

GUJARAT TECHNOLOGICAL UNIVERSITY

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exsmination (Marks)		Mid Sem. Test Marks	Internal Assessment Marks	Total Marks	Branch Code
		Theory	Tutorial	Practical		Theory	Practical				
Branch Code : 1 M.E. Computer Science & Engineering (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	1
720101	Wireless Networking & Mobile Computing	4	0	2	5	60	10	20	10	100	1
720102	Distributed Computing & Application	4	0	2	5	60	10	20	10	100	1
720103	Major Elective II- Advance Compiler Design	3	0	2	4	60	10	20	10	100	1
720104	Major Elective II- Digital Image Processing	3	0	2	4	60	10	20	10	100	1
720105	Major Elective II- Object Oriented Methodology & Design	3	0	2	4	60	10	20	10	100	1
720106	Major Elective III- Grid Computing	3	0	2	4	60	10	20	10	100	1
720107	Major Elective III- Embedded System	3	0	2	4	60	10	20	10	100	1
720108	Major Elective III- Data Mining & Data warehousing	3	0	2	4	60	10	20	10	100	1
720109	Inter Disciplinary Elective II- Object Oriented Programming	3	0	2	4	60	10	20	10	100	1
720110	Inter Disciplinary Elective II- Numerical Methods	3	0	2	4	60	10	20	10	100	1
Branch Code : 2 M.E. Computer Engineering (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	2
720201	Distributed Operating Systems	4	0	2	5	60	10	20	10	100	2
720202	Design of Language Processors	4	0	2	5	60	10	20	10	100	2
720203	Major Elective II- Artificial Intelligence	3	0	2	4	60	10	20	10	100	2
720104	Major Elective II- Digital Image Processing	3	0	2	4	60	10	20	10	100	2
720204	Major Elective II- Software Engineering Methodologies	3	0	2	4	60	10	20	10	100	2
720205	Major Elective III- Cryptography & Network Security	3	0	2	4	60	10	20	10	100	2
720206	Major Elective III- Soft Computing	3	0	2	4	60	10	20	10	100	2
720108	Major Elective III- Data Mining and Data Warehousing	3	0	2	4	60	10	20	10	100	2
720109	Inter Disciplinary Elective II- Object Oriented Programming	3	0	2	4	60	10	20	10	100	2
720110	Inter Disciplinary Elective II- Numerical Methods	3	0	2	4	60	10	20	10	100	2
Branch Code : 3 M.E. Instrumentation and Control (Applied Instrumentation) (Semester-II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	3
720301	Digital Control	3	0	0	3	60	0	20	20	100	3
720302	Advance Instrumentation	4	0	2	5	60	10	20	10	100	3
720303	Virtual Instrumentation	0	0	2	1	0	80	0	20	100	3
720304	Major Elective II - Electromagnetic Compatibility	3	0	2	4	60	10	20	10	100	3
720305	Major Elective II - Applied Transducers	3	0	2	4	60	10	20	10	100	3
720306	Major Elective II - Embedded System Design	3	0	2	4	60	10	20	10	100	3
720307	Major Elective III - Industrial Drives and Control	4	0	2	5	60	10	20	10	100	3
720308	Major Elective III - Process Control	4	0	2	5	60	10	20	10	100	3
720309	Major Elective III - Biomedical Signal Processing	4	0	2	5	60	10	20	10	100	3
720310	Interdisciplinary Elective II - Industrial Measurements	3	0	2	4	60	10	20	10	100	3
720311	Interdisciplinary Elective II - Microelectromechanical systems	3	0	2	4	60	10	20	10	100	3

Branch Code : 4 M.E. Electronics and Communication Engineering (Semester -II) (Subjects already offered in sem-I should not be repeated in subsequent semesters)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	4
720401	Telecom Switching System, Networks and Network Management	4	0	2	5	60	10	20	10	100	4
722202	Advanced Digital Communication	4	0	2	5	60	10	20	10	100	4
710405	Major Elective II & III - Fiber Optic Communication	3	0	2	4	60	10	20	10	100	4
710404	Major Elective II & III - Image Processing	3	0	2	4	60	10	20	10	100	4
710406	Major Elective II & III -Speech Processing	3	0	2	4	60	10	20	10	100	4
710407	Major Elective II & III -Biomedical Signal Processing	3	0	2	4	60	10	20	10	100	4
710409	Major Elective II & III -Embedded System Design	3	0	2	4	60	10	20	10	100	4
710411	Major Elective II & III -RF and Microwave Engineering	3	0	2	4	60	10	20	10	100	4
710412	Major Elective II & III -Digital VLSI Design	3	0	2	4	60	10	20	10	100	4
710413	Major Elective II & III -RF Microelectronics	3	0	2	4	60	10	20	10	100	4
710417	Major Elective II & III -Microelectronics chip fabrication	3	2	0	4	60	10	20	10	100	4
710418	Major Elective II & III -Satellite communication	3	2	0	4	60	10	20	10	100	4
710419	Major Elective II & III -Antenna Engineering and Design	3	0	2	4	60	10	20	10	100	4
710421	Major Elective II & III -Computer Aided Design for VLSI	3	0	2	4	60	10	20	10	100	4
710422	Major Elective II & III -Digital Signal Processing and Applications	3	0	2	4	60	10	20	10	100	4
710423	Major Elective II & III -Neuro Computing and Applications	3	2	0	4	60	10	20	10	100	4
710424	Major Elective II & III -Machine Learning	3	2	0	4	60	10	20	10	100	4
710425	Major Elective II & III -Robotics and Intelligent Systems	3	2	0	4	60	10	20	10	100	4
710426	Major Elective II & III -Linear System Theory	3	2	0	4	60	10	20	10	100	4
710427	Major Elective II & III -Soft Computing Technique and its Application in Engineering	3	0	2	4	60	10	20	10	100	4
710428	Major Elective II & III -Recent topics in Modern Communication Engineering	3	2	0	4	60	10	20	10	100	4
710410	Interdisciplinary Elective II - Introduction to Artificial Intelligence	3	0	2	4	60	10	20	10	100	4

Branch Code : 5 M.E. Communication Systems Engineering (Semester II) (Subjects already offered in sem-I should not be repeated in subsequent semesters)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	5
720401	Telecom Switching System, Networks and Network Management	4	0	2	5	60	10	20	10	100	5
722202	Advanced Digital Communication	4	0	2	5	60	10	20	10	100	5
710405	Major Elective II & III - Fiber Optic Communication	3	0	2	4	60	10	20	10	100	5
710404	Major Elective II & III - Image Processing	3	0	2	4	60	10	20	10	100	5
710406	Major Elective II & III -Speech Processing	3	0	2	4	60	10	20	10	100	5
710407	Major Elective II & III -Biomedical Signal Processing	3	0	2	4	60	10	20	10	100	5
710409	Major Elective II & III -Embedded System Design	3	0	2	4	60	10	20	10	100	5
710411	Major Elective II & III -RF and Microwave Engineering	3	0	2	4	60	10	20	10	100	5
710412	Major Elective II & III -Digital VLSI Design	3	0	2	4	60	10	20	10	100	5
710413	Major Elective II & III -RF Microelectronics	3	0	2	4	60	10	20	10	100	5
710417	Major Elective II & III -Microelectronics chip fabrication	3	2	0	4	60	10	20	10	100	5
710418	Major Elective II & III -Satellite communication	3	2	0	4	60	10	20	10	100	5
710419	Major Elective II & III -Antenna Engineering and Design	3	0	2	4	60	10	20	10	100	5
710421	Major Elective II & III -Computer Aided Design for VLSI	3	0	2	4	60	10	20	10	100	4
710422	Major Elective II & III -Digital Signal Processing and Applications	3	0	2	4	60	10	20	10	100	5
710423	Major Elective II & III -Neuro Computing and Applications	3	2	0	4	60	10	20	10	100	5
710424	Major Elective II & III -Machine Learning	3	2	0	4	60	10	20	10	100	5
710425	Major Elective II & III -Robotics and Intelligent Systems	3	2	0	4	60	10	20	10	100	5
710426	Major Elective II & III -Linear System Theory	3	2	0	4	60	10	20	10	100	5
710427	Major Elective II & III -Soft Computing Technique and its Application in Engineering	3	0	2	4	60	10	20	10	100	5
710428	Major Elective II & III -Recent topics in Modern Communication Engineering	3	2	0	4	60	10	20	10	100	5
710410	Interdisciplinary Elective II - Introduction to Artificial Intelligence	3	0	2	4	60	10	20	10	100	5

Branch Code : 6 M.E. Communication Engineering (Semester -II) Subjects already offered in sem-I should not be repeated in subsequent semesters											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	6
720401	Telecom Switching System, Networks and Network Management	4	0	2	5	60	10	20	10	100	6
722202	Advanced Digital Communication	4	0	2	5	60	10	20	10	100	6
710405	Major & Minor Elective - Fiber Optic Communication	3	0	2	4	60	10	20	10	100	6
710404	Major & Minor Elective - Image Processing	3	0	2	4	60	10	20	10	100	6
710406	Major & Minor Elective - Speech Processing	3	0	2	4	60	10	20	10	100	6
710407	Major & Minor Elective - Biomedical Signal Processing	3	0	2	4	60	10	20	10	100	6
710409	Major & Minor Elective - Embedded System Design	3	0	2	4	60	10	20	10	100	6
710410	Major & Minor Elective - Introduction to Artificial Intelligence	3	0	2	4	60	10	20	10	100	6
710411	Major & Minor Elective - RF and Microwave Engineering	3	0	2	4	60	10	20	10	100	6
710412	Major & Minor Elective - Digital VLSI Design	3	0	2	4	60	10	20	10	100	6
710413	Major & Minor Elective - RF Microelectronics	3	0	2	4	60	10	20	10	100	6
710417	Major & Minor Elective - Microelectronics chip fabrication	3	2	0	4	60	10	20	10	100	6
710418	Major & Minor Elective - Satellite communication	3	2	0	4	60	10	20	10	100	6
710419	Major & Minor Elective - Antenna Engineering and Design	3	0	2	4	60	10	20	10	100	6
710421	Major & Minor Elective -Computer Aided Design for VLSI	3	0	2	4	60	10	20	10	100	4
710422	Major & Minor Elective - Digital Signal Processing and Applications	3	0	2	4	60	10	20	10	100	6
710423	Major & Minor Elective - Neuro Computing and Applications	3	2	0	4	60	10	20	10	100	6
710424	Major & Minor Elective - Machine Learning	3	2	0	4	60	10	20	10	100	6
710425	Major & Minor Elective - Robotics and Intelligent Systems	3	2	0	4	60	10	20	10	100	6
710426	Major & Minor Elective - Linear System Theory	3	2	0	4	60	10	20	10	100	6
710427	Major & Minor Elective - Soft Computing Technique and its Application in Engineering	3	0	2	4	60	10	20	10	100	6
710428	Major & Minor Elective - Recent topics in Modern Communication Engineering	3	2	0	4	60	10	20	10	100	6
710601	Major & Minor Elective- Wireless and Mobile Communication	3	2	0	4	60	10	20	10	100	6

Branch Code : 7 M.E. Electrical Engineering (Semester- II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	7
720701	Advanced Electrical Machines	3	0	0	3	60	0	20	20	100	7
720702	Digital Signal Processing	3	0	0	3	60	0	20	20	100	7
720703	Major Elective II - Power System Dynamics & Control (Power Group)	4	0	0	4	60	0	20	20	100	7
720704	Major Elective II - Digital control systems (Control Group)	4	0	0	4	60	0	20	20	100	7
720705	Major Elective II - Power Quality (Power Electronics Group)	4	0	0	4	60	0	20	20	100	7
720706	Major Elective II - Digital Image Processing (Micro Group)	4	0	0	4	60	0	20	20	100	7
720707	Major Elective III - Flexible AC Transmission System (Power Group)	4	0	0	4	60	0	20	20	100	7
720708	Major Elective III - Modeling and simulation of dynamic systems. (Control Group)	4	0	0	4	60	0	20	20	100	7
720709	Major Elective III - Advanced Power Converters (Power Electronics Group)	4	0	0	4	60	0	20	20	100	7
720710	Major Elective III - Embedded System Design (Micro Group)	4	0	0	4	60	0	20	20	100	7
720711	Inter Disciplinary Elective II - Electrical Power Utilization	3	0	2	4	60	10	20	10	100	7
720712	Core Laboratory II	0	0	4	2	0	80	0	20	100	7
720713	Elective Laboratory	0	0	4	2	0	80	0	20	100	7

Branch Code : 8 M.E. Mechanical (CAD/CAM) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	8
720801	Finite Element Method	4	2	0	5	60	10	20	10	100	8
720802	Computer Aided Manufacturing	4	0	0	4	60	0	20	20	100	8
720803	Major Elective II - Robotic Engineering	3	0	0	3	60	0	20	20	100	8
720804	Major Elective II - Experimental Modal Analysis and Dynamic Design	3	0	0	3	60	0	20	20	100	8
720805	Major Elective II - Machine Tool Design	3	0	0	3	60	0	20	20	100	8
720806	Major Elective II - Vibration Engineering	3	0	0	3	60	0	20	20	100	8
720807	Major Elective III - Automation in Production and Hydraulic control	3	0	0	3	60	0	20	20	100	8
720808	Major Elective III - Manufacturing Processes and Analysis	3	0	0	3	60	0	20	20	100	8
720809	Major Elective III - Product Design and Development	3	0	0	3	60	0	20	20	100	8
720810	Interdisciplinary Elective II - Modern Machining Methods	3	0	2	4	60	10	20	10	100	8
720811	FEM & Software Lab	0	0	4	2	0	80	0	20	100	8
720812	CAM & Software Lab	0	0	2	1	0	80	0	20	100	8

Branch Code : 9 M.E. Mechanical (Machine Design) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	9
720901	Finite Element Method	4	0	2	5	60	10	20	10	100	9
720902	Geometrical Dimensioning and Tolerancing	4	2	0	5	60	10	20	10	100	9
720903	Major Elective II & III - Machine Tool Design	3	0	2	4	60	10	20	10	100	9
720904	Major Elective II & III - Mechanical Vibration and Diagnostics	3	0	2	4	60	10	20	10	100	9
720905	Major Elective II & III - Computer Aided Design	3	0	2	4	60	10	20	10	100	9
720906	Major Elective II & III - Robotics	3	0	2	4	60	10	20	10	100	9
720907	Major Elective II & III - Design for Manufacturing	3	0	2	4	60	10	20	10	100	9
720908	Major Elective II & III - Reliability Engineering	3	0	2	4	60	10	20	10	100	9
720909	Interdisciplinary Elective II - Quality Control and Reliability	3	2	0	4	60	10	20	10	100	9

Branch Code : 10 M.E. Mechanical (CRYOGENIC ENGG.) (Semester - II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	10
721001	Cryogenic Systems	3	0	2	4	60	10	20	10	100	10
721002	Cryogenic Plants and Equipments	4	0	2	5	60	10	20	10	100	10
721003	Major Elective II - Advanced Air Conditioning	4	0	2	5	60	10	20	10	100	10
721004	Major Elective III - Radiation Heating and Cooling System	3	0	2	4	60	10	20	10	100	10
721005	Major Elective III - Computational Fluid Dynamics	3	0	2	4	60	10	20	10	100	10
721006	Inter Disciplinary Elective II - Cryogenic Applications	3	0	2	4	60	10	20	10	100	10
Branch Code : 11 M.E. Mechanical (I.C.Engine & Automobile) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	11
721101	Instrumentation & Vehicle Testing	4	0	2	5	60	10	20	10	100	11
721102	Alternate Fuels & Energy	4	0	2	5	60	10	20	10	100	11
721103	Major Elective II & III - Modern Vehicle Design	3	2	0	4	60	10	20	10	100	11
721104	Major Elective II & III - Automotive Chassis & Body Engineering	3	2	0	4	60	10	20	10	100	11
721105	Major Elective II & III - High Speed Diesel Engine	3	2	0	4	60	10	20	10	100	11
721106	Major Elective II & III - Automobile Maintenance and Pollution Control	3	2	0	4	60	10	20	10	100	11
721107	Inter Disciplinary Elective II - Energy Conservevation & Management	3	2	0	4	60	10	20	10	100	11
Branch Code : 12 M.E. Civil (Water Resources Management) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	12
721201	Ground Water Management	4	0	2	5	60	10	20	10	100	12
721202	Water Resources Planning	3	0	2	4	60	10	20	10	100	12
721203	Major Elective II - Design of Canal Network and Regulation Work	4	2	0	5	60	10	20	10	100	12
721204	Major Elective II - Water Supply and Drainage	4	2	0	5	60	10	20	10	100	12
721205	Major Elective III - Hydro System Engineering And Management	3	2	0	4	60	10	20	10	100	12
721206	Major Elective III - Stochastic Models in Water Resources.	3	2	0	4	60	10	20	10	100	12
721207	Inter Disciplinary Elective II - Infrastructure Engineering and Management	3	2	0	4	60	10	20	10	100	12

Branch Code : 13 M.E. Civil (Transportation Engineering) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	13
721301	Traffic Engineering - 2	4	0	2	5	60	10	20	10	100	13
721302	Pavement Design and Evaluation	4	0	2	5	60	10	20	10	100	13
721303	Major Elective II - Regional and Mass Transportation Systems Planning	3	2	0	4	60	10	20	10	100	13
721304	Major Elective II - Railway and Airport Engineering	3	2	0	4	60	10	20	10	100	13
721305	Major Elective II - Docks and Harbour Engineering	3	2	0	4	60	10	20	10	100	13
721306	Major Elective II - Transportation Facility Design	3	2	0	4	60	10	20	10	100	13
721307	Major Elective III - Economics and Evaluation of Transportation Projects	3	2	0	4	60	10	20	10	100	13
721308	Major Elective III - Environmental Impact Assessment of Transportation Project	3	2	0	4	60	10	20	10	100	13
721309	Major Elective III - Transportation System Management	3	2	0	4	60	10	20	10	100	13
721310	Major Elective III - Road Safety and Environment	3	2	0	4	60	10	20	10	100	13
721311	Inter Disciplinary Elective II - Geo - Spatial Techniques	3	0	2	4	60	10	20	10	100	13
Branch Code : 14 M.E. Construction Engineering & Management (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	14
721401	Advanced Civil Engineering Materials	3	2	0	4	60	10	20	10	100	14
721402	Resources Management	4	2	0	5	60	10	20	10	100	14
721403	Major Elective II - Construction Contract Management	4	2	0	5	60	10	20	10	100	14
721404	Major Elective II - Project risk analysis and mitigation techniques	4	2	0	5	60	10	20	10	100	14
721405	Major Elective III - Value Engineering	3	2	0	4	60	10	20	10	100	14
721406	Major Elective III - IT Solutions in construction management	3	2	0	4	60	10	20	10	100	14
721407	Inter disciplinary Elective II - Stratagic mamangement	3	2	0	4	60	10	20	10	100	14
721408	Inter disciplinary Elective II - Research Methodology	3	2	0	4	60	10	20	10	100	14
Branch Code : 15 M.E. Civil (CASAD) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	15
721501	Finite Element Method	4	0	0	4	60	0	20	20	100	15
721502	Behaviour of Reinforced Concrete	4	0	0	4	60	0	20	20	100	15
721503	Major Elective II - Advanced Foundation Engineering	3	2	0	4	60	10	20	10	100	15
721504	Major Elective II - Analysis and Design of Bridges	3	2	0	4	60	10	20	10	100	15
721505	Major Elective II - Disaster Resistant Structures	3	2	0	4	60	10	20	10	100	15
721506	Major Elective III - Rehabilitation and Retrofitting of Buildings	3	0	0	3	60	0	20	20	100	15
721507	Major Elective III - Advanced Steel Structural Design	3	0	0	3	60	0	20	20	100	15
721508	Major Elective III - Marine Structures	3	0	0	3	60	0	20	20	100	15
721509	Inter-Disciplinary Elective II - Advanved Computing in Engineering	3	2	0	4	60	10	20	10	100	15
721510	CASAD LAB-II	0	0	3	1.5	0	80	0	20	100	15
721511	Structural Design Project	0	3	0	1.5	0	80	0	20	100	15

Branch Code : 16 M.E. Chemical Engineering (Computer Aided Process Design) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	16
721601	Industrial Biotechnology	3	0	2	4	60	10	20	10	100	16
721602	Chemical Process Optimization	4	0	0	4	60	0	20	20	100	16
721603	Process Plant Simulation	0	0	4	2	0	80	0	20	100	16
721604	Major Elective II - Property Prediction for Mixtures (CAD Group)	4	0	0	4	60	0	20	20	100	16
721605	Major Elective II - Polymer Processing (Polymer Group)	4	0	0	4	60	0	20	20	100	16
721606	Major Elective III - Chemical System Modeling & Simulation (CAD Group)	3	0	2	4	60	10	20	10	100	16
721607	Major Elective III - Polymer Materials & Testing (Polymer Group)	3	0	2	4	60	10	20	10	100	16
721608	Inter Disciplinary Elective II - Seperation Techniques	3	0	2	4	60	10	20	10	100	16
Branch Code : 17 M.E. Environmental Engineering (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	17
721701	Principles of waste Water Treatment	4	0	2	5	60	10	20	10	100	17
721702	Industrial Water And Wastewater Treatment	4	0	2	5	60	10	20	10	100	17
721703	Major Elective II - Hazardous Waste management	3	0	2	4	60	10	20	10	100	17
721704	Major Elective II - Solid waste Management	3	0	2	4	60	10	20	10	100	17
721705	Major Elective II - Environmental Health and safety	3	0	2	4	60	10	20	10	100	17
721706	Major Elective III - Noise Pollution and Thermal Pollution and control	3	2	0	4	60	10	20	10	100	17
721707	Major Elective III - Air Pollution Control	3	2	0	4	60	10	20	10	100	17
721708	Major Elective III - CAD in Environmental Engineering	3	2	0	4	60	10	20	10	100	17
721709	Inter Disciplinary Elective II - Environmental and Occupational Health and Safety	3	0	2	4	60	10	20	10	100	17
Branch Code : 18 M.E. Environmental Management (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	18
721801	Environmental Impact Assessment	4	2	0	5	60	10	20	10	100	18
721802	Treatment Process Design and drawing	4	2	0	5	60	10	20	10	100	18
721803	Major Elective II - Environmental Legislation	3	2	0	4	60	10	20	10	100	18
721804	Major Elective II - Environmental Risk Assessment & Management	3	2	0	4	60	10	20	10	100	18
721805	Major Elective II - Environmental Monitoring & Statistics	3	2	0	4	60	10	20	10	100	18
721806	Major Elective III - Environmental Modelling	3	2	0	4	60	10	20	10	100	18
721807	Major Elective III - Air Quality Modelling & Meterologys	3	2	0	4	60	10	20	10	100	18
721808	Interdisciplinary Elective II - Environmental Audit & Legislation	3	2	0	4	60	10	20	10	100	18

Branch Code : 19 M.E. Transportation System Engineering (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	19
721901	Traffic Flow Theory & Management	3	2	0	4	60	10	20	10	100	19
721902	Transportation Planning	4	2	0	5	60	10	20	10	100	19
721903	Major Elective II - Highway Construction & Management	4	2	0	5	60	10	20	10	100	19
721904	Major Elective II - Mass Transportation System	4	2	0	5	60	10	20	10	100	19
721905	Major Elective III - GIS – GPS in Civil Engineering	3	2	0	4	60	10	20	10	100	19
721906	Major Elective III - Pavement Design and Analysis	3	2	0	4	60	10	20	10	100	19
721907	Inter Disciplinary Elective II - Road Safety	3	0	2	4	60	10	20	10	100	19
Branch Code : 20 M.E. (Civil) Structural Engineering (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	20
722001	Finite Element Method	4	0	0	4	60	0	20	20	100	20
722002	Advanced Concrete Structures	4	0	0	4	60	0	20	20	100	20
722003	Computer Lab For Design Of Structures	0	0	2	1	0	80	0	20	100	20
722004	Structural Design Project	0	2	0	1	0	80	0	20	100	20
722005	Major Elective II - Advanced Foundation Engineering	3	2	0	4	60	10	20	10	100	20
722006	Major Elective II - Rehabilitation of structures	3	2	0	4	60	10	20	10	100	20
722007	Major Elective III - Advanced Steel Structures	3	2	0	4	60	10	20	10	100	20
722008	Major Elective III - Theory Of Plates and Shells	3	2	0	4	60	10	20	10	100	20
722009	Inter disciplinary Elective II - Concrete Technology	3	2	0	4	60	10	20	10	100	20
Branch Code : 21 M.E. Mechanical (Thermal Engineering) (Semester -II)											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	21
722101	Design of Heat Exchange Equipments	3	0	2	4	60	10	20	10	100	21
722102	Thermal Power Plant Engineering	4	0	2	5	60	10	20	10	100	21
722103	Major Elective II - Advanced Air conditioning	4	0	2	5	60	10	20	10	100	21
721005	Major Elective III - Computational Fluid Dynamics	3	0	2	4	60	10	20	10	100	21
722104	Interdisciplinary Elective II - Energy Conservation & Management	3	2	0	4	60	10	20	10	100	21

Branch Code : 22 M.E. Digital Communication (Semester -II) Subjects already offered in sem-I should not be repeated in subsequent semesters											
720001	Principles of Management	3	0	0	3	60	0	20	20	100	22
720401	Telecom Switching System, Networks and Network Management	4	0	2	5	60	10	20	10	100	22
722202	Advanced Digital Communication	4	0	2	5	60	10	20	10	100	22
710405	Major Elective II & III - Fiber Optic Communication	3	0	2	4	60	10	20	10	100	22
710404	Major Elective II & III - Image Processing	3	0	2	4	60	10	20	10	100	22
710406	Major Elective II & III -Speech Processing	3	0	2	4	60	10	20	10	100	22
710407	Major Elective II & III -Biomedical Signal Processing	3	0	2	4	60	10	20	10	100	22
710409	Major Elective II & III -Embedded System Design	3	0	2	4	60	10	20	10	100	22
710411	Major Elective II & III -RF and Microwave Engineering	3	0	2	4	60	10	20	10	100	22
710412	Major Elective II & III -Digital VLSI Design	3	0	2	4	60	10	20	10	100	22
710413	Major Elective II & III -RF Microelectronics	3	0	2	4	60	10	20	10	100	22
710417	Major Elective II & III -Microelectronics chip fabrication	3	2	0	4	60	10	20	10	100	22
710418	Major Elective II & III -Satellite communication	3	2	0	4	60	10	20	10	100	22
710419	Major Elective II & III -Antenna Engineering and Design	3	0	2	4	60	10	20	10	100	22
710421	Major Elective II & III -Computer Aided Design for VLSI	3	0	2	4	60	10	20	10	100	4
710422	Major Elective II & III -Digital Signal Processing and Applications	3	0	2	4	60	10	20	10	100	22
710423	Major Elective II & III -Neuro Computing and Applications	3	2	0	4	60	10	20	10	100	22
710424	Major Elective II & III -Machine Learning	3	2	0	4	60	10	20	10	100	22
710425	Major Elective II & III -Robotics and Intelligent Systems	3	2	0	4	60	10	20	10	100	22
710426	Major Elective II & III -Linear System Theory	3	2	0	4	60	10	20	10	100	22
710427	Major Elective II & III -Soft Computing Technique and its Application in Engineering	3	0	2	4	60	10	20	10	100	22
710428	Major Elective II & III -Recent topics in Modern Communication Engineering	3	2	0	4	60	10	20	10	100	22
710601	Major Elective II & III -Wireless and Mobile Communication	3	2	0	4	60	10	20	10	100	22
712201	Major Elective II & III -Detection And Estimation Theory	3	2	0	4	60	10	20	10	100	22
712202	Major Elective II & III -Digital Telephony & Switching Networks	3	2	0	4	60	10	20	10	100	22
710410	Interdisciplinary Elective II - Introduction to Artificial Intelligence	3	0	2	4	60	10	20	10	100	22