics and Design
110021	Applied Science Lab
120021	Basic Electrical Engineering Lab
120022	Engineering Graphics and Design Lab
180051	Induction Programme

Term: Sem II Separate Passing Head: No, Min Courses: 10, Max Courses: 10, Min:0,Max:600, Total Credits: 20.50

The papers for FY - Sem II are classified into following groups:

1.Compulsory Group (Min Papers: 10, Max Papers: 10, Separate Passing Head: No, Max. Marks: 600) Select minimum 10 paper(s) Select maximum 10 paper(s) Papers:	
210011	Applied Science (Physics and Chemistry)
210012	Mathematics-II
220011	Programming for Problem Solving
220012	Workshop/Manufacturing Practices
230011	English
210021	Applied Science Lab
220021	Programming for Problem Solving Lab
220022	Workshop/Manufacturing Practices Lab
230021	English Practical
280011	Environmental Sciences

Program Part: SY Separate Passing Head: No, Min: 0, Max: 1500, Total Credits: 41.00

Term: Sem III Separate Passing Head: No, Min Courses: 10, Max Courses: 10, Min:0,Max:750, Total Credits: 19.00

The papers for SY - Sem III are classified into following groups:

1.Compulsory Group (Min Papers: 9, Max Papers: 9, Separate Passing Head: No, Max. Marks: 700) Select minimum 9 paper(s) Select maximum 9 paper(s) Papers:	
341211	Electronic Devices (ENC)
341221	Electronic Devices Lab (ENC)
341212	Digital System Design (ENC)
341222	Digital System Design Lab (ENC)
341214	Computer Architecture (ENC)
311211	Applied Mathematics (ENC)
391221	Data Structure and Algorithms Lab (ENC)
341213	Signals and System(ENC)
381251	Constitutions of India (ENC)(R)

2.Optional Group (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 50)

Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

331211	Economics for Engineer (ENC)
331212	Women Law (ENC)

Term: Sem IV Separate Passing Head: No, Min Courses: 10, Max Courses: 10, Min:0,Max:750, Total Credits: 22.00

The papers for SY - Sem IV are classified into following groups:

1.Compulsory Group (Min Papers: 9, Max Papers: 9, Separate Passing Head: No, Max. Marks: 750) Select minimum 9 paper(s) Select maximum 9 paper(s) Papers:	
441211	Electromagnetic Waves (ENC)
441221	Electromagnetic Waves Lab (ENC)
441212	Analog Circuits (ENC)
441222	Analog Circuits Lab (ENC)
441213	Microcontroller (ENC)
441223	Microcontroller Lab (ENC)
441214	Probability Theory and Stochastic Processes (ENC)
441215	Network Theory (ENC)
491221	Object Oriented Programming (ENC)
2.Optional Group (Min Papers: 1, Max Papers: 1, Separate Passing Head: No, Max. Marks: 50) Select minimum 1 paper(s) Select maximum 1 paper(s) Papers:	
431211	Creating and Managing IPR/Patenting (ENC)
431212	Professional Ethics (ENC)
431213	Critical Thinking (ENC)
431214	Fundamentals of Management for Engineers (ENC)

Program Part: TY Separate Passing Head: No, Min: 0, Max: 1550, Total Credits: 48.00

Term: Sem V Separate Passing Head: No, Min Courses: 11, Max Courses: 11, Min:0,Max:750, Total Credits: 20.00

The papers for TY - Sem V are classified into following groups:

1.Compulsory Group (Min Papers: 9, Max Papers: 9, Separate Passing Head: No, Max. Marks: 600) Select minimum 9 paper(s) Select maximum 9 paper(s) Papers:	
541211	Analog and Digital Communications
541221	Analog and Digital Communications Lab
541212	Digital Signal Processing
541222	Digital Signal Processing Lab
541213	Control Systems
541223	Electronics Measurement Lab
531211	Effective Technical Communication
531221	Effective Technical Communication Lab
580011	Essence of Indian Traditional Knowledge
2.Elective Group I (Min Papers: 1, Max Papers: 1, Separate Passing Head: No, Max. Marks: 100) Select minimum 1 paper(s) Select maximum 1 paper(s) Papers:	
550111	Embedded System
3.Elective Lab Group I (Min Papers: 1, Max Papers: 1, Separate Passing Head: No, Max. Marks: 50) Select minimum 1 paper(s) Select maximum 1 paper(s) Papers:	

Term: Sem VI Separate Passing Head: No, Min Courses: 11, Max Courses: 11, Min:0,Max:800, Total Credits: 28.00

The papers for TY - Sem VI are classified into following groups:

1.Compulsory Group (Min Papers: 5, Max Papers: 5,
Separate Passing Head: No, Max. Marks: 250)
Select minimum 5 paper(s)
Select maximum 5 paper(s)

Papers:

640111	Computer Network
640121	Computer Network Lab
670131	Mini Project
691221	Web Technology Lab / Tutorial
6912	Honours Subject

2.Elective Group II (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

650111	Microwave Theory and Techniques
--------	---------------------------------

3.Elective Group III (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

650112	Speech and Audio Processing
650113	Scientific Computing
650114	VLSI Design

4.Open Elective Group I (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

660111	Database Management
660112	Advance Programming

5.Open Elective Group II (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

660113	Internet Of Things
660114	RTOS

6.Open Elective lab Group I (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 50)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

660121	Database Management Lab
660122	Advance Programming Lab

7.Open Elective lab Group II (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

660123	Internet Of Things Lab
660124	RTOS Lab

Program Part: Final Year Separate Passing Head: No, Min: 0, Max: 1350, Total Credits: 41.00

Term: Sem VII Separate Passing Head: No, Min Courses: 11, Max Courses: 11, Min:0,Max:850, Total Credits: 22.00

The papers for Final Year - Sem VII are classified into following groups:

1.Compulsory Group (Min Papers: 7, Max Papers: 7,
Separate Passing Head: No, Max. Marks: 550)
Select minimum 7 paper(s)
Select maximum 7 paper(s)

Papers:

750111	Information Theory and Coding
750121	Information Theory and Coding Tutorial
750112	Mobile Communication and WSN
750122	Mobile Communication and WSN Lab
750113	Fiber Optic Communication
770131	Major Project-I
731211	Disaster Management

2.Open Elective Group III (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

761211	Artificial Intelligence
760111	Computer Vision
760112	Mobile Robotics

3.Open Elective Group IV (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 100)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

761212	Machine Learning
760113	Big Data Analysis
760114	Cybersecurity and Forensic

4.Open Elective Lab Group III (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 50)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

761221	Artificial Intelligence Lab
760121	Computer Vision Lab
760122	Mobile Robotics Lab

5.Open Elective Lab Group IV (Min Papers: 1, Max Papers: 1,
Separate Passing Head: No, Max. Marks: 50)
Select minimum 1 paper(s)
Select maximum 1 paper(s)

Papers:

761222	Machine Learning Lab
760123	Big Data Analysis Lab
760124	Cybersecurity and Forensic Lab

Term: Sem VIII Separate Passing Head: No, Min Courses: 3, Max Courses: 3, Min:0,Max:550, Total Credits: 19.00

The papers for Final Year - Sem VIII are classified into following groups:

1.Compulsory Group (Min Papers: 3, Max Papers: 3,
Separate Passing Head: No, Max. Marks: 550)
Select minimum 3 paper(s)
Select maximum 3 paper(s)

Papers:

821211	Design Thinking and Visualization
870161	Internship
870131	Major Project-II