Subject Name	Description
Antenna & Wave Propagation	This course gives an insight on radiating systems and propagation of electromagnetic waves. Antenna used in various applications both for domestic and commercial applications are studied. Students get knowledge of antennas and can pursue any industry oriented projects in this field.
VHDL Design	VHDL is a computer language used for designing electronic circuits particularly microelectronics/VLSI circuits. Modern electronic circuitry is being increasingly miniaturized thus the importance of VHDL. This course enables our students to join electronic circuits design industry.
Microprocessors & Interfacing	The objective of this course is to become familiar with the architecture and the instruction set of an Intel microprocessor. Assembly language programming will be studied as well as the design of various types of digital and analog interfaces. The accompanying lab is designed to provide practical hands-on experience with microprocessor software applications and interfacing techniques.
Digital Signal Processing	This course will introduce the basic concepts and techniques for processing signals on a computer. By the end of the course, you be familiar with the most important methods in DSP, including digital filter design, transform-domain processing and importance of Signal Processors. The course emphasizes intuitive understanding and practical implementations of the theoretical concepts.
Information Theory & Coding	This course provides a basic understanding of the nature of information, the effects of noise in analogue and digital transmission systems and the construction of both source codes and error-detection/-correction codes.
Essentials of Information Technology-I	Gain fundamental knowledge regarding technical concepts and practices in information technology (IT).Gain a broad background across fundamental areas of information technology along with a depth of understanding in a particular area of interest within the domain of information systems.
DSP Lab using MATLAB	Principles learnt in the theory course are seen and implemented in the lab. Students design various types of filters, obtain FFT and use various types of DSP algorithms. It provides students hands-on experience on various DSP processors.
VHDL Lab	VHDL is a computer language for designing VLSI and microelectronic circuits. In this course, students learn the practical aspects of writing a VHDL program and to design digital circuits like gates, counters, registers etc. This course is a basic building block for higher courses in electronic system design in the industry. After studying this course our students will understand the basics of design of digital circuits.
Microprocessors & Interfacing Lab	This course teaches the students how to design digital electronic circuits using a microprocessor and how to interface the microprocessors with other circuits. The theoretical aspects studied in the course ECE-355 are brought out in detail to the students. This is the first course in design using a microprocessor and a very useful course from industry point of view.
Optical Communication	This course is helpful in understanding the optical communication system, the basic media of wireless and wired communication system for global communication system. It provides a thorough knowledge of optical design, principles and applications for digital and analog mathematical calculations for fiber optic systems, analysis of optical network, detectors, sources and generator for different advance technology and industry ready environment.
MOS IC Design & Technology	The course serves the basics of VLSI Technique, fabrication process sequences which will be useful for manufacture the integrated technology for one bag and single window digital world. The design process and packaging of Integrated Circuits require

	the sophisticated basic VLSI Design and for such purpose physical design the Introduction and detailed theory of VLSI circuits and systems is necessary.
Computer Communication Networks	The data communications and networking can easily be realized by any ordinary lay man by this course. The course focuses on data communication systems and different parameters that can be detectable for many application of communication in daily life. The analysis of various layers and wireless communication techniques deliver the knowledge of verifying the fault diagnosis existing in the computer network of industry ready material. In the current scenario, all types of electronic transfer like e-commerce, e- banking, e- customer service etc. can be easily observed and learned by this course.
Power Electronics	The Principles & Design of power electronics is necessary for concept analysis and applications of power electronic of any electronic circuitry and industry. The Thyristors' analysis and brief description of parallel and series inverters gives the methods of how to use such system in daily applications. The effective function of chopper and types of cyclo-converter is the main keystone of all industries.
Microcontroller & Embedded Systems	This course is the integrated circuit application of embedded microcontrollers which provides single window multi-facility automatic system. The use of PIC microcontrollers, architecture and pipelining delivers the knowledge of programming and customizing techniques of all types of microcontrollers like 8051 and other families. The designing of embedded hardware can be easily understood through this course and provides opportunities to work in advance electronics industries.
Embedded System Lab	Students get the opportunity to observe the maintenance method of a particular system. After taking up this course the student acquires the practical knowledge about Microcontroller and its need, is able to identify basic architecture of different Microcontroller 8051, capable to write the programming using 8051 microcontroller and its interfacing with different peripheral devices
Electronic Design Lab	This course has been introduced in the curriculum to make comprehensive use of the technical knowledge gained from circuit analysis using various ICs like IC-555, IC-741, etc. This enables a student to design, build and test electronic circuitry using IC-555, IC-741, etc. in the electronics industry.
Optical Communication Lab	This course enables to design a simple optical communication link and compare the structural characteristics of different optical fibers and the different fabrication processes of optical fiber cables. Interpretation of optical losses characteristic in optical fiber such as dispersion, scattering, absorption, nonlinear effects, fiber alignment and splicing that affect the performance of transmission systems can be experimentally calculated.