

GUJARAT TECHNOLOGICAL UNIVERSITY (Effective from 14-02-2011)

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Examination		Mid Sem Test Marks	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 1 M.E. Computer Science & Engineering (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720101	Wireless Networking & Mobile Computing	4	0	2	5	70	30	30	20	150
1720102	Distributed Computing & Application	4	0	2	5	70	30	30	20	150
1720103	Major Elective II- Advance Compiler Design	3	0	2	4	70	30	30	20	150
1720104	Major Elective II- Digital Image Processing	3	0	2	4	70	30	30	20	150
1720105	Major Elective II- Object Oriented Methodology & Design	3	0	2	4	70	30	30	20	150
1720106	Major Elective III- Grid Computing	3	0	2	4	70	30	30	20	150
1720107	Major Elective III- Embedded System	3	0	2	4	70	30	30	20	150
1720108	Major Elective III- Data Mining & Data warehousing	3	0	2	4	70	30	30	20	150
1720109	Inter Disciplinary Elective II- Object Oriented Programming	3	0	2	4	70	30	30	20	150
1720110	Inter Disciplinary Elective II- Numerical Methods	3	0	2	4	70	30	30	20	150
Branch Code : 2 M.E. Computer Engineering (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720201	Distributed Operating Systems	4	0	2	5	70	30	30	20	150
1720202	Design of Language Processors	4	0	2	5	70	30	30	20	150
1720203	Major Elective II- Artificial Intelligence	3	0	2	4	70	30	30	20	150
1720104	Major Elective II- Digital Image Processing	3	0	2	4	70	30	30	20	150
1720204	Major Elective II- Software Engineering Methodologies	3	0	2	4	70	30	30	20	150
1720205	Major Elective III- Cryptography & Network Security	3	0	2	4	70	30	30	20	150
1720206	Major Elective III- Soft Computing	3	0	2	4	70	30	30	20	150
1720108	Major Elective III- Data Mining and Data Warehousing	3	0	2	4	70	30	30	20	150
1720109	Inter Disciplinary Elective II- Object Oriented Programming	3	0	2	4	70	30	30	20	150
1720110	Inter Disciplinary Elective II- Numerical Methods	3	0	2	4	70	30	30	20	150
Branch Code : 3 M.E. Instrumentation and Control (Applied Instrumentation) (Semester-II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720301	Digital Control	3	0	0	3	70	0	30	20	120
1720302	Advance Instrumentation	4	0	2	5	70	30	30	20	150
1720303	Virtual Instrumentation	0	0	2	1	0	80	0	20	100
1720304	Major Elective II - Electromagnetic Compatibility	3	0	2	4	70	30	30	20	150
1720305	Major Elective II - Applied Transducers	3	0	2	4	70	30	30	20	150
1720306	Major Elective II - Embedded System Design	3	0	2	4	70	30	30	20	150
1720307	Major Elective III - Industrial Drives and Control	4	0	2	5	70	30	30	20	150
1720308	Major Elective III - Process Control	4	0	2	5	70	30	30	20	150
1720309	Major Elective III - Biomedical Signal Processing	4	0	2	5	70	30	30	20	150
1720310	Interdisciplinary Elective II - Industrial Measurements	3	0	2	4	70	30	30	20	150
1720311	Interdisciplinary Elective II - Microelectromechanical systems	3	0	2	4	70	30	30	20	150

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		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 4 M.E. Electronics and Communication Engineering (Semester -II) (Subjects already offered in sem-I should not be repeated in subsequent semesters)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720401	Telecom Switching System, Networks and Network Management	4	0	2	5	70	30	30	20	150
1722202	Advanced Digital Communication	4	0	2	5	70	30	30	20	150
1710404	Major Elective II & III -Image Processing	3	0	2	4	70	30	30	20	150
1710405	Major Elective II & III - Fiber Optic Communication	3	0	2	4	70	30	30	20	150
1710406	Major Elective II & III -Speech Processing	3	0	2	4	70	30	30	20	150
1710407	Major Elective II & III -Biomedical Signal Processing	3	0	2	4	70	30	30	20	150
1710409	Major Elective II & III -Embedded System Design	3	0	2	4	70	30	30	20	150
1710411	Major Elective II & III -RF and Microwave Engineering	3	0	2	4	70	30	30	20	150
1710412	Major Elective II & III -Digital VLSI Design	3	0	2	4	70	30	30	20	150
1710413	Major Elective II & III -RF Microelectronics	3	0	2	4	70	30	30	20	150
1710417	Major Elective II & III -Microelectronics chip fabrication	3	2	0	4	70	30	30	20	150
1710418	Major Elective II & III -Satellite communication	3	2	0	4	70	30	30	20	150
1710419	Major Elective II & III -Antenna Engineering and Design	3	0	2	4	70	30	30	20	150
1710421	Major Elective II & III -Computer Aided Design for VLSI	3	0	2	4	70	30	30	20	150
1710422	Major Elective II & III -Digital Signal Processing and Applications	3	0	2	4	70	30	30	20	150
1710423	Major Elective II & III -Neuro Computing and Applications	3	2	0	4	70	30	30	20	150
1710424	Major Elective II & III -Machine Learning	3	2	0	4	70	30	30	20	150
1710425	Major Elective II & III -Robotics and Intelligent Systems	3	2	0	4	70	30	30	20	150
1710426	Major Elective II & III -Linear System Theory	3	2	0	4	70	30	30	20	150
1710427	Major Elective II & III -Soft Computing Technique and its Application in Engineering	3	0	2	4	70	30	30	20	150
1710428	Major Elective II & III -Recent topics in Modern Communication Engineering	3	2	0	4	70	30	30	20	150
1710410	Interdisciplinary Elective II - Introduction to Artificial Intelligence	3	0	2	4	70	30	30	20	150

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Examination		Mid Sem Test Marks	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 5 M.E. Communication Systems Engineering (Semester II) (Subjects already offered in sem-I should not be repeated in subsequent semesters)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720401	Telecom Switching System, Networks and Network Management	4	0	2	5	70	30	30	20	150
1722202	Advanced Digital Communication	4	0	2	5	70	30	30	20	150
1710404	Major Elective II & III -Image Processing	3	0	2	4	70	30	30	20	150
1710405	Major Elective II & III - Fiber Optic Communication	3	0	2	4	70	30	30	20	150
1710406	Major Elective II & III -Speech Processing	3	0	2	4	70	30	30	20	150
1710407	Major Elective II & III -Biomedical Signal Processing	3	0	2	4	70	30	30	20	150
1710409	Major Elective II & III -Embedded System Design	3	0	2	4	70	30	30	20	150
1710411	Major Elective II & III -RF and Microwave Engineering	3	0	2	4	70	30	30	20	150
1710412	Major Elective II & III -Digital VLSI Design	3	0	2	4	70	30	30	20	150
1710416	Major Elective II & III -Adaptive signal Processing	3	2	0	4	70	30	30	20	150
1710417	Major Elective II & III -Microelectronics chip fabrication	3	2	0	4	70	30	30	20	150
1710418	Major Elective II & III -Satellite communication	3	2	0	4	70	30	30	20	150
1710419	Major Elective II & III -Antenna Engineering and Design	3	0	2	4	70	30	30	20	150
1710421	Major Elective II & III -Computer Aided Design for VLSI	3	0	2	4	70	30	30	20	150
1710422	Major Elective II & III -Digital Signal Processing and Applications	3	0	2	4	70	30	30	20	150
1710423	Major Elective II & III -Neuro Computing and Applications	3	2	0	4	70	30	30	20	150
1710424	Major Elective II & III -Machine Learning	3	2	0	4	70	30	30	20	150
1710425	Major Elective II & III -Robotics and Intelligent Systems	3	2	0	4	70	30	30	20	150
1710426	Major Elective II & III -Linear System Theory	3	2	0	4	70	30	30	20	150
1710427	Major Elective II & III -Soft Computing Technique and its Application in Engineering	3	0	2	4	70	30	30	20	150
1710428	Major Elective II & III -Recent topics in Modern Communication Engineering	3	2	0	4	70	30	30	20	150
1710410	Interdisciplinary Elective II - Introduction to Artificial Intelligence	3	0	2	4	70	30	30	20	150

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Examination		Mid Sem Test Marks	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 6 M.E. Communication Engineering (Semester -II) Subjects already offered in sem-I should not be repeated in subsequent semesters										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720401	Telecom Switching System, Networks and Network Management	4	0	2	5	70	30	30	20	150
1722202	Advanced Digital Communication	4	0	2	5	70	30	30	20	150
1710405	Major & Minor Elective - Fiber Optic Communication	3	0	2	4	70	30	30	20	150
1710406	Major & Minor Elective - Speech Processing	3	0	2	4	70	30	30	20	150
1710407	Major & Minor Elective - Biomedical Signal Processing	3	0	2	4	70	30	30	20	150
1710409	Major & Minor Elective - Embedded System Design	3	0	2	4	70	30	30	20	150
1710411	Major & Minor Elective - RF and Microwave Engineering	3	0	2	4	70	30	30	20	150
1710412	Major & Minor Elective - Digital VLSI Design	3	0	2	4	70	30	30	20	150
1710413	Major & Minor Elective - RF Microelectronics	3	0	2	4	70	30	30	20	150
1710417	Major & Minor Elective - Microelectronics chip fabrication	3	2	0	4	70	30	30	20	150
1710418	Major & Minor Elective - Satellite communication	3	2	0	4	70	30	30	20	150
1710419	Major & Minor Elective - Antenna Engineering and Design	3	0	2	4	70	30	30	20	150
1710421	Major & Minor Elective - Computer Aided Design for VLSI	3	0	2	4	70	30	30	20	150
1710422	Major & Minor Elective - Digital Signal Processing and Applications	3	0	2	4	70	30	30	20	150
1710423	Major & Minor Elective - Neuro Computing and Applications	3	2	0	4	70	30	30	20	150
1710424	Major & Minor Elective - Machine Learning	3	2	0	4	70	30	30	20	150
1710425	Major & Minor Elective - Robotics and Intelligent Systems	3	2	0	4	70	30	30	20	150
1710426	Major & Minor Elective - Linear System Theory	3	2	0	4	70	30	30	20	150
1710427	Major & Minor Elective - Soft Computing Technique and its Application in Engineering	3	0	2	4	70	30	30	20	150
1710428	Major & Minor Elective - Recent topics in Modern Communication Engineering	3	2	0	4	70	30	30	20	150
1710601	Major & Minor Elective- Wireless and Mobile Communication	3	2	0	4	70	30	30	20	150
1710404	Major & Minor Elective - Image Processing	3	0	2	4	70	30	30	20	150
1710410	Major & Minor Elective - Introduction to Artificial Intelligence	3	0	2	4	70	30	30	20	150

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		Theory	Tutorial	Practical		Theory	Practical/Viva			
Branch Code : 7 M.E. Electrical Engineering (Semester- II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720701	Advanced Electrical Machines	3	0	0	3	70	0	30	20	120
1720702	Digital Signal Processing	3	0	0	3	70	0	30	20	120
1720703	Major Elective II - Power System Dynamics & Control (Power Group)	4	0	0	4	70	0	30	20	120
1720704	Major Elective II - Digital control systems (Control Group)	4	0	0	4	70	0	30	20	120
1720705	Major Elective II - Application of Power Electronics in Power Systems (Power Electronics Group)	4	0	0	4	70	0	30	20	120
1720706	Major Elective II - Digital Image Processing (Micro Group)	4	0	0	4	70	0	30	20	120
1720707	Major Elective III - Flexible AC Transmission System (Power Group)	4	0	0	4	70	0	30	20	120
1720708	Major Elective III - Modeling and simulation of dynamic systems. (Control Group)	4	0	0	4	70	0	30	20	120
1720709	Major Elective III - Advanced Power Converters (Power Electronics Group)	4	0	0	4	70	0	30	20	120
1720710	Major Elective III - Embedded System Design (Micro Group)	4	0	0	4	70	0	30	20	120
1720711	Inter Disciplinary Elective II - Electrical Power Utilization	3	0	2	4	70	30	30	20	150
1720712	Core Laboratory II	0	0	4	2	0	80	0	20	100
1720713	Elective Laboratory	0	0	4	2	0	80	0	20	100

Branch Code : 8 M.E. Mechanical (CAD/CAM) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720801	Finite Element Method	4	2	0	5	70	30	30	20	150
1720802	Computer Aided Manufacturing	4	0	0	4	70	0	30	20	120
1720803	Major Elective II - Robotic Engineering	3	0	0	3	70	0	30	20	120
1720804	Major Elective II - Experimental Modal Analysis and Dynamic Design	3	0	0	3	70	0	30	20	120
1720805	Major Elective II - Machine Tool Design	3	0	0	3	70	0	30	20	120
1720806	Major Elective II - Vibration Engineering	3	0	0	3	70	0	30	20	120
1720807	Major Elective III - Automation in Production and Hydraulic control	3	0	0	3	70	0	30	20	120
1720808	Major Elective III - Manufacturing Processes and Analysis	3	0	0	3	70	0	30	20	120
1720809	Major Elective III - Product Design and Development	3	0	0	3	70	0	30	20	120
1720810	Interdisciplinary Elective II - Modern Machining Methods	3	0	2	4	70	30	30	20	150
1720811	FEM & Software Lab	0	0	4	2	0	80	0	20	100
1720812	CAM & Software Lab	0	0	2	1	0	80	0	20	100

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		Theory	Tutorial	Practical		Theory	Practical/Viva			
Branch Code : 9 M.E. Mechanical (Machine Design) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1720901	Finite Element Method	4	0	2	5	70	30	30	20	150
1720902	Geometrical Dimensioning and Tolerancing	4	2	0	5	70	30	30	20	150
1720903	Major Elective II & III - Machine Tool Design	3	0	2	4	70	30	30	20	150
1720904	Major Elective II & III - Mechanical Vibration and Diagnostics	3	0	2	4	70	30	30	20	150
1720905	Major Elective II & III - Computer Aided Design	3	0	2	4	70	30	30	20	150
1720906	Major Elective II & III - Robotics	3	0	2	4	70	30	30	20	150
1720907	Major Elective II & III - Design for Manufacturing	3	2	0	4	70	30	30	20	150
1720908	Major Elective II & III - Reliability Engineering	3	2	0	4	70	30	30	20	150
1720909	Interdisciplinary Elective II - Quality Control and Reliability	3	2	0	4	70	30	30	20	150
Branch Code : 10 M.E. Mechanical (CRYOGENIC ENGG.) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721001	Cryogenic Systems	3	0	2	4	70	30	30	20	150
1721002	Cryogenic Plants and Equipments	4	0	2	5	70	30	30	20	150
1721003	Major Elective II - Advanced Air Conditioning	4	0	2	5	70	30	30	20	150
1721004	Major Elective III - Radiation Heating and Cooling System	3	0	2	4	70	30	30	20	150
1721005	Major Elective III - Computational Fluid Dynamics	3	0	2	4	70	30	30	20	150
1721006	Inter Disciplinary Elective II - Cryogenic Applications	3	0	2	4	70	30	30	20	150
Branch Code : 11 M.E. Mechanical (I.C.Engine & Automobile) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721101	Instrumentation & Vehicle Testing	4	0	2	5	70	30	30	20	150
1721102	Alternate Fuels & Energy	4	0	2	5	70	30	30	20	150
1721103	Major Elective II & III - Modern Vehicle Design	3	2	0	4	70	30	30	20	150
1721104	Major Elective II & III - Automotive Chassis & Body Engineering	3	2	0	4	70	30	30	20	150
1721105	Major Elective II & III - High Speed Diesel Engine	3	2	0	4	70	30	30	20	150
1721106	Major Elective II & III - Automobile Maintenance and Pollution Control	3	2	0	4	70	30	30	20	150
1721107	Inter Disciplinary Elective II - Energy Conservation & Management	3	2	0	4	70	30	30	20	150

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		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 12 M.E. Civil (Water Resources Management) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721201	Ground Water Management	4	0	2	5	70	30	30	20	150
1721202	Water Resources Planning	3	0	2	4	70	30	30	20	150
1721203	Major Elective II - Design of Canal Network and Regulation Work	4	2	0	5	70	30	30	20	150
1721204	Major Elective II - Water Supply and Drainage	4	2	0	5	70	30	30	20	150
1721205	Major Elective III - Hydro System Engineering And Management	3	2	0	4	70	30	30	20	150
1721206	Major Elective III - Stochastic Models in Water Resources.	3	2	0	4	70	30	30	20	150
1721207	Inter Disciplinary Elective II - Infrastructure Engineering and Management	3	2	0	4	70	30	30	20	150
Branch Code : 13 M.E. Civil (Transportation Engineering) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721301	Traffic Engineering - 2	4	0	2	5	70	30	30	20	150
1721302	Pavement Design and Evaluation	4	0	2	5	70	30	30	20	150
1721303	Major Elective II - Regional and Mass Transportation Systems Planning	3	2	0	4	70	30	30	20	150
1721304	Major Elective II - Railway and Airport Engineering	3	2	0	4	70	30	30	20	150
1721305	Major Elective II - Docks and Harbour Engineering	3	2	0	4	70	30	30	20	150
1721306	Major Elective II - Transportation Facility Design	3	2	0	4	70	30	30	20	150
1721307	Major Elective III - Economics and Evaluation of Transportation Projects	3	2	0	4	70	30	30	20	150
1721308	Major Elective III - Environmental Impact Assessment of Transportation Project	3	2	0	4	70	30	30	20	150
1721309	Major Elective III - Transportation System Management	3	2	0	4	70	30	30	20	150
1721310	Major Elective III - Road Safety and Environment	3	2	0	4	70	30	30	20	150
1721311	Inter Disciplinary Elective II - Geo - Spatial Techniques	3	0	2	4	70	30	30	20	150
Branch Code : 14 M.E. Construction Engineering & Management (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721401	Advanced Civil Engineering Materials	3	2	0	4	70	30	30	20	150
1721402	Resources Management	4	2	0	5	70	30	30	20	150
1721403	Major Elective II - Construction Contract Management	4	2	0	5	70	30	30	20	150
1721404	Major Elective II - Project risk analysis and mitigation techniques	4	2	0	5	70	30	30	20	150
1721405	Major Elective III - Value Engineering	3	2	0	4	70	30	30	20	150
1721406	Major Elective III - IT Solutions in construction management	3	2	0	4	70	30	30	20	150
1721407	Inter disciplinary Elective II - Strategic mamangement	3	2	0	4	70	30	30	20	150
1721408	Inter disciplinary Elective II - Research Methodology	3	2	0	4	70	30	30	20	150

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		Theory	Tutorial	Practical		Theory	Practical/ Viva			
Branch Code : 15 M.E. Civil (CASAD) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721501	Finite Element Method	4	0	0	4	70	0	30	20	120
1721502	Behaviour of Reinforced Concrete	4	0	0	4	70	0	30	20	120
1721503	Major Elective II - Advanced Foundation Engineering	3	2	0	4	70	30	30	20	150
1721504	Major Elective II - Analysis and Design of Bridges	3	2	0	4	70	30	30	20	150
1721505	Major Elective II - Disaster Resistant Structures	3	2	0	4	70	30	30	20	150
1721506	Major Elective III - Rehabilitation and Retrofitting of Buildings	3	0	0	3	70	0	30	20	120
1721507	Major Elective III - Advanced Steel Structural Design	3	0	0	3	70	0	30	20	120
1721508	Major Elective III - Marine Structures	3	0	0	3	70	0	30	20	120
1721509	Inter-Disciplinary Elective II - Advanved Computing in Engineering	3	2	0	4	70	30	30	20	150
1721510	CASAD Lab-II	0	0	3	1.5	0	80	0	20	100
1721511	Structural Design Project	0	3	0	1.5	0	80	0	20	100
Branch Code : 16 M.E. Chemical Engineering (Computer Aided Process Design) (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721601	Industrial Biotechnology	3	0	2	4	70	30	30	20	150
1721602	Chemical Process Optimization	4	0	0	4	70	0	30	20	120
1721603	Process Plant Simulation	0	0	4	2	0	80	0	20	100
1721604	Major Elective II - Property Prediction for Mixtures (CAD Group)	4	0	0	4	70	0	30	20	120
1721605	Major Elective II - Polymer Processing (Polymer Group)	4	0	0	4	70	0	30	20	120
1721606	Major Elective III - Chemical System Modeling & Simulation (CAD Group)	3	0	2	4	70	30	30	20	150
1721607	Major Elective III - Polymer Materials & Testing (Polymer Group)	3	0	2	4	70	30	30	20	150
1721608	Inter Disciplinary Elective II - Seperation Techniques	3	0	2	4	70	30	30	20	150
Branch Code : 17 M.E. Environmental Engineering (Semester -II)										
1720001	Principles of Management	3	0	0	3	70	0	30	20	120
1721701	Principles of waste Water Treatment	4	0	2	5	70	30	30	20	150
1721702	Industrial Water And Wastewater Treatment	4	0	2	5	70	30	30	20	150
1721703	Major Elective II - Hazardous Waste management	3	0	2	4	70	30	30	20	150
1721704	Major Elective II - Solid waste Management	3	0	2	4	70	30	30	20	150
1721705	Major Elective II - Environmental Health and safety	3	0	2	4	70	30	30	20	150
1721706	Major Elective III - Noise Pollution and Thermal Pollution and control	3	2	0	4	70	30	30	20	150
1721707	Major Elective III - Air Pollution Control	3	2	0	4	70	30	30	20	150
1721708	Major Elective III - CAD in Environmental Engineering	3	2	0	4	70	30	30	20	150
1721709	Inter Disciplinary Elective II - Environmental and Occupational Health and Safety	3	0	2	4	70	30	30	20	150

Subject code	Subject name	Teaching Scheme (Hours)			Credits	University Exam (E)		Sem Test (M)	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/Viva			
Branch Code: 46 Industrial Engineering (Semester II)										
1720001	Principals of Management	3	0	0	3	70	0	30	20	120
1724601	Facility Planning and Design	4	0	2	5	70	30	30	20	150
1724602	Production and Service Operation Management	4	2	0	5	70	30	30	20	150
1724603	Quality Engineering and Six Sigma Fundamentals (Major Elective II)	3	2	0	4	70	30	30	20	150
1724604	Marketing Management (Major Elective II)	3	2	0	4	70	30	30	20	150
1724605	Operations Planning and Control Techniques (Major Elective III)	3	2	0	4	70	30	30	20	150
1724606	Project Management Practices (Major Elective III)	3	2	0	4	70	30	30	20	150
1724607	Value Engineering and Analysis (Interdisciplinary Elective II)	3	2	0	4	70	30	30	20	150
1724608	Reliability Engineering and Maintenance Management (Interdisciplinary Elective II)	3	2	0	4	70	30	30	20	150

Branch Code: 47 Mechatronics (Semester II)										
Subject code	Subject name	Teaching Scheme (Hours)			Credits	University Exam (E)		Mid Sem Test (M)	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/Viva			
1720001	Principals of Management	3	0	0	3	70	0	30	20	120
1724701	Advance Oil Hydraulic and Pneumatic Systems	4	0	2	5	70	30	30	20	150
1724702	Advanced Microcontrollers and Logic Controllers	4	0	2	5	70	30	30	20	150
1724703	Fundamentals of Micro Mechatronics Systems (Elective – II)	3	0	2	4	70	30	30	20	150
1724704	Diagnostic Maintenance and Monitoring (Elective – II)	3	0	2	4	70	30	30	20	150
1724705	Total Quality Management (Elective-II)	3	2	0	4	70	30	30	20	150

Subject code	Subject name	Teaching Scheme (Hours)			Credits	University Exam (E)		Mid Sem Test (M)	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/Viva			
1724707	Mechatronics Signal Processing (Elective-III)	3	0	2	4	70	30	30	20	150
1724708	Fundamentals and Applications of Nanotechnology (Elective – III)	3	0	2	4	70	30	30	20	150
1724709	Futuristic Manufacturing Systems (Int. Elective – II)	3	0	2	4	70	30	30	20	150

Branch Code: 48 Town and Country Planning (Semester II)										
Subject code	Subject name	Teaching Scheme (Hours)			Credits	University Exam (E)		Mid Sem Test (M)	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/Viva			
1720001	Principals of Management	3	0	0	3	70	0	30	20	120
1724801	Urban Planning Techniques and Practice (Core-IV)	4	0	0	4	70	30	0	20	120
1724802	Regional Planning (Core-V)	4	0	0	4	70	30	0	20	120
1724803	Geospatial Techniques & Planning (Major Elective II)	3	2	0	4	70	30	0	20	120
1724804	Planning for Disaster Management (Major Elective II)	3	2	0	4	70	30	0	20	120
1721303	Regional and Mass Transportation Systems Planning (Major Elective II)	3	2	0	4	70	30	0	20	120
1724806	Rural Planning and Development (Major Elective III)	3	0	0	3	70	30	0	20	120
1724807	Tourism Planning & Development (Major Elective III)	3	0	0	3	70	30	0	20	120
1724808	Project Planning and Management (Major Elective III)	3	0	0	3	70	30	0	20	120
1724809	(Interdisciplinary Elective II)	3	2	0	4	70	30	30	20	150
1724810	Planning Studio – II	0	0	4	2	0	80	0	20	100
1724811	Graduate Report – II	0	0	2	1	0	80	0	20	100

Subject code	Subject name	Teaching Scheme (Hours)			Credits	University Exam (E)		Mid Sem Test (M)	Practical (I)	Total Marks
		Theory	Tutorial	Practical		Theory	Practical/Viva			
Branch Code: 49 Construction Management (Semester II)										
1720001	Principals of Management	3	0	0	3	70	0	30	20	120
1724901	Construction Project Management-II	4	2	0	5	70	30	30	20	150
1724902	Construction Safety Management	3	2	0	4	70	30	30	20	150
1724903	Application of Information Technology in Construction Management	3	0	2	4	70	30	30	20	150
1724904	Maintenance and Rehabilitation of Structures (Major Elective II)	4	2	0	5	70	30	30	20	150
1724905	Operational Research (Major Elective II)	4	2	0	5	70	30	30	20	150
1724906	Advances in Concrete Technology (Major Elective III)	3	0	2	4	70	30	30	20	150
1724907	Essentials of Management Information System (Major Elective III)	3	2	0	4	70	30	30	20	150

Branch Code: 50 Advanced Manufacturing Systems (Semester II)										
1720001	Principals of Management	3	0	0	3	70	0	30	20	120
1725001	Robotics and Artificial Intelligence	4	0	2	5	70	30	30	20	150
1725002	Computer Integrated Manufacturing	4	0	2	5	70	30	30	20	150
1725003	Product Development and Innovation (Major Elective II)	3	2	0	4	70	30	30	20	150
1725004	World Class Manufacturing (Major Elective II)	3	2	0	4	70	30	30	20	150
1725005	Supply Chain Manament (Major Elective II)	3	2	0	4	70	30	30	20	150
1725006	Tribology of Machine Elements (Major Elective III)	3	2	0	4	70	30	30	20	150
1725007	Tool Design (Major Elective III)	3	2	0	4	70	30	30	20	150
1725008	Rapid Prototyping	3	2	0	4	70	30	30	20	150
1725009	Design and Analysis of Experiments	3	0	2	4	70	30	30	20	150