Course Outcomes (CO) - B. Tech. - SEMESTER – VIII

Sr. No.	Subject Code	Course Title	Code	Course Outcome
1	EE 402	Power System Operation and Control	a	To be able to develop computer programs to perform power flow analysis on a power system.
			b	To be able to define automatic generation control scheme on a power system and analyze generation control on a power system using simulation tools.
			c	To be able to define generation dispatching on a power system and develop generation dispatching schemes using MATLAB.
			d	To be able to define State Estimation problem and analyze state estimation of a power system using analysis programs
			e	To be able to define contingency analysis on a power system and perform contingency studies using a power flow analysis program.
2	EE 404	Electrical Machine Design	a	Demonstrate the basic steps involved in design of electrical machines
			b	Calculate and analyse the performance of electrical machines
			c	Adjust the design parameters as per performance requirements.
			d	Do complete design of transformers, induction machines, dc machines and synchronous machines
3	EE 406	Advanced Power Electronic Converters & Applications	a	Theoretical and practical knowledge on modern day semiconductor devices, their characteristics and control.
			b	Understanding operation and analysis of switched mode DC-DC converters and their designing.
			c	Knowledge of power conditioners and their application.
			d	Working knowledge of static applications of advanced power electronics like UPS, HVDC, Automotive, Renewable Energy etc.
			e	Learning power electronics system simulation and advanced control methods.

4	EE418 (Elective)	Industrial Instrumentation	a	Theoretical knowledge of sensing industrial and process parameters
			b	Theoretical knowledge of analytical instruments
			c	Theoretical knowledge of industrial data communication
			d	Theoretical knowledge of design of industrial instrumentation systems
	EE424 (Elective)	Nonlinear & Optimal Control theory	a	They would be able to design control of a broader class of systems, since the non-linear systems are ubiquitous.
			b	They would be able to achieve optimal control, optimal estimation of dynamical systems as well.
			c	They would be able to generalize available classical results for linear cases.
			d	They would be able to address complexity, dimensionality of real physical systems.
	EL 606 (Elective)	Introduction to 32 bit DSC	a	To understand architecture of a 32 bit DSC (STM32F4xx)
			b	Advanced concepts in embedded 'C' programming.
			c	Practical understanding of embedded systems program development tool chain.
			d	In-depth understanding of various peripherals (TIMERS, PWM TIMERS, ADC DAC etc.) and their programming
			e	Hands on Experiments of programming and DSC interfacing
5	EE 408	Project	a	Learning latest trends and technology in selected field of interest.
			b	Simulation and implementation of the set up.
			c	Exposure to related interfacing, controlling and programming
			d	Learning technical report writing and presentation.