

## Illustrative list

Electronics and Communication Engineering	
Communication Engineering	Antenna Engineering
VLSI Design	Wireless Communication
Embedded Systems	Optical and Wireless Networks
RF Engineering	Digital System Design using VHDL using FPGA
Digital System Design using Verilog using FPGA	Image, Video and Speech Processing
MATLAB and Simulink for beginners	MATLAB and Simulink for Advance users
Digital Signal Processing	Wireless sensor Networks
VLSI Back end Design Tools	Verification and Testing for VLSI ICs
Hardware-Software code-sign	PID and Advance Process Control
MATLAB programming	Embedded Systems
Micro controller	Image Processing with MATLAB

Instrumentation and Control Engineering	
Industrial Data Communication	Temperature Measurement
Programming with VHDL using Xilinx-FPGA	PLC and SCADA programming
Industrial Automation, Process Control	LabVIEW programming and its applications
Process Equipment Design	
Electrical Engineering	
Fundamentals of electrical engineering	Electrical Power System Planning and Design
Substation Design	Testing, Commissioning of Electrical Equipment
Condition Monitoring	Insulation Coordination
Microprocessor and Microcontrollers	Power System Analysis using ETAP, PSCAD
Mathematical Modelling of Electrical Systems	Electrical Machine Design using MAGNET, SPEED, MATLAB, MOTORSOLVE
Power Electronics Converters	Switched Mode Power Supplies
Electric Drives	Active Filters
Multilevel Inverters	Applications of DSP in Power Electronics Applications
Simulations of Power Electronic systems on PSIM, MATLAB	HVDC and FACTS controllers
Power Electronics	

Computer Science Engineering	
Network configuration and Design	Data Mining with Weka
Network Simulators	Sensor and Adhoc Networks
Machine and Deep Learning	Python Programming
Biometric Authentication	Big Data Analytics
Documentation using LaTeX	Multimedia Information Retrieval
Mechanical Engineering	
Finite Element Analysis using Hyper works	Finite Element Analysis and Optimization using Hyper works
Finite Element Analysis using Ansys	Solid modelling using Creo Parametric (Pro/Engineer)
Solid modelling using CATIA	Mechanism analysis and simulation using Creo Prametric (Pro/Engineer)
Multibody dynamics using Hyper works	2D Drafting using AutoCAD
Kinematics and Dynamics aspects of Robotics	Robot building for students
Dynamic simulation using Autodesk Inventor	Solid modelling using Autodesk Inventor
Role of Thermal insulations in the industries	Energy conservation in the industries
Non-Conventional optimization	Derivative free algorithms of Optimization
Pressure vessel design	Theories of failure

Engineering Drawing Fundamentals	Geometric Dimensioning & Tolerencing	
Finite element Analysis	Machine Design	
Stress Analysis	Mechanical Vibration	
CNC programming fundamentals & practice	Part programming using UGS NXCAM, Pro Mechanica	
Chemical Engineering		
Catalyst and catalysis	Bio-Fuels	
Environment Audit	Cleaner Production	
Environment Impact Assessment	Environment Management Systems	
Nanotechnology	Process Integration and Process Scheduling	
Computational Tools for Chemical Engineering	Use of Thermodynamics in Process Industries	
Properties Estimation and its usefulness in Designing	Energy Audit, Process Calculation	
Energy Efficiency in Process Utilities	Auto-exhaust Emission Control	
Air Pollution Control Technology	Solid Waste Treatment Technology	
Waste Water Treatment Technology	Heat Transfer Operations	
Analysis of water, Gas Chromatography	Polymer Technology	
Process Control	Fluid Mechanics	
Solar Energy	HTRI	

Civil Engineering	
<ul> <li>Structural Engineering</li> <li>Concrete Technology and Sustainable Materials</li> <li>Earthquake Engineering and Structural Dynamics</li> <li>RCC, Steel, Precast and Special Structures</li> <li>Computational Mechanics</li> </ul>	<ul> <li>Geotechnical Engineering</li> <li>Geotechnical Earthquake Engineering</li> <li>Ground Improvement Techniques</li> <li>Numerical Modelling and Soil-structure Interaction</li> <li>Analysis and Design of Foundations</li> </ul>
Geomatics  Remote Sensing	Construction Technology & Management  • Construction Management
Geographic Information Systems	Building Information Modelling (BIM)
Global Positioning Systems	Sustainable Construction Technology     Lean Construction
• Global Positioning Systems	Lean Construction

## **Skill based Programmes in Engineering and Technology**

Electrician	Mobile Care Taker
Laptop Repairer	Refrigeration and Air condition Mechanic
Various Computer related courses	CAD Solid Modeller
CNC Programming	Energy Audit
Electrical Safety	Diesel Engine Mechanic
Pump Mechanic	Foundry Technology
Embedded System Programming	PCB Design
MATLAB	Soldering Workshop
Motor rewinding	PLC Programming

Know your Car and home Appliances system for house wives.	Java Programming
VB Script and ASP	Certificate Course in medical equipment maintenance
Call Centre Training	D.T.P.
Data Base Management Course	