

Faculty of Engineering and Technology

B.Tech.all Programme

Sr.No.	Name of the Program	Sem/Paper Branch	Deleted Syllabus Only for Examination
1.	B.Tech Part.I.toIV All Sem	Civil Engineering	UNIT VI : to be deleted Entire UNIT V : Weightage in reduction Regarding question paper setting: UNIT I , II , III, IV : 15 questions each UNIT V : 05 questions only
2.		Mechanical	Last Unit .
3.		production	Last Unit
4.		Electrical Engineering	As per discussed in BOSs members , it is decided to eliminate the 6th module from the syllabus of each subject. of all semester of B. tech electrical .
5.		Chemical Engineering	Last Unit .
6		Computer Science Engineering	Last Unit .
7		Information Technology	Last Unit .

B.Tech E&Tc Engineering 20% syllabus reduction is considered

SL NO	Name of Subject	Subject code	Topic(unit) to be omitted for final theory exam	
			Major(Full reduction)	Minor(in points)
S Y BTech ETC				
01	Engineering Mathematics-III	BSC-ETC301	CH-4 Fourier series	CH-5 Laplace transform and its applications
02	Electronic Circuit Design-I	PCC-ETC-301	CH-6 –Frequency response of single stage amplifier	CH-1.-Multipliers doubler ,triplersetc
03	Network Analysis	PCC-ETC302	CH-6-Transient Response	CH-5-Filters
04	Transducers and Measurement	PCC-ETC303	CH-6 Bridges	CH-5Measurment of display devices
05	Analog Communication	PCC-ETC304	CH-6 Pulse modulation	CH-5 FM receiver
TY BTech ETC				
01	Signal and Systems	PCC-ETC501	CH-6 System Realization	CH-4 DTFT
02	Electromagnetic Engineering	PCC-ETC502	CH-5 electromagnetic waves	CH-6 Smith chart
03	Digital and VLSI Design	PCC-ETC503	CH-6 Semiconductor memories &PLD	CH-5 FSM
04	Optical Communication	PCC-ETC504	CH-6-Advances in optical fiber systems	Ch-5-Fundamental receiver operation, Digital receiver performance
05	Open Elective – I (Industrial automation)	OEC-ETC501	CH-4 DCS H/W	CH-4 Introduction to DCS
BE ETC				
01	Satellite Communication		CH-5 Low Earth Orbit and Non Geo-Stationary satellite system:	CH-6 Satellite Radio and GPS:
02	Embedded System		CH-3-Introduction to Embedded Systems	CH-6-Real Time Operating System (RTOS):
03	Computer Communication Networks		CH-6 Network security	CH-2 Fast Ethernet ,gigabit Ethernet
04	RF & Microwave Engineering		CH-5 Microwave Measurements and Microwave Applications	CH-4 Microwave Solid State Devices
05	Robotics		CH-6 Robot Application	CH-5 Robot Programming

B.Tech ELECTRONICS Engineering 20% syllabus reduction is considered

ELECTRONICS ENGG: REDUCTION OF SYLLABUS (20%) FOR THEORY EXAM HELD IN MARCH/ APRIL 2021

SR.NO.	NAME OF SUBJECT	SUBJECT CODE	Topic/Unit to be omitted for theory exm	
			Major unit with title	Minor unit with content
S.Y.B.TECH (Electronics) Sem-III				
1	Engineering Mathematics-III	BSC-EN301	To be provided by BoS First Year Engineering	
2	Electronic Circuit Design-I	PCC-EN301	UNIT III: Waveshaping Circuits	Unit-VI: MOSFET
3	Linear Circuit	PCC-EN302	UNIT VI: Filters & Attenuators	UNIT V: Properties and necessary condition for Transfer functions, Time domain response from pole and zero plot
4	Electronic Measurement & Instrumentation	PCC-EN303	UNIT VI : Bridges & applications	UNIT IV : Signal analyzers- introduction, Fourier analyzer, harmonic distortion analyzer, spectrum analyzer, logic analyzer.
5	Analog Communication	PCC-EN304	UNIT VI : Pulse Modulation	UNIT V: PLL-FM demodulators, FM noise suppression
T.Y.B.TECH (Electronics) SEM- V				
1	Signal & Systems	PCC-EN501	UNIT VI: System Realization	1.UNIT III:Problems on Fourier transform using properties of FT. 2.UNIT V : Problems on Z-transform using properties of Z-Transform.
2	Electromagnetic Engineering	PCC-EN502	UNIT V: Electromagnetic Waves	1.UNIT IV: Maxwells Equations, Harmonically varying field& circuit theory 2. UNIT-VI: Smith Chart
3	VLSI Design	PCC-EN503	UNIT VI: Semiconductor Memories & Programmable Logic Devices	Unit V: Counters

4	Video Engg.	PCC-EN504	UNIT IV: Digital TV & HDTV	
5	Open Elective-I: Biomedical Instrumentation	OEC-EN501	NOT OFFERED	
6	Open Elective-I: Industrial Automation	OEC-EN501	UNIT V: DCS Hardware	UNIT II: Programming using SFC, Programming using FBD & Structured Language
B.E.(Electronics)-I Sem-VII				
1	Information Theory & Coding Techniques	67526	UNIT II: Channel Capacity & Coding	UNIT VI: Decoding of Codes : Maximum Likelihood Decoding - Viterbi Algorithm, Sequential Decoding . Structural & Distance properties of Convolutional codes,
2	Embedded System Design	67527	UNIT VI: Introduction to RTOS	UNIT V: LPC 2148 Onchip Resources-PWM, Vectored Interrupt Controller, Features of onchip USB.
3	Computer Network	67528	UNIT VI: Basics of Network Security & Network Administration	UNIT V: SMTP, Telnet & FTP
4	Image Processing	67529	UNIT VI: Color Image Processing	UNIT V: Region based segmentation.
5	Elective_I : Satellite Communication	67531	UNIT V: VSAT Systems	1.UNIT VI : GPS Receivers and Codes, GPS C/A Code accuracy, Differential GPS, 2.UNIT IV : Design of Downlinks, Up link design.
6	Elective-I : Biomedical Instrumentation	67532	UNIT II: Classification of Biomedical Equipments	UNIT V: Dental Image intensifier system, Trouble shooting & maintenance of X-ray Machine

First Year B. Tech Program (All Branches) Semester -I

Course: Engineering Mathematics-I

25 % Syllabus reduced topics

Unit 5: Expansion of Functions and Indeterminate forms

1. Maclaurin's theorem
2. Standard expansions
3. Taylor's theorem
4. Indeterminate forms and L' Hospital's rule

Unit 6: Partial Differentiation

4. Euler's theorem on homogeneous function of two variables
5. Jacobian and its Properties .
6. Maxima and Minima of functions of two variables

First Year B. Tech Program (All Branches) Semester -II

Course: Engineering Mathematics-II

25 % Syllabus reduced topics

Unit 2: Applications of Ordinary Differential Equations of First Order and First Degree

1. Applications to Orthogonal trajectories (Cartesian and Polar equations)
2. Applications to Simple Electrical Circuits
3. Newton's law of cooling

Unit 6: Multiple Integration and its applications:

3. Change into Polar Coordinates
4. Area enclosed by plane curves
5. Mass of a plane lamina

S.Y.B. Tech.(Computer Science and Engineering)

Course: APPLIED MATHEMATICS

25 % Syllabus reduced topics

Unit 5. Fuzzy Arithmetic:

5.3 Arithmetic Operations on Fuzzy numbers.

5.4 Solutions of Fuzzy equations of type $A + X = B$ and $A.X = B$.

Unit 6. Assignment Problem

6.1 Definition, Balanced and Unbalanced assignment problem.

6.2 Hungarian Method.

6.3 Balanced assignment problems.

6.4 Unbalanced assignment problems.

6.5 Traveling salesmen problem.

S.Y.B. Tech. (ELECTRONICS) Semester-III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 4. Fourier Series:

4.1 Introduction.

4.2 Definition, Euler's formulae.

4.3 Dirichlet's conditions.

4.4 Change of interval.

4.5 Expansions of odd and even functions.

4.6 Half range series.

Unit 5. Laplace Transform and its Applications:

5.4 Inverse Laplace transforms by partial fractions & convolution theorem.

5.5 Solution of Linear differential equation with constant coefficients using Laplace transform.

S.Y.B. Tech. (ELECTRONICS AND TELECOMMUNICATION) Semester-III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 4. Fourier Series:

4.1 Introduction.

4.2 Definition, Euler's formulae.

4.3 Dirichlet's conditions.

4.4 Change of interval.

4.5 Expansions of odd and even functions.

4.6 Half range series.

Unit 5. Laplace Transform and its Applications:

5.4 Inverse Laplace transforms by partial fractions & convolution theorem.

5.5 Solution of Linear differential equation with constant coefficients using Laplace transform.

S.Y.B. Tech. (ELECTRICAL) Semester-III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 4. Fourier Series:

- 4.1 Introduction.
- 4.2 Definition, Euler's formulae.
- 4.3 Dirichlet's conditions.
- 4.4 Change of interval.
- 4.5 Expansions of odd and even functions.
- 4.6 Half range series.

Unit 5. Laplace Transform and its Applications:

- 5.4 Inverse Laplace transforms by partial fractions & convolution theorem.
- 5.5 Solution of Linear differential equation with constant coefficients using Laplace transform.

S.Y.B. Tech. (Information Technology)- Semester – III

Course: Statistics and Fuzzy Systems

25 % Syllabus reduced topics

Unit 5. Fuzzy Arithmetic:

- 5.3 Arithmetic Operations on Fuzzy numbers.

Unit 6. Transportation and Assignment Problems:

- 6.1 Definition, balanced and unbalanced transportation problem.
- 6.2 Least cost and VAM methods of Initial solution.
- 6.3 UV method of optimum solution.
- 6.4, Balanced and Unbalanced assignment problems.
- 6.5 Hungarian method to solve assignment problems.
- 6.6 Traveling salesmen problem.

S.Y.B. Tech. (MECHANICAL ENGINEERING)- Semester – III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 5. Fourier Series:

- 5.1 Introduction
- 5.2 Definition, Euler's formulae.
- 5.3 Dirichlet's conditions.
- 5.4 Change of interval.
- 5.5 Expansions of odd and even functions.
- 5.6 Half range series.

Unit 6 Partial Differential Equations and Applications:

- 6.3 Wave Equation and its solution
- 6.4 One dimensional heat flow equation
- 6.5 Solutions of Laplace equations by the Gauss – Seidel iterative method

**S.Y.B. Tech. (PRODUCTION ENGINEERING)-
Semester – III**

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 5. Fourier Series:

- 5.1 Introduction
- 5.2 Definition, Euler's formulae.
- 5.3 Dirichlet's conditions.
- 5.4 Change of interval.
- 5.5 Expansions of odd and even functions.
- 5.6 Half range series.

Unit 6 Partial Differential Equations and Applications:

- 6.3 Wave Equation and its solution
- 6.4 One dimensional heat flow equation
- 6.5 Solutions of Laplace equations by the Gauss – Seidel iterative method

S.Y.B. Tech. (CIVIL ENGINEERING)- Semester – III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 5. Laplace Transform and its Applications:

- 5.1 Laplace transform of elementary functions
- 5.2 Properties of Laplace transforms(First Shifting , Change of scale property , Multiplication & Division by t)
- 5.3 Laplace transforms of derivatives and integral.
- 5.4 Inverse Laplace transforms by partial fractions & convolution theorem.
- 5.5 Solution of Linear differential equation with constant coefficients using Laplace transform

Unit 6. Numerical Integration:

- 6.1 Newton Cotes formulae
- 6.5 Weddle's Rule.

S.Y.B. Tech. (CHEMICAL ENGINEERING)- Semester – III

Course: ENGINEERING MATHEMATICS-III

25 % Syllabus reduced topics

Unit 2 Application to Linear differential equations:

- 2.1 Chemical reactions and solutions (mixture problems).
- 2.2 Conduction of heat.
- 2.3 Chemical Reactions-Law of mass action

Unit 5. Inverse Laplace Transform:

- 5.4 Convolution theorem (without proof)
- 5.5 Inverse Laplace transform of derivatives
- 5.6 Solution of Linear differential equation with constant coefficients using Laplace transform

S.Y.B. Tech. (CHEMICAL ENGINEERING)- Semester – IV

Course: ENGINEERING MATHEMATICS-IV

25 % Syllabus reduced topics

Unit 5. Fourier Series:

5.1 Introduction

5.2 Definition, Euler's formulae.

5.3 Dirichlet's conditions.

5.4 Change of interval.

5.5 Expansions of odd and even functions.

5.6 Half range series.

Unit 6 Partial Differential Equations and Applications:

6.3 Wave Equation and its solution

6.4 One dimensional heat flow equation

6.5 Solutions of Laplace equations by the Gauss – Seidel iterative method

M.Tech.all Programme

Sr.No.	Name of the Program	Sem/Paper Branch	Deleted Syllabus Only for Examination
	M.Tech		
1.		Civil Engineering	Part-I Last Unit .
2.		Electronics Engineering	Part-I Last Unit .
3		Computer Science and Engineering	Part-I Last Unit .
4		Electronics and Telecommunication	Part-I Last Unit .
5		Chemical Engineering	Part-I Last Unit .
6		Mechanical (Heat power Engineering)	Part-I Last Unit .
7		Mechanical (CAD/CAM/CAE)	Part-I Last Unit .
8		Mechanical (Design Engineering)	Part-I Last Unit .
9		Mechanical (Machine Design)	Part-I Last Unit .

Faculty of Engineering and Technology -Architecture

Sr. No.	Name of the Program	Sem/Paper	Deleted Syllabus Only for Examination
1	1 B. Arch Sem-I	1. Aesthetics and Visual arts-I 2. Graphics-I 3. Architecture Design-I 4. Building Construction and Material-I	20% reduction in submission work to be done as following- Drafting work to be reduced and substituted by sketch work. Institutes shall decide at their level, unit wise which portion to be completed in sketch form
2	2 M.Arch (General) Sem-I	1. Advanced Architectural Design Studio-I 2. Landscape Architecture 3. Vernacular Architecture	20% reduction in submission work to be done as following- Project background work has to be reduced in the form of Presentation Replace live case studies by net case studies. Data collection may be presented in rough format
3	3 M.Arch – (Construction Project management) Sem-I	1. Advanced Construction Technology-1 2. Project Management - I 3. Research Methodology 4. Information Technology in management 5. Services Management – I 6. Operation Research.	20% reduction in submission work to be done as following- Field/site visit to be replaced by book review, internet case studies ,wherever possible