Sem	Course Code	Course Name	CO Number	Course Outcome Statements
III	ECC301	Engineering Mathematics-III	1.ECC3011	Understand the concept of Laplace Transform of various functions
			1.ECC3012	Apply the Laplace Transform technique to solve ordinary differential equations
			1.ECC3013	Expand the periodic function by using Fourier Series and Complex form of Fourier Series
			1.ECC3014	Understand complex variable theory, applications of Harmonic Conjugate to get Orthogonal Trajectories and Analytics function
			1.ECC3015	Compute eigen values & eigen vectors of a square matrix and
			1.ECC3016	Choose the Vector differential operator to compute the
III	ECC302	Electronic Devices & Circuits	2.ECL3021	Study the characteristics of electronic devices
			2.ECL3022	Implement circuits based on electronic devices
			2.ECL3023	Perform DC analysis of Transistors using simulation
			2.ECL3024	Analyze small and large signal amplifiers
			2.ECL3025	Evaluate frequency response of small signal amplifiers
			2.ECL3026	Design electronic circuits (BJT, MOSFET based) for given specifications
III	ECC303	Digital System Design	2.ECC3031	Recall different Number Systems and Codes
			2.ECC3032	Explain different digital logic families based upon their characteristics
			2.ECC3033	Apply Knowledge of Digital System Design to solve real life problem
			2.ECC3034	Analyze different combinational and sequential logic circuits
			2.ECC3035	Evaluate different semiconductor memories and PLD's
			2.ECC3036	Design combinational and sequential logic circuits using VHDL

Sem	Course Code	Course Name	CO Number	Course Outcome Statements
III	ECC304	Network Theory	2.ECC3041	Apply their knowledge in analyzing dc circuits, ac circuits and magnetic circuits by using various methods like mesh analysis, nodal analysis and network theorems.
			2.ECC3042	Analyze networks using graph theory and obtain circuit matrices of linear graphs.
			2.ECC3043	Apply time and frequency method of analysis to RL,RC and RLC circuits.
			2.ECC3044	Calculate the network transfer functions and driving point functions in s-domain, pole-zero concept and stability of the network.
			2.ECC3045	Evaluate various parameters of two port network.
			2.ECC3046	Develop electrical network from the given driving point functions and two port functions.
III	ECC305	Electronic Instrumentation & Control Systems	2.ECC3051	Explain the basics of instruments for measurements &control system.
			2.ECC3052	Explain AC and DC bridge circuit diagrams to analyze different measurements
			2.ECC3053	Explain the construction and working of various sensors , transducers.
			2.ECC3054	Analyze transfer functions using block diagram reduction and signal flow graph method and study the dynamic response of the control system
			2.ECC3056	Evaluate stability of given control system in the form of polar plot/Bode plot, Nyquist plot,
			2.ECC3056	Evaluate stability of given control system in the form of polar plot/Bode plot, Nyquist plot,

Sem	Course Code	Course Name	CO Number	Course Outcome Statements
III	ECL301	Electronic Devices & Circuits Lab	2.ECL3011	Study the characteristics of electronic devices
			2.ECL3012	Implement circuits based on electronic devices
			2.ECL3013	Perform DC analysis of Transistors using simulation tools
			2.ECL3014	Analyze small and large signal amplifiers
			2.ECL3015	Evaluate frequency response of small signal amplifiers
			2.ECL3016	Design electronic circuits (BJT, MOSFET based) for given specifications
III	ECL302	Digital System Design Lab	2.ECL2031	Recall digital logic gates and verify working of same
			2.ECL2032	Explain working of combinational and sequential logic circuits
			2.ECL2033	Apply practical knowledge of combinational and sequential logic circuits
			2.ECL2034	Analyze different combinational and sequential logic circuits
			2.ECL2035	Evaluate behavior of logic circuits by writing hardware description languages (VHDL)
			2.ECL2036	Design solutions for real life problems
III	ECL303	Electronic Instrumentation & Control Systems Lab	2ECL3041	Understand temperature sensor and verify their characteristics
			2ECL3042	Understand secondary transducer working principle
			2ECL3043	Evaluate different response for a first order unity feedback system
			2ECL3044	Evaluate different response for a second order unity feedback system
			2ECL3045	Analyze Root Locus Plot for 2nd Order System
			2ECL3046	Analyze Bode Plot for 2nd Order System

Sem	Course Code	Course Name	CO Number	Course Outcome Statements
III	ECL304	Skill Lab: C++ and Java Programming	4ECL3041	Apply fundamental programming constructs in C++
			4ECL3042	Apply OOP concepts for effective C++ programming
			4ECL3043	Apply fundamental programming constructs in Java
			4ECL3044	Apply OOP concepts for effective Java programming
			4ECL3045	Implement the concept of exception handling and multithreading
			4ECL3046	Implement applet and develop GUI based application in Java
III	ECM301	Mini Project 1A	4.ECM3011	Create the electronics circuit for particular application/experiment. u
			4.ECM3012	Design and simulate the circuits by putting together the analog and digital components
			4.ECM3013	Learn the technique of soldering and circuit implementation on general purpose printed circuit board (GPP).
			4.ECM3014	Realize the PCB design process and gain up-to-date knowledge of PCB design software.
			4.ECM3015	Utilize the basic electronic tools and equipment's (like DMM, CRO, DSO etc.)
			4.ECM3016	Analysis of hardware fault (Fault detection and correction)