BRANCH-APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING

2nd Semester

Specialization: ***Electronics & Instrumentation Engineering/ Applied Electronics & Instrumentation Engg***

	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Fiber Optics & LASER Instrumentation	4-0	4	100	50	-	-	-
Specialization Core-2 Industrial Process Control Instrumentation	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1 .Biomedical instrumentation & Signal Processing 2.Analytical Instrumentation 3. Microsystems Principle, Design and Application 4.Digital & Adaptive Control 5.Digital & IC Based Instrumentation	4-0	4	100	50	-	. -	-
Elective-II (Departmental related) 1. Non-Linear Systems 2. Adaptive Signal Processing. 3. Virtual Instrumentation 4.Micro Controller & Embedded Systems	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2.Industrial Automation & Robotics 3.Bio-mems & nanotechnology 4.Bio Informatics	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department) Modeling & Simulation Laboratory					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-AUTOMATION & ROBOTICS

2nd Semester

Specialization:Automation & Robotics

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Automation & Manufacturing	4-0	4	100	50	-	-	-
Specialization Core-2 Mechanical Measurement & Control System	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Advanced Computer Concept for Automation 2.Mechatronics 3.Modelling, Simulation & Analysis of Manufacturing System	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Total Quality Management 2. Embedded System Design 3. Mechanical Vibration	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Computer Aided Production Operation Management 2.Finite Element Methods in Engineering 3. Project Management	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-BIOTECHNOLOGY

2nd Semester

Specialization: Biotechnology

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Biochemical Engineering	4-0	4	100	50	-	-	-
Specialization Core-2 Applied Bioinformatics	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1. Plant biotechnology 2.Animal biotechnology 3. Genomics & Proteomics 4.Computational Biology	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Environmental Biotechnology 2. Advanced Microbiology & Immunology 3. Nanobiotechnology 4. Pharmaceutical Biotechnology	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Techniques in Genetic Engineering 2. Bioreactor Design & Optimization 3.IPR, Bioethics & Biosafety 4.Process Control & Instrumentation	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH- CHEMICAL ENGINEERING

2nd Semester

Specialization: **Chemical Engineering**

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Petroleum Refinery Engineering	4-0	4	100	50	-	-	-
Specialization Core-2 Advanced Separation Techniques	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1. Advanced Fluid Dynamics 2. Mineral Beneficiation 3. Advance Process Control	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1. Multiphase Flow 2. Bioprocess Engineering 3. Advances in Bio-Chemical Engineering 4. Process Plant Simulation	4-0	4	100	50	-	-	-
Elective III (from any department) 1. Air Pollution Control Equipment Design 2. Thermodynamics in Process Design 3. Non-conventional Energy 4. Industrial Safety & management	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CIVIL ENGINEERING

2nd Semester

Specialization: Structural Engineering/ Structural and Foundation Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Reinforced Concrete Design	4-0	4	100	50	-	-	-
Specialization Core-2 Matrix Methods of Analysis of Structure	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.Structural Dynamics 2.Advanced Steel Structure 3. Bridge Engineering 4.Earthquake Resistance Design of Structure	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Advance Construction Materials 2. Offshore Engineering 3. Tall Structures 4.Optimization Methods & its Application in Civil Engineering	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Composite Structure 2. Hydropower Engineering 3.Non-conventional Energy 4. Advanced Numerical Method 5.Green Building Concepts	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CIVIL ENGINEERING

2nd Semester

Specialization: Water Resource Engineering & Management/ Water Resource Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Ground Water Hydrology	4-0	4	100	50	-	-	-
Specialization Core-2 Free Surface Flow	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.Advanced Fluid Mechanics 2. Applied Hydrology 3.Fluvial Hydaulics 4. Ground Improvement Engineering	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1. Design of Irrigation Structure 2. GIS & Remote Sensing 3. Irrigation & Drainage 4.Water Resources System & Management	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Composite Structure 2. Hydropower Engineering 3.Non-conventional Energy 4. Advanced Numerical Method 5.Green Building Concepts	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CIVIL ENGINEERING

2nd Semester

Specialization: Transportation Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Geometric Design of Highways	4-0	4	100	50	-	-	-
Specialization Core-2 Transportation Systems Planning	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.Advanced Railway Engineering 2.Planing & Design of Airport 3. Bridge Engineering 4.Ground Improvement Engineering	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1.Advance Construction Materials 2. Mass Transit Systems 3. Traffic Engineering & Traffic Flow Theory 4.Transportation & Environment	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Composite Structure 2. Hydropower Engineering 3.Non-conventional Energy 4. Advanced Numerical Method 5.Green Building Concepts	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CIVIL ENGINEERING

2nd Semester

***Specialization:** Soil Mechanics and Foundation Engineering/ Soil Mechanics*

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Soil Mechanics	4-0	4	100	50	-	-	-
Specialization Core-2 Ground Improvement Technique	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.Stability Analysis of Slopes, embankments & Dams 2.Ground Water & Flow Through Porous Media 3.Earth Retaining structure 4.Earthquake Geotechnical Engineering	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Subsoil Exploration & Soil Testing 2. Dynamics of Soils & Foundation 3.Strength & Deformation Behavior of Soil 4.Optimization Methods & its Application in Civil Engineering	4-0	4	100	50	-	-	-
Elective III (from any department) 1. Composite Structure 2. Hydropower Engineering 3.Non-conventional Energy 4. Advanced Numerical Method 5.Green Building Concepts	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CIVIL ENGINEERING

2nd Semester

Specialization: Geotechnical Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Geo-Mechanics	4-0	4	100	50	-	-	-
Specialization Core-2 Ground Improvement Technique	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.Stability Analysis of Slopes, embankments & Dams 2.Ground Water & Flow Through Porous Media 3.Rock Mechanics 4.Soil Dynamics & Geotechnical Earthquake Engineering	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1. Subsoil Exploration & Soil Testing 2. Soil Stabilization by Admixture 3.Reinforced Soil Structure 4.Optimization Methods & its Application in Civil Engineering	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Composite Structure 2. Hydropower Engineering 3.Non-conventional Energy 4. Advanced Numerical Method 5.Green Building Concepts	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-COMPUTER SCIENCE &ENGINEERING

2nd Semester

***Specialization:*CSE/CS**

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Computer Graphics	4-0	4	100	50	-	-	-
Specialization Core-2 Software Engineering	4-0	4	100	50	-	-	-
Elective I (Specialization related) 1. Distributed Database System. 2. J2EE. 3. Information Extraction and Retrieval. 4. Fast Machine Learning.	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1. Data Ware Housing & Data Mining 2. Cloud Computing 3. Cryptography. 4. Graph Theory.	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Mobile Computing. 2. Wireless Sensor Network. 3. Big Data Analytic 4. Bio Informatics. 5. Digital Image Processing	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-CONSTRUCTION TECHNOLOGY & MANAGEMENT

2nd Semester

Specialization: **Construction Technology & Management**

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-I Infrastructure Valuation	4-0	4	100	50	-	-	-
Specialization Core-II Strategic Management in Construction	4-0	4	100	50	-	-	-
Elective – I (Specialization related) 1. Quality & Safety Management 2. Building Information Management 3. Construction Techniques 4.Quantitative Methods in Construction	4-0	4	100	50	-	-	-
Elective – II (Departmental related) 1. Advance Construction Materials 2. Construction Equipment Management 3.Mantainance & Rehabilitation of Structures 4.Contract Management & Arbitration	4-0	4	100	50	-	-	-
Elective _ III (from any department) 1.Energy Conservation Techniques in Building Construction 2.Environmental Impact Assessment & Management 3.Human Resource Development for Construction 4.Climate Change & Sustainable Development 5. Green Building Concepts	4-0	4	100	50	-	-	-
LAB 2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL ENGINEERING

2nd Semester

Specialization: Power System Engineering/ Power Systems/ Electrical Power Systems

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Electrical Power System Transient	4-0	4	100	50	-	-	-
Specialization Core-2 Power System Dynamics	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.HVDC Transmission & FACTS 2.EHVAC Transmission 3.Computer Aided Power System Protection 4.Power System Reliability	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Advance Control System 2. Energy Generation From Waste 3.Power Quality Improvement Techniques 4.Power System Control & Instrumentation	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Electric Drives In Hybrid Vehicle 2.Green Energy Resources & Technology 3. Quantitative methods For Energy Management & planning 4.Advanced Numerical Methods	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL ENGINEERING

2nd Semester

Specialization: Power Electronics & Drives/ Power Electronics/ Power Electronics & Electrical Drives

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Power Converter	4-0	4	100	50	-	-	-
Specialization Core-2 Advanced Electric Drives	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.HVDC Transmission & FACTS 2.Electrical Machine Analysis & Control 3.Power System Transient 4.Control Techniques In Power Electronics	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Advance Control System 2. Energy Generation From Waste 3.Power Quality Improvement Techniques 4.Power System Control & Instrumentation	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Electric Drives In Hybrid Vehicle 2.Green Energy Resources & Technology 3. Quantitative methods For Energy Management & planning 4.Advanced Digital Signal Processing	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL ENGINEERING

2nd Semester

Specialization:* *Power Electronics & Power System

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Power Converter	4-0	4	100	50	-	-	-
Specialization Core-2 Power System Dynamics	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.HVDC Transmission & FACTS 2.Electrical Machine Analysis & Control 3.Power System Transient 4.Control Techniques In Power Electronics	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Advance Control System 2. Energy Generation From Waste 3.Power Quality Improvement Techniques 4.Power System Control & Instrumentation	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Electric Drives In Hybrid Vehicle 2.Green Energy Resources & Technology 3. Quantitative methods For Energy Management & planning 4.Advance Microprocessor & Microcontroller	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL ENGINEERING

2nd Semester

Specialization: Power Engineering and Energy System/ Power And Energy Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Foundation For Energy Systems Technology	4-0	4	100	50	-	-	-
Specialization Core-2 Power System Dynamics	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.HVDC Transmission & FACTS 2.EHVAC Transmission 3.Operation & Control Of Electrical Energy Systems 4.Power System Reliability	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Advance Control System 2. Energy Generation From Waste 3.Power Quality Improvement Techniques 4.Protection & Digital Relaying	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Electric Drives In Hybrid Vehicle 2.Green Energy Resources & Technology 3. Quantitative methods For Energy Management & planning 4.System Identification & Adaptive Control	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL ENGINEERING

2nd Semester

Specialization: Energy System Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Solar Energy Engineering	4-0	4	100	50	-	-	-
Specialization Core-2 Wind and Small Hydro System	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1.HVDC Transmission & FACTS 2.Operation & control of Electrical Energy System 3.Energy System Modeling & Analysis 4.Energy Resources, Economics & Environment	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1.Power System Planning & Operation 2.Energy Generation From Waste 3.Computer Aided Power System Analysis 4.Power System Control & Instrumentation	4-0	4	100	50	-	-	-
Elective III(from any department) 1.Electric Drives In Hybrid Vehicles 2. Green Energy Resources & Technology 3.Quantitative methods For Energy Management & Planning 4. Energy Efficiency in Electrical Utility	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-INDUSTRIAL POWER CONTROL & DRIVES

2nd Semester

Specialization: **Industrial** ***Power Control & Drives***

Second Semester							
	Theory				**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Load Flow & Optimal Power Control	4-0	4	100	50	-	-	-
Specialization Core-2 Advanced Electric Drives	4-0	4	100	50	-	-	-
Elective -I(Specialization related) 1.HVDC Transmission & FACTS 2. Digital Relaying 3.Solid State Control of Electric Drive 4.Power System Reliability	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1.Advance Control System 2. Design & Synthesis of Control System 3.Power Quality Improvement Techniques 4.Power System Control & Instrumentation	4-0	4	100	50	-	-	-
Elective -III(from any department) 1. Electric Drives In Hybrid Vehicle 2.Green Energy Resources & Technology 3. Transducer & Instrumentation 4.Advanced Digital Signal Processing	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRICAL & ELECTRONICS ENGINEERING

2nd Semester

Students of this branch will follow the syllabus as per the specialization given by their institute.

BRANCH-ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2nd Semester

***Specialization:** VLSI & Embedded System Design/ VLSI & Embedded System/ VLSI Design & Embedded System*

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Embedded System Design	4-0	4	100	50	-	-	-
Specialization Core-2 VLSI Fabrication Technology	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Low Power Digital VLSI Design 2.Introduction to Nanoelectronics 3.Microsystems – Principle, Design and Application 4.VLSI Physical Design	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Advanced Techniques in DSP 2. Adaptive Signal Processing. 3. RF and Mixed-Signal Integrated Circuits 4. ASIC & SoC Design	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2. Network Architecture and Design. 3.Bio-MEMS and Nanotechnology 4.Wireless and Mobile Communication	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2nd Semester

Specialization: Electronics and Communication Engineering/ Electronics and Telecommunication Engineering/ Communication Engineering/ Communication Systems

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Telecommunication Network and Optical Switching	4-0	4	100	50	-	-	-
Specialization Core-2 Satellite Communication System	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Fiber-Optics Components and Device 2.Digital Image Processing 3.Radar System Engineering 4.Wireless Sensor Network	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Industrial Telematics 2. Statistical Signal Processing 3. RF and Mixed-Signal Integrated Circuits 4. Embedded System Design	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2. Network Architecture and Design. 3.Antenna Design & Measurement 4. Wireless and Mobile Communication	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2nd Semester

Specialization: Signal Processing and Engineering

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 DSP Algorithm and Architectures	4-0	4	100	50	-	-	-
Specialization Core-2 Digital Image and Video Processing	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Array Signal Processing 2.Multirate Signal Processing 3. Biomedical instrumentation & Signal Processing 4. Speech and Audio Signal Processing	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Advanced Techniques in DSP 2.Statistical Signal Processing 3. RF and Mixed-Signal Integrated Circuits 4. Embedded System Design	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2. Network Architecture and Design. 3. Bio-MEMS and Nanotechnology 4. Wireless and Mobile Communication	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2nd Semester

Specialization: Wireless Communication Technology

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 MIMO Wireless Communication System	4-0	4	100	50	-	-	-
Specialization Core-2 Ultra Wide Band Communication system	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Wireless Communication Management 2.Spread Spectrum Communication Technique 3.VLSI for Wireless Communication 4.Satellite Communication System	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Advanced Techniques in DSP 2. Statistical Signal Processing 3. RF and Mixed-Signal Integrated Circuits 4. Embedded System Design	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2. Network Architecture and Design. 3. Antenna Design & Measurement 4. Wireless and Mobile Communication	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-ELECTRONICS AND TELECOMMUNICATION ENGINEERING

2nd Semester

Specialization: Signal Processing and Communication

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Detection and Estimation Theory	4-0	4	100	50	-	-	-
Specialization Core-2 Digital Image and Video Processing	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Fiber-Optics Components and Device 2.Radar and Sonar Signal Processing 3.Biomedical Instrumentation and Signal Processing 4.Digital Filter Design	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Advanced Techniques in DSP 2. Statistical Signal Processing 3. RF and Mixed-Signal Integrated Circuits 4.VLSI Digital Signal Processing	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Data Encryption and Security 2. Network Architecture and Design. 3. Antenna Design & Measurement 4. Wireless and Mobile Communication	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH: ENERGY CONSERVATION & MANAGEMENT

2nd Semester

Syllabus will be uploaded soon

BRANCH-ENVIRONMENTAL ENGINEERING

2nd Semester

Specialization: **Environmental Engineering/ Environmental Science & Engineering**

Second Semester							
	Theory				**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Air & Noise Pollution	4-0	4	100	50	-	-	-
Specialization Core-2 Solid Waste Management	4-0	4	100	50	-	-	-
Elective I (Specialization related) 1. Hazardous Waste Management 2. Industrial Pollution Control 3. Advanced Water & Waste Water Treatment System 4. Green Technology	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1. Environmental Impact Assessment 2. Environmental Management 3. Occupational Health & Safety 4. Environmental System Modeling & Optimization	4-0	4	100	50	-	-	-
Elective III (from any department) 1 Environmental Hydraulics 2. Engineering Hydrology 3. Application of Remote Sensing & GIS for Environmental Engineering 4. Instrumental Methods for Environmental Analysis	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-INDUSTRIAL ENGINEERING & MANAGEMENT

2nd Semester

Specialization: ***Industrial Engineering & Management/Industrial Engineering***

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Decision Modeling-II	4-0	4	100	50	-	-	-
Specialization Core-2 Supply Chain Management	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Quality Engineering & Management 2.Facility Planning 3.Finantial Management & Accounting 4.Marketing Management	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Total Quality Management 2. Productivity Management 3. Human Resource Management 4. Strategic Management	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1. System Modeling & Analysis 2. Enterprise Resource Planning(ERP) 3. Total Productive Maintenance 4. Project Management	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-INFORMATION TECHNOLOGY

2nd Semester

Specialization: IT

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Data Ware Housing & Data Mining	4-0	4	100	50	-	-	-
Specialization Core-2 Software Engineering	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1. Distributed Database System. 2. J2EE. 3. Information Extraction and Retrieval. 4. Enterprise Resource Planning.	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1. Information Theory and Coding Techniques 2. Cloud Computing 3. Cryptography 4. Graph Theory.	4-0	4	100	50	-	-	-
Elective III(from any department) 1. Mobile Computing. 2. Business Function Process. 3. Big Data Analytic 4. Bio Informatics. 5. Digital Image Processing	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

SPECIALIZATION: HEAT POWER & THERMAL ENGINEERING/HEAT POWER ENGINEERING/THERMAL ENGINEERING

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Engg Thermodynamics.	4 - 0	4	100	50	-	-	-
Specialization Core-2 Refrigeration Engineering.	4 - 0	4	100	50	-	-	-
Elective –I (Specialization related) 1. Two-Phase Flow and Heat Transfer. 2. Thermal & Nuclear Power Plant. 3. Introduction to Computational Fluid Dynamics. 4. Computational Methods in Thermal Engineering.	4 - 0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Internal Combustion Engine 2. Numerical Analysis 3. Heat Transfer Equipments. 4. Fluid & Gas Dynamics.	4 - 0	4	100	50	-	-	-
Elective-III (Other Departmental Related) 1. Analysis and Design of Heat Exchanger 2. Renewable Energy Systems. 3. Hydel Power & Wind Energy. 4. Advanced Fluid Mechanics.	4 - 0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

SPECIALIZATION: PRODUCTION ENGINEERING/PRODUCTION ENGINEERING & OPERATIONAL MANAGEMENT

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Non-Traditional Machining	4 - 0	4	100	50	-	-	-
Specialization Core-2 Rapid Prototyping and Tooling	4 - 0	4	100	50	-	-	-
Elective–I (Specialization related) 1. Advanced Decision Modeling and Techniques 2. Metal Forming Technology 3. Computer Aided Design and Computer Integrated Manufacturing 4. Metrology & Non-Destructive Testing	4 - 0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Composite Materials & Application 2. Quality Engineering & Reliability 3. Theory of Plastic Deformation. 4. Production Management.	4 - 0	4	100	50	-	-	-
Elective-III (From any department) 1. Quantitative Techniques in Production Management. 2. Alternative Energy. 3. Machine Fault Diagnosis and Signal Processing. 3. Finite Element Methods in Engineering. 4. Tribology.	4 - 0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

SPECIALIZATION: ***MACHINE DESIGN / MECHANICAL SYSTEMS DESIGN / SYSTEM DESIGN***

Second Semester							
Theory					Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Mechanics of Composite Materials	4 - 0	4	100	50	-	-	-
Specialization Core-2 Fatigue, Creep & Fracture	4 - 0	4	100	50	-	-	-
Elective –I (Specialization Related) 1. Finite Element Method 2. Bearing and Lubrication 3. Basic Mechanical Handling systems 4. Analysis and synthesis of Mechanism.	4 - 0	4	100	50	-	-	-
Elective-II (Departmental Related) 1. Optimum Design of Mechanical Systems 2. Robotics 3. Material Selection in Mechanical Design. 4. Experimental Stress Analysis	4 - 0	4	100	50	-	-	-
Elective-III(From any department) 1. Machine Vibration 2. Numerical Method for Engineers 3. Machine Learning 4. Computer Aided Design.	4 - 0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks:1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

SPECIALIZATION:THERMAL AND FLUID ENGINEERING

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Advanced Engg Thermodynamics.	4 - 0	4	100	50	-	-	-
Specialization Core-2 Advanced Fluid Mechanics	4 - 0	4	100	50	-	-	-
Elective –I (Specialization Related) 1. Advanced Refrigeration Engg. 2. Gas Turbine & Jet Propulsion. 3. Introduction to Computational Fluid Dynamics. 4. Computational Methods in Thermal Engineering.	4 - 0	4	100	50	-	-	-
Elective-II (Departmental Related) 1. Heat Transfer in Two-phase Flow 2. Gas Dynamics 3. Heat Exchanger Analysis and Design. 4. Aircraft & Rocket Propulsion.	4 - 0	4	100	50	-	-	-
Elective-III (Other Department Related) 1. Cryogenic Technology. 2. Advanced Internal Combustion Engines. 3. Viscous Fluid Flow. 4. Wind Energy Conversion.	4 - 0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

***SPECIALIZATION:* CAD/CAM**

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Computer Numeric Control Part programming	4 – 0	4	100	50	-	-	150
Specialization Core-2 Computer Integrated Manufacturing	4 – 0	4	100	50	-	-	150
Elective –I (Specialization related) 1. Rapid Prototyping and Manufacturing 2. Mechantronics and Manufacturing Systems 3. Manufacturing Systems and simulation 4. Metrology And Non Destructive Testing	4 – 0	4	100	50	-	-	150
Elective-II (Departmental related) 1. Manufacturing Information System 2. Robotics 3. Performance Modeling And Analysis of Manufacturing System Performance 4. Computer Aided Process Planning	4 – 0	4	100	50	-	-	150
Elective-III(Departmental Related) 1. Design for manufacturing 2. Design of Material Handling Equipment 3. Management Information System 4. Machine Tool Technology	4-0	4	100	50			
Lab-2 Compute Aided Manufacturing Lab					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH - MECHANICAL ENGINEERING

2nd Semester

SPECIALIZATION:* *MECHANICAL SYSTEM DESIGN & DYNAMICS / DESIGN & DYNAMICS

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Vibration of structures	4 – 0	4	100	50	-	-	150
Specialization Core-2 Dynamics of Rotors.	4 – 0	4	100	50	-	-	150
Elective –I (Specialization Related) 1. Acoustics 2. Machine Fault Diagnosis and Signal Processing 3. Mechatronics 4. Analysis and Design of Smart Materials and Structure	4 – 0	4	100	50	-	-	150
Elective-II (Departmental Related) 1. Non Linear Vibration 2. Bearing and Lubrication 3. Vibration and Shock Isolation 4. Experimental Stress Analysis	4 – 0	4	100	5 0	-	-	150
Elective-III (From any department) 1. Robotics and Automation 2. Random vibrations & Failure Analysis 3. Finite Element Method in Engineering 4. Computer Graphics and Visualization	4 – 0	4	100	50	-	-	150
Lab-2 (to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH – MECHATRONICS

2ND SEMESTER

Syllabus will be uploaded soon

BRANCH-METALLURGICAL ENGINEERING

2nd Semester

***Specialization:*METALLURGICAL AND MATERIALS ENGINEERING**

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Transport Phenomena in Metallurgy	4-0	4	100	50	-	-	-
Specialization Core-2 Mechanical Behavior of Materials	4-0	4	100	50	-	-	-
Elective I (Specialization related) 1.Solid State Phase Transformation 2.Mechanical Working of Materials 3.Physics of Materials 4.Process Metallurgy	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1.Advanced Casting Processes 2.Material Failure and Analysis 3.Industrial Heat Treatment 4.Nano Materials 5.Modeling and Computer Application in Metallurgy 6.Powder Metallurgy	4-0	4	100	50	-	-	-
Elective III (from any Department) 1.Tribology of Materials 2.Composite Materials 3.Bio Materials 4.Degradation of Materials	4-0	4	100	50	-	-	-
Lab-2 Material Processing and Process Metallurgy Lab					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-METALLURGICAL ENGINEERING

2nd Semester

Specialization: **INDUSTRIAL METALLURGY**

Second Semester							
Theory					**Practical**		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Metal Forming Theory and Practices	4-0	4	100	50	-	-	-
Specialization Core-2 Advanced Ferrous Production Technology	4-0	4	100	50	-	-	-
Elective I (Specialization related) 1.Non Ferrous Metal Extraction 2.Alternatives Routes of Iron Making 3.Mineral Engineering 4.Material Joining and Non Destructive Testing	4-0	4	100	50	-	-	-
Elective II(Departmental related) 1.Advanced Casting Processes 2.Material Failure and Analysis 3.Industrial Heat Treatment 4.Nano Materials 5.Modeling and Computer Application in Metallurgy	4-0	4	100	50	-	-	-
Elective III(from any department) 1.Tribology of Materials 2.Composite Materials 3.Bio Materials 4.Degradation of Materials	4-0	4	100	50	-	-	-
Lab-2 Fabrication and Characterisation of Materials Lab					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-Nanotechnology

2nd Semester

Specialization: Nanotechnology

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Mathematical Modeling & Simulation	4-0	4	100	50	-	-	-
Specialization Core-2 Fabrication Techniques & Characterization of Nanomaterials	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1.Nanoparticles & microorganisms, Bionano composite 2.Nanocomposites 3.Quntum Mechanics 4. Physicochemical Methods for Characterization of Nanomaterials	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1. Biosensors 2. MEMS & Bio MEMS 3.Nanobiotechnology 4.Advance Nanomaterials	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1.Nanotechnology in Health Care 2. Nanotechnology for Energy System 3.Green Nanotechnology 4.Bio Informatics 5. Semiconductor Nano Structure & Nanoparticles	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH-Nanotechnology

2nd Semester

Specialization: Polymer Nanotechnology

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Nanofabrication Technology	4-0	4	100	50	-	-	-
Characterization of Polymeric Nanomaterials	4-0	4	100	50	-	-	-
Elective-I (Specialization related) 1. Nanomaterials for Energy & Environment 2. Polymer based Optical, Electronic & Magnetic Materials	4-0	4	100	50	-	-	-
Elective-II (Departmental related) 1.Micro/Nanofluidics - Design & Modeling 2. Nanopolymers in Medicine	4-0	4	100	50	-	-	-
Elective-III (from any Department) 1. Technology, innovation and quality Management 2. Mechanics of Finite Size Elements 3.Green Nanotechnology	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the Department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH- PLASTIC ENGINEERING

2nd Semester

Specialization: **Plastic Engineering**

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-1 Properties & Testing of Plastics	4-0	4	100	50	-	-	-
Specialization Core-2 Plastics Processing Theory and Product Design	4-0	4	100	50	-	-	-
Elective I(Specialization related) 1. Coating Science & Technology 2. Biodegradable Plastics 3 .Polymer Rheology 4. Plastics waste management and recycling.	4-0	4	100	50	-	-	-
Elective II (Departmental related) 1.Polymer degradation and stabilization . 2.Mechanical behavior of polymers 3.Polymer Blends and Alloys 4.Nylon technology	4-0	4	100	50	-	-	-
Elective III (from any department) 1.Production management 2.Engineering Economic and costing 3.Strength of materials 4.CAD/CAM/CAE application in mould/tool design	4-0	4	100	50	-	-	-
Lab-2 (Specialization lab to be decided by the department)					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							

BRANCH- TEXTILE ENGINEERING

2nd Semester

Specialization: **Textile Chemical Processing**

Second Semester							
	Theory				Practical		
Course Name	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**	**Hours/ Week L/T**	**Credit Practical**	**Marks**
Specialization Core-I Chemistry of Dyes and Textile Chemicals	4-0	4	100	50	-	-	-
Specialization Core-II Advanced Chemical Processing	4-0	4	100	50	-	-	-
Elective – I (Specialization related) 1. Principle of Colour Measurement & Communication 2. Application of Plasma in Textile 3. Application of Nano Technology in Textile 4.Technical Textile	4-0	4	100	50	-	-	-
Elective – II (Departmental related) 1. Fibre Reinforced Composites 2. Application of Biotechnology in Textile 3.Garment Processing Technology 4.High Performance Fiber	4-0	4	100	50	-	-	-
Elective _ III (from any department) 1.Biopolymer 2.Solar Energy Technology 3.Polymer s & Fiber Chemistry 4.Environmental & Ecological Aspects of Textile Processing 5.Digital Image Processing	4-0	4	100	50	-	-	-
Lab-2 Advance Chemical Processing Lab					4	4	150
Seminar/Project					4	4	150
Total							
Total Marks: 1050							
Total Credits: 28							