



Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH : Civil Engineering

ACADEMIC YEAR : 2017- 18

Courses that include experiential learning through project work	Project domain	justification
Elements of Mechanical Engineering Engineering /Applied Physics Lab Engg. Workshop & IT Workshop Probability & Statistics Surveying Survey Field Work - I Survey Field Work - II	Basic Projects with Multidisciplinary & Planning Layouts	Basic Knowledge of Mathematics and science are needed to understand any engineering problem.
Strength of Materials-I Building Materials & Construction Strength of Materials Lab Building Planning & Drawing Strength of Materials - II Concrete Technology Structural Analysis - I Structural Analysis -II Design & Drawing of Reinforced Concrete Structures Design & Drawing of Steel Structures Concrete Technology Lab GIS & CAD Lab	Structural Engineering	These courses help the students to do Design in various types of Structures, Study various properties of ingredients of concrete.
Fluid Mechanics Hydraulics & Hydraulic Machinery FM & HM Lab Irrigation Design & Drawing Engineering Geology	Hydraulics and Water Resources Engineering	These courses help the students to do Geometric design of design various hydraulics and water resources structures.
Geology Lab Geotechnical Engineering - I	Geotechnical Engineering	These courses help the students to do Geometric design of foundations in various types of soils for various structures.
Transportation Engineering - I Transportation Engineering - II Transportation Engineering Lab	Transportation Engineering	These courses help the students to plan and design Highways, Railways, Airports, Docks and harbours.
Environmental Engineering -I	Environmental Engineering	These courses help the students to plan and design water and waste water treatment system gaining expertise in subject knowledge


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Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH : EEE

ACADEMIC YEAR : 2017-18

Courses that include experiential learning through project work	Project domain	justification
HVAC & DC Transmission Power System Operation and Control Electrical Distribution System Microprocessor & Microcontrollers Lab Electrical Simulation Lab Power System Lab Power System Analysis Micro Processors and Micro controllers OOPS Through JAVA Energy Audit and Conservation Management HVDC Transmission Electrical Distribution Systems Flexible Alternating Current Transmission Systems Seminar Project Microprocessors & Microcontrollers Laboratory Data Structures Laboratory Utilization of Electrical Energy Power System Operation & Control Electrical Simulation Laboratory Power Systems & Simulation Laboratory Flexible AC Transmission System Power Systems-II Projects Applied / Engineering Chemistry Laboratory English- Communication Skills Laboratory - I Computer Programming Laboratory English - Communication Skills Laboratory - II Eng. Workshop & IT Workshop	<p>Power transmission, coding</p> <p>Smart grid Smart home communication</p>	<p>These courses help the students to do programming/simulation/hardware implementations</p>
Special Electrical Machines Electrical Machines-II Laboratory	Electric vehicle	<p>Basic Engineering fundamentals and engineering specializations are needed to understand any engineering problem</p>
Renewable Energy Sources Renewable Energy Sources & Systems	<p>Solar applications</p> <p>Smart grid, Power generation</p>	<p>These courses help the students to do programming/simulation/hardware implementations</p>
Pulse & Digital Circuits Power Electronics Control Systems Laboratory Electrical Measurements Laboratory Power Electronic Controllers & Drives Power Electronics Laboratory Linear IC Applications	controlling, robots	<p>Basic Knowledge of Mathematics and science are needed to understand any engineering problem</p>



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Switchgear and Protection
Instrumentation
Digital Control Systems
Electrical Measurements

controlling, robots

These courses help the students to
do hard ware implementation
gaining expert knowledge


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Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH : Mechanical Engineering

ACADEMIC YEAR : 2017 – 18

Courses that include Experiential learning through project work	Project domain	justification
Simulation Lab Design/Fabrication Project Project Work Engineering /Applied Physics – Virtual Labs - Assignments Computer Aided Engineering Drawing Practice Mechanics Of Solids & Metallurgy Lab Design Of Machine Members -I Dynamics Of Machinery Design Of Machine Members–II Theory Of Machines Lab Metrology Computer Graphics Metrology & Instrumentation Lab Cad/Cam Finite Element Methods Cad/Cam Lab Automobile Engineering Instrumentation & Control Systems	They can design any machine part	They can solve the design problems which is facing, and they can give new design which is appropriate.
Industrial Hydraulics And Pneumatics Engineering/Applied Chemistry Laboratory Basic Electrical And Electronics Engineering Thermal Engineering -I Thermal Engineering -II Thermal Engineering Lab Refrigeration & Air-Conditioning Heat Transfer Heat Transfer Lab Computational Fluid Dynamics Lab Power Plant Engineering	They can make new engines and new fuels	They can analysis the thermal properties and fluid flow in engines and boilers
Automation In Manufacturing Metallurgy & Materials Science Industrial Engineering And Management Operations Research Nano Technology Additive Manufacturing Advanced Materials Production Planning And Control Unconventional Machining Processes Non Destructive Evaluation	They can fabricate any type of machine parts	They can able to do machining and process planning for the production
Green Engineering Systems Electrical & Electronics Engg. Lab Mechatronics Mechatronics Lab	They can make electrical and automated vehicles	They can able to connect the circuits and program for vehicles automation 



Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH :ECE

ACADEMIC YEAR :2017-18

Courses that include Experimental learning through project work	Project domain	justification
Digital Image Processing Radar Systems Optical Communication Microwave Engineering Lab Cellular Mobile Communications Electronics Measurements And Instrumentation Embedded Systems Wireless Sensors & Networks Project & Seminar	Basic Projects With Controlling And Monitoring	Basic Electronics Fundamentals And Engineering Specializations Are Needed To Understand Any Engineering Problem
Electrical And Mechanical Technology English - Communication Skills Lab -2 Applied / Engineering Chemistry Lab Computer Programming Lab	Design of logic for program development.	Basics Of Programming for developing logics for problems and applications.
Electronic Devices And Circuits Switching Theory And Logic Design Signals And Systems Network Analysis Random Variables And Stochastic Processes Electronic Devices And Circuits Lab Networks & Electrical Technology Lab	Design Of Transmitters, Receivers, Filters Etc.	These Courses Help The Students To Apply The Knowledge Of Electronics And Communication To Advanced Concepts.
Management Science Electronic Circuit Analysis Control Systems Electromagnetic Waves And Transmission Lines Analog Communications Pulse And Digital Circuits	Real-Time Applications Involving Automation	These Courses Help The Students Understand The Necessary Hard Ware For Implementing Real-Time Tasks.
Electronic Circuit Analysis Lab Analog Communications Lab Computer Architecture And Organization Linear I C Applications Digital I C Applications Digital Communications	Real-Time Analysis Of Environmental Based Applications	These Courses Help Students To Understand And Analyse The Surrounding Environmental Aspects.
Antenna And Wave Propagation Pulse And Digital Circuits Lab Linear I C Applications Lab Digital I C Applications Lab Micro Processors & Micro Controllers Micro Wave Engineering Vlsi Design Digital Signal Processing Micro Processors & Micro Controllers Lab Vlsi Lab Digital Communications Lab Bio-Medical Engineering Computer Programming	Security, Automation, Realtime Behaviour Of Designed System	Helps Student To Design, Implement And Analyse Any Realtime Application With Electronics And Communication Concepts.



Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH : CSE

ACADEMIC YEAR : 2017 - 18

Courses That Include experiential Learning Through Project Work	Project Domain	Justification
Hadoop And Big Data Lab	Console Applications,\	This courses gives the knowledge of mathematics, science, computer fundamentals to create the solution to complex real-world problems.
Mathematics -3	Desktop Applications,	This courses gives the knowledge of mathematics, science, computer fundamentals to create the solution to complex real-world problems.
Engineering Mechanics	Web Applications,	This courses provides knowledge to design solutions for complex problems and design software's or processes that meet the specified needs.
English Communication Skills Lab-2	Android Applications,	This courses provides knowledge to design solutions for complex problems and design software's or processes that meet the specified needs.
Data Structures Through C++ Lab	Data Science Applications,	This courses provides knowledge to design and develop scientific applications.
Advanced Data Structures	Data ware housing and Data Mining,	This courses provides knowledge to design and develop scientific applications.
Formal Languages And Autometa Theory	Digital Image Processing,	It demonstrate knowledge and understanding of project management and finance activities
Advanced Data Structures Lab	Network Security	This courses provides knowledge to design and develop scientific applications. This courses provides knowledge to design and develop scientific applications.
Compiler Design	Internet of things	IT tools including prediction and modelling to complex problems with an understanding.
Unix Programming	Big data applications	This courses provides knowledge to design and develop scientific applications.
Unified Modelling Lab	Security	This courses provides knowledge



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		to design and develop scientific applications.
Operating Systems And Linux Programming Lab	Networking	This courses provides knowledge to design solutions for complex problems and design software's or processes that meet the specified needs.
Dataware housing And Mining	Embedded systems	This courses gives the knowledge of mathematics, science, computer fundamentals to create the solution to complex real-world problems.


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Courses That Include Experiential Learning Through Project Work/Field work/Internship.

BRANCH : IT

ACADEMIC YEAR : 2017-18

Courses that include experimental learning through project work	Project domain	justification
UML & Design Patterns Elective - I: Multimedia Computing Elective -II: Hadoop and Big Data UML & Design Patterns Lab Mobile Application Development Lab Hadoop & Bigdata Lab C Programming Lab Applied/Engineering Physics-Virtual Labs-Assignments Object Oriented Programming through C++ Data Structures through C++ Computer Graphics E-Commerce Object Oriented Analysis and Design using UML Principles of Programming Languages Unified Modeling Languages Lab Human Computer Interaction Unix and Shell Programming Advanced Java Programming Operating Systems Advanced Java Programming Lab Unix and Operating System Lab Hadoop & BigData Lab Distributed Systems Management Information System Seminar Project	Using these programming language have to develop software	Basic Knowledge on computer programming language are needed to understand and solve the programming problems
Database Management Systems Lab Data Mining	Oracle, SQL	Used to create and maintain Database
Mathematical Optimization Statistics with R Programming Mathematical Foundations of Computer Science	Mathematic Calculation	Use to develop mathematic models for computer problems.
Software Engineering	Software Development and Testing	It focus on analysing the requirement of users to design deploy and test new software.
Web Technologies	Web Engineering	Deals with developing websites, management, deployment and maintenance.
Cryptography and Network Security Lab Elective-III: Cyber Security	Information Security	Basics on cyber attacks and protocols that protect the data on the internet.


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Courses That Include Experiential Learning Through Project Work/Field work/Internship.

Name of the Program : MBA

ACADEMIC YEAR : 2017-18

Courses that include experiential learning through project work	Project domain	Justification
Management And Organizational Behaviour	Strategic alternatives for corporate issues and suggest best strategy for solving business problems.	This course provides basic knowledge on management, communication, and specialized knowledge in all specializations.
Managerial Economics	Optimize economic decisions by using operations research, mathematical programming, strategic decision making, game theory and other computational methods	This course provides the knowledge to better se of economic modes of thoughts to analyze business situations.
Accounting For Managers	To acquaint the students with the fundamentals principles of financial, cost and management accounting	This course provides the knowledge of preparing, analyzing and interpreting financial statements
Quantitative Analysis For Business Decisions	Quantitative analysis is used to make purchasing decisions, marketing decisions, and even sales decisions.	This course provides the knowledge to use scientific approach and solves the management problems and to make best decisions.
Legal And Business Environment	Helps to handle legal contracts and agreements, To relate the impact of environment on business in an integrated manner	This course provides the knowledge about business laws and regulations, issues of domestic and global environment in which business has to operate
Business Communication And Soft Skills	Knowing how to present fresh ideas and cooperate with others can prove just as important as technical ability to your success in the workplace.	This course provides the knowledge to discover the means to cultivate the essential skills like leadership, communication, critical thinking, team work etc.
Cross Cultural Management	They will gain the analytical skills to map cultural differences and similarities and to diagnose their implications	The course takes a culture-general perspective: to learn systematic frameworks, analytical approaches, self-awareness, and behaviors that are related to effective interaction across cultures and in multicultural settings
Business Communication And Soft Skills Lab	Practically knowing how to present fresh ideas and cooperate with others can prove just as important as technical ability to your success in the workplace.	This course provides the knowledge to discover the means to cultivate the essential skills like team work, interpersonal skills, leadership, communication, critical thinking etc. practically.
INFORMATION TECHNOLOGY LAB -1(Spreadsheet And Tally)	This applications are dedicated to manage and process financial data in business	This course helps in maintaining accounts in manual books, we write accounting entries as debit and credit.


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Financial Management	Finance management provides an opportunity to invest further and creating plans that are in-line with the long-term financial goals for their organization	This course is beneficial as it involves management, control, and review of the collection, investment and resources of money as a capital required for an industrial building, plant, and management.
Human Resource Management	HRM within an organization primarily concerned with the recruitment of and management of the people who work for the organization.	This course provides direction for the people who work in an organization and also seek to aid in their satisfaction.
Business Research Methods	The concept of Scientific Research and the methods of conducting scientific enquiry and to know about the statistical tools of Data Analysis	This course helps the businesses to gain better insights about their target customer's preferences, buying patterns, pain points, as well as demographics
Lean Management	It seeks to eliminate any waste of time, effort or money by identifying each step in a business process and then revising or cutting out steps that do not create value	The primary purpose of lean management is to produce value for the customer through the optimization of resources and create a steady workflow based on real customer demands
IT Lab- 2 (Programming R)	Helps in analyzing large amounts of data quickly; it can produce business ready reports.	This course can help to minimize the risk in investing portfolios in practical.
Strategic Management	It develops the analytical capacity of the learner and equips them with skills such as market analysis and data collection	This course teaches how to treat the market in such a manner that sales and profit are churned out by the company.
Operations Management	This helps for managing activities within the production of goods and services, utilizing resources from staff, materials, equipment and technology.	This course helps to train for handling different aspects of a business, such as planning, manufacturing, production, services and maintenance.
Industrial Project Based On Summer Internship	During internships, students usually work as part of a team, get a feel for the company's culture, participate in the organization's greater mission, and complete a specific project	This course helps to pave the way to future full-time roles for students; for employers, these short-term work arrangements can serve as a recruiting tool of sorts.
Leadership And Change Management	This will build the business fundamentals needed to advance the career while focusing on leading people and organizations.	This course provides knowledge to develop servant leadership, interpersonal, and influencing skills to effectively shape group change.
Performance Evaluation And Compensation Management	This familiarizes students with the concepts of compensation management within the wider context of human resource management, understanding of the reward management process which includes pay survey, job evaluation, and the design of pay structure.	This course is designed to promote understand in issues related to compensation in corporate sector and impart skills in designing, analysis and restructure compensation management system, policies and strategies.
Human Capital Management	It provides individuals with keen insights and information for being a good manager.	This course provides knowledge on HR rules and regulations, current best practices in recruitment, training, performance management,



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Manpower Planning, Recruitment And Selection	It consists of putting right number of people, right kind of people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organization.	and strategic HR functions. This course provides the knowledge in the arena of industrialization. Human Resource Planning has to be a systems approach and is carried out in a set procedure as analyzing the current manpower inventory, making future manpower forecasts, developing employment programs, design training programs
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