

DEPARTMENT OF EEE
COURSE OUTCOME – REGULATION 2013

SEMESTER	THEORY /PRACTICAL	COURSE CODE	COURSE NAME	COURSE OUTCOME
I	THEORY	HS6151	TECHNICAL ENGLISH – I	Speak clearly, confidently, comprehensibly, and communicate with one or many listeners using appropriate communicative strategies.
				Write cohesively and coherently and flawlessly avoiding grammatical errors, using a wide listen/view and comprehend different spoken discourses/excerpts in different accents
				Read different genres of texts adopting various reading strategies
				Vocabulary range, organizing their ideas logically on a topic.
	THEORY	MA6151	MATHEMATICS – I	This course equips students to have basic knowledge and understanding in one fields of materials, integral and differential calculus
	THEORY	PH6151	ENGINEERING PHYSICS – I	The students will have knowledge on the basics of physics related to properties of matter, optics, acoustics etc., and they will apply these fundamental principles to solve practical problems related to materials used for engineering applications.
	THEORY	CY6151	ENGINEERING CHEMISTRY -I	The knowledge gained on polymer chemistry, thermodynamics. spectroscopy, phase rule and nano materials will provide a strong platform to understand the concepts on these subjects for further learning.
	THEORY	GE6151	COMPUTER PROGRAMMING	Write and execute C programs for simple applications. Design C Programs for problems.
				At the end of the course, the student should be able to:
	THEORY	GE6152	ENGINEERING GRAPHICS	On Completion of the course the student will be able to perform free hand sketching of basic geometrical constructions and multiple views of objects.
				Do orthographic projection of lines and plane surfaces.
				Draw projections and solids and development of surfaces.
				Prepare isometric and perspective sections of simple solids. Demonstrate computer aided drafting.
	PRACTICAL	GE6161	COMPUTER PRACTICES LABORATORY	At the end of the course, the student should be able to: Apply good programming design methods for program development.
Design and implement C programs for simple applications.				
Develop recursive programs.				
PRACTICAL	GE6162	ENGINEERING PRACTICES LABORATORY	Ability to fabricate carpentry components and pipe connections including plumbing works.	
			Ability to use welding equipments to join the structures.	
			Ability to fabricate electrical and electronics circuits	
PRACTICAL	GE6163	PHYSICS AND CHEMISTRY LABORATORY – I	The hands on exercises undergone by the students will help them to apply physics principles of optics and thermal physics to evaluate engineering properties of materials.	
			The students will be outfitted with hands-on knowledge in the quantitative chemical analysis of water quality related parameters.	

II

II	THEORY	HS6251	TECHNICAL ENGLISH II	Learners should be able to speak convincingly, express their opinions clearly, initiate a discussion, negotiate, argue using appropriate communicative strategies
				Write effectively and persuasively and produce different types of writing such as narration, description, exposition and argument as well as creative, critical, analytical and evaluative writing.
				Read different genres of texts, infer implied meanings and critically analyse and evaluate them for ideas as well as for method of presentation.
				Listen/view and comprehend different spoken excerpts critically and infer unspoken and implied meanings.
	THEORY	MA6251	MATHEMATICS – II	The subject helps the students to develop the fundamentals and basic concepts in vector calculus, ODE, Laplace transform and complex functions. Students will be able to solve problems related to engineering applications by using these techniques.
	THEORY	PH6251	ENGINEERING PHYSICS – II	The students will have the knowledge on physics of materials and that knowledge will be used by them in different engineering and technology applications.
	THEORY	CY6251	ENGINEERING CHEMISTRY - II	The knowledge gained on engineering materials, fuels, energy sources and water treatment techniques will facilitate better understanding of engineering processes and applications for further learning
	THEORY	GE6251	BASIC CIVIL AND MECHANICAL ENGINEERING	Ability to explain the usage of construction material and proper selection of construction materials.
				Ability to design building structures.
				Ability to identify the components use in power plant cycle.
				Ability to demonstrate working principles of petrol and diesel engine.
				Ability to explain the components of refrigeration and Air conditioning cycle.
	THEORY	EE6201	CIRCUIT THEORY	Ability analyse electrical circuits
				Ability to apply circuit theorems
			Ability to analyse AC and DC Circuits	
PRACTICAL	GE6262	PHYSICS AND CHEMISTRY LABORATORY – II	The students will have the ability to test materials by using their knowledge of applied physics principles in optics and properties of matter.	
			The students will be conversant with hands-on knowledge in the quantitative chemical analysis of water quality related parameters, corrosion measurement and cement analysis.	
PRACTICAL	GE6263	COMPUTER PROGRAMMING LABORATORY	At the end of the course the students should be able to Use Shell commands	
			Design of Implement Unix shell scripts	
			Write and execute C programs on Unix	
PRACTICAL	EE6211	ELECTRIC CIRCUITS LABORATORY	Ability to understand and apply circuit theorems and concepts in engineering applications.	
THEORY	MA6351	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	The understanding of the mathematical principles on transforms and partial differential equations would provide them the ability to formulate and solve some of the physical problems of engineering.	
THEORY	EE6301	DIGITAL LOGIC CIRCUITS	Ability to understand and analyse, linear and digital electronic circuits.	
THEORY	EE6302	ELECTROMAGNETIC THEORY	Ability to understand and apply basic science, circuit theory, Electro-magnetic field theory control theory and apply them to electrical engineering problems.	

III	THEORY	GE6351	ENVIRONMENTAL SCIENCE AND ENGINEERING	Environmental Pollution or problems cannot be solved by mere laws. Public participation is an important aspect which serves the environmental Protection. One will obtain knowledge on the following after completing the course. Public awareness of environmental is at infant stage. Ignorance and incomplete knowledge has lead to misconceptions Development and improvement in std. of living has lead to serious environmental disasters
	THEORY	EC6202	ELECTRONIC DEVICES AND CIRCUITS	To explain the structure of the basic electronic devices. To design applications using the basic electronic devices.
	THEORY	EE6303	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Ability to understand and analyse, linear and digital electronic circuits.
	PRACTICAL	EC6361	ELECTRONICS LABORATORY	Ability to understand and analyse, linear and digital electronic circuits
	PRACTICAL	EE6311	LINEAR AND DIGITAL INTEGRATED CIRCUITS LABORATORY	Ability to understand and analyse, linear and digital electronic circuits.
IV	THEORY	MA6459	NUMERICAL METHODS	The students will have a clear perception of the power of numerical techniques, ideas and would be able to demonstrate the applications of these techniques to problems drawn from industry, management and other engineering fields.
	THEORY	EE6401	ELECTRICAL MACHINES – I	Ability to model and analyze electrical apparatus and their application to power system
	THEORY	CS6456	OBJECT ORIENTED PROGRAMMING	Gain the basic knowledge on Object Oriented concepts. Ability to develop applications using Object Oriented Programming Concepts. Ability to implement features of object oriented programming to solve real world problems.
	THEORY	EE6402	TRANSMISSION AND DISTRIBUTION	Ability to understand and analyze power system operation, stability, control and protection.
	THEORY	EE6403	DISCRETE TIME SYSTEMS AND SIGNAL PROCESSING	Ability to understand and apply basic science, circuit theory, Electro-magnetic field theory control theory and apply them to electrical engineering problems.
	THEORY	EE6404	MEASUREMENTS AND INSTRUMENTATION	Ability to model and analyze electrical apparatus and their application to power system
	PRACTICAL	CS6461	OBJECT ORIENTED PROGRAMMING LABORATORY	Gain the basic knowledge on Object Oriented concepts. Ability to develop applications using Object Oriented Programming Concepts Ability to implement features of object oriented programming to solve real world problems.
	PRACTICAL	EE6411	ELECTRICAL MACHINES LABORATORY – I	Ability to model and analyze electrical apparatus and their application to power system
	THEORY	EE6501	POWER SYSTEM ANALYSIS	Ability to understand and analyze power system operation, stability, control and protection.

V	THEORY	EE6502	MICROPROCESSOR S AND MICROCONTROLLE RS	Ability to understand and analyse, linear and digital electronic circuits. To understand and apply computing platform and software for engineering problems
	THEORY	ME6701	POWER PLANT ENGINEERING	Upon completion of this course, the Students can able to understand different types of power plant, and its functions and their flow lines and issues related to them. Analyse and solve energy and economic related issues in power sectors.
	THEORY	EE6503	POWER ELECTRONICS	Ability to understand and analyse, linear and digital electronic circuits
	THEORY	EE6504	ELECTRICAL MACHINES – II	Ability to model and analyze electrical apparatus and their application to power system
	THEORY	IC6501	CONTROL SYSTEMS	Ability to understand and apply basic science, circuit theory, theory control theory Signal processing and apply them to electrical engineering problems.
	PRACTICAL	EE6511	CONTROL AND INSTRUMENTATIO N LABORATORY	Ability to understand and apply basic science, circuit theory, Electro-magnetic field theory control theory and apply them to electrical engineering problems.
	PRACTICAL	GE6674	COMMUNICATION AND SOFT SKILLS- LABORATORY BASED	At the end of the course, learners should be able to Take international examination such as IELTS and TOEFL Make presentations and Participate in Group Discussions. Successfully answer questions in interviews.
	PRACTICAL	EE6512	ELECTRICAL MACHINES LABORATORY - II	Ability to model and analyze electrical apparatus and their application to power system
VI	THEORY	EC6651	COMMUNICATION ENGINEERING	Ability to understand and analyse, linear and digital electronic circuits.
	THEORY	EE6601	SOLID STATE DRIVES	Ability to understand and apply basic science, circuit theory, Electro-magnetic field theory control theory and apply them to electrical engineering problems.
	THEORY	EE6602	EMBEDDED SYSTEMS	Ability to understand and analyse, linear and digital electronic circuits
	THEORY	EE6603	POWER SYSTEM OPERATION AND CONTROL	Ability to understand and analyze power system operation, stability, control and protection
	THEORY	EE6604	DESIGN OF ELECTRICAL MACHINES	Ability to model and analyze electrical apparatus and their application to power system
	THEORY	EE6002	POWER SYSTEM TRANSIENTS	Ability to understand and analyze power system operation, stability, control and protection
	PRACTICAL	EE6611	POWER ELECTRONICS AND DRIVES LABORATORY	Ability to understand and analyse, linear and digital electronic circuits
	PRACTICAL	EE6612	MICROPROCESSOR S AND MICROCONTROLLE RS LABORATORY	Ability to understand and analyse, linear and digital electronic circuits To understand and apply computing platform and software for engineering problems.
	PRACTICAL	EE6613	PRESENTATION SKILLS AND TECHNICAL SEMINAR	Ability to review, prepare and present technological developments Ability to face the placement interviews
	THEORY	EE6701	HIGH VOLTAGE ENGINEERING	Ability to understand and analyze power system operation, stability, control and protection.

VII	THEORY	EE6702	PROTECTION AND SWITCHGEAR	Ability to understand and analyze power system operation, stability, control and protection
	THEORY	EE6703	SPECIAL ELECTRICAL MACHINES	Ability to model and analyze electrical apparatus and their application to power system
	THEORY	MG6851	PRINCIPLES OF MANAGEMENT	Upon completion of the course, students will be able to have clear understanding of managerial functions like planning, organizing, staffing, leading & controlling and have same basic knowledge on international aspect of management
	THEORY	EE6005	POWER QUALITY	Ability to understand and analyze power system operation, stability, control and protection.
	THEORY	EE6007	MICRO ELECTRO MECHANICAL SYSTEMS	Ability to understand the operation of micro devices, micro systems and their applications. Ability to design the micro devices, micro systems using the MEMS fabrication process.
	PRACTICAL	EE6711	POWER SYSTEM SIMULATION LABORATORY	Ability to understand and analyze power system operation, stability, control and protection.
	PRACTICAL	EE6712	COMPREHENSION	Ability to review, prepare and present technological developments
VIII	THEORY	EE6801	ELECTRIC ENERGY GENERATION, UTILIZATION AND CONSERVATION	Ability to understand and analyze power system operation, stability, control and protection Ability to handle the engineering aspects of electrical energy generation and utilization.
	THEORY	GE6083	DISASTER MANAGEMENT	The students will be able to Differentiate the types of disasters, causes and their impact on environment and society Assess vulnerability and various methods of risk reduction measures as well as mitigation Draw the hazard and vulnerability profile of India, Scenarios in the Indian context, Disaster damage assessment and management.
	THEORY	GE6075	PROFESSIONAL ETHICS IN ENGINEERING	Upon completion of the course, the student should be able to apply ethics in society, discuss the ethical issues related to engineering and realize the responsibilities and rights in the society
	PRACTICAL	EE6811	PROJECT WORK	On Completion of the project work students will be in a position to take up any challenging practical problems and find solution by formulating proper methodology.