

Subject name	Description
Mathematics-III	The course intends to provide an overview of Matrices which occur in physical and engineering problems. This course helps in translating a physical or other problem in to a mathematical model. To provide an overview of discovering the experimental aspect of modern applied mathematics. This course creates the ability to model, solve and interpret any physical or engineering problem
Engineering Economics & Industrial Management	Understanding of the concept of cost estimation, depreciation, Industrial management & Materials management
Personality Development	<p>After thorough learning of Quantitative Aptitude and Reasoning, a student</p> <ul style="list-style-type: none"> <li>• will be able to critically evaluate various real life situations by resorting to Analysis of key issues and factors</li> <li>• will be able to read between the lines and understand various language structures</li> <li>• will be able to demonstrate various principles involved in solving mathematical problems and thereby reducing the time taken for performing job functions</li> </ul>
Network Theory	This Course familiarizes students about the basic RLC circuits, their transient and steady state responses to a variety of input signals. More complicated circuits' analysis through Laplace transform and Pole-Zero plots. This subject will help students to understand courses like communication systems, Linear control systems.
Semiconductors Devices & Circuits	This course introduces the physics of semiconductor devices and various types of transistors like BJTs, FETs and MOSFETs. This subject will help students to understand other higher level courses like linear ICs, VLSI and Microelectronics. These are extensively used in the industry.
Signal & Systems	This course familiarize students about the elements of various types of signals and would pursue the students to understand advance telecommunication subjects like analog and digital communications, digital signal processing and information theory. These topics are extensively used in industry today.
Electronics Measurements & Instrumentation	This course develop the understanding to learn the basics of instrumentation and measurements technique, basic analog and digital measurements devices besides transducers. These topics are widely used in industry and would make the students industry ready.
Semiconductors Devices &	This lab enables students to know first-hand experience of

Circuits Lab	semiconductor devices. Study of the characteristics of these devices would enable the students to learn and make themselves more familiar with their design. It is vital course for making the students industry ready.
Data Structures	To learn and understand the systematic way of solving problems and the different methods of organizing large amounts of data. It introduce the practical and formal aspects of data structures. It teach methodologies useful for the implementation and empirical evaluation of sorting and searching algorithms and to efficiently implement the solutions for specific problems using data structures.
Signal & System Lab using MATLAB	This Lab introduces principles learnt in signal and system course which are practically understood by the students. MATLAB (i.e. Matrix Laboratory) software is used to perform these experiments. This course also familiarizes the students with MATLAB for designing electronic system and research methodology in subjects like control theory, digital signal processing, image processing.
Electronics Measurements & Instrumentation Lab	Theoretical analysis learnt in the corresponding course EMI are practically seen, understood and performed by the students in this laboratory by the students. Students get a hands-on experience of the instruments. Like all laboratory courses this is also a vital course to make the students industry ready.
Communication Systems	This subject focuses on Communication Systems and analysis of various analog and digital modulation techniques which would deliver the knowledge of rectification, troubleshooting and verifying the fault diagnosis of industry ready material. The different methods of generation and detection of signals allows the different algorithm in multi array linked communication system.
Digital Electronics	This course enables the students to understand the digital fundamentals methods of simplification for digital electronic & communication system. The course covers the digital principles and applications for digital logic gates and mathematical calculations for digital world. A/D and D/A Converter & Programmable Logic Devices for different advance technology are emphasized to make the students industry ready.
Linear Control System	The syllabus offers the mathematical models and signal analysis in controlled manner by the applications of time response method in different order of system. The Root locus concept, Polar Plots, Nyquist plots, Bode Plots, Nyquist stability criterion enables the control system for efficient use of electronic with higher efficiency and

	adaptable module for Automatic Control Systems”.
Electromagnetic Field Theory	The syllabus familiarizes with the behavior of electric and magnetic component with the utilization of real time varying mathematical calculations using Poisson’s equation and Laplace’s equations, Uniqueness theorem, Maxwell’s equations, Poynting criteria etc. The Transmission line equations using Smith chart confines to practical utility of wired medium. The waveguide analysis gives the behavior of electromagnetic rays in different types of rectangular and circular orientation and shows the useful method for practical daily life applications.
Linear IC Applications	This course is used to understand the integrated circuit application which provides single window multi facilitate automatic system. The use of Differential amplifier, Operational amplifier and 555 timer IC commonly used in every day applications makes the running life compatible and fast.
Digital Electronics Lab	Theoretical analysis learnt in the Digital electronics course are practically seen, understood and performed in this laboratory by the students like the application of logic to design and creation using gates, using De-Morgan’s theorem to simplify a negated expression, formulate and employ a Karnaugh Map to reduce Boolean expressions and logic circuits to their simplest forms, etc.
Linear Integrated Circuits Lab	Practical approach to understanding the terminal characteristics of op-amps and designing/analysis of fundamental circuits based on op-amps is realized through this Lab. Designing and analysis of non-linear circuits working on active filters is emphasized. Students also get to implement various circuits involving the applications of op-amps and IC 555.
Communication System lab	This Lab enables the students are able to formulate and interpret the presentation and processing of signals in communication systems. An in-depth understanding the basic concepts of AM, FM, and PM transmission and reception through practical implementation can be experienced by the students.
Linear Control System lab Using MATLAB	This Lab enables the students to determine transfer function models of electrical, mechanical and electromechanical systems and representation of a set of algebraic equations by block diagram and signal flow graphs. It would also help to determine specified transfer functions from block diagrams, to evaluate to robustness/sensitivity of systems with and without feedback.