



METHODIST

COLLEGE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE New Delhi | Affiliated to Osmania University, Hyderabad

Estd : 2008 Address : King Koti Road, Abids, Hyderabad, Telangana, 500001 | Email : principal@methodist.edu.in

DEPARTMENT OF H&S

A.Y 2018-19

GROUP-A (MECH & CSE) SEM-I

S No	Course Code	Course Title	CO No.	Course Outcomes
1	BS101PH	PHYSICS	CO1	Explain the basics of crystals, lattice parameters and their defects.
			CO2	Classify solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study the electric polarization in dielectrics
			CO3	Apply the knowledge of basic laws of electricity and magnetism to understand the concept of electromagnetic waves propagation and solve problems related to various fields
			CO4	Classify the properties of materials and Choose the materials for various applications in different disciplines
			CO5	Recall the basic concepts of optics, study the working of optical fibres and their applications
			CO6	Define the basic concepts of emission and absorption and study the different types of lasers and their applications.
2	ES101EE	BASIC ELECTRICAL ENGINEERING	CO1	Elaborate themselves in designing basic electric circuits
			CO2	Judge suitable test to determine total power in three phase circuits
			CO3	Apply suitable test to determine the performance of AC machines
			CO4	Examine the performance characteristics of DC machines
			CO5	Illustrate the requirements for electric machines for industrial purpose
			CO6	Find awareness about various electrical installation rules to be followed while working with electrical equipment
3	BS101MT	MATHEMATICS-I	CO1	To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
			CO2	To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envelopes of family of curves.

			CO3	To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of composite and implicit functions, Jacobians
			CO4	To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum and minimum of functions of two variables.
			CO5	To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
			CO6	To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
4	BS151PH	PHYSICS LAB	CO1	Explain the behavior of Semiconductor diode in Forward and Reverse bias conditions
			CO2	Illustrate the variation of capacitance and resistance with temperature of different materials.
			CO3	Explain the concepts of Solar cell for generation of power
			CO4	Develop a conceptual Explaining of the fundamental physical principles involved in the Laser, Optical fibres and other materials described in the theory.
			CO5	Find the Rigidity Modulus of the material of the given wire using Torsional Pendulum
			CO6	Measure the energy gap of a semiconductor.
5	ES152EE	BASIC ELECTRICAL ENGINEERING LAB	CO1	Justify the statements of basic electrical circuits
			CO2	Examine the performance of different electrical machines
			CO3	Identify the electrical machines requirements
			CO4	Find the response of different electrical circuits
			CO5	Determine parameters of electrical machines and equipment
			CO6	Test for efficiency of electrical machines
6	ES156CE	ENGINEERING GRAPHICS	CO1	Recall terms & conventions of engineering design and justify its place in society
			CO2	Visualise the aspects of engineering design
			CO3	Consruct & apply engineering graphics standards
			CO4	Use computer-aided geometric design to model Projection diagrams
			CO5	Create working drawings
			CO6	Support engineering communication in constructive criticism



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GROUP-B (ECE, CIVIL & EEE) SEM-I

A.Y 2018-19

S N o	Course Code	Course Title	CO	Course Outcomes
			No.	
1	BS104CH	CHEMISTRY	CO1	Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro analytical techniques and working of batteries.
			CO2	Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion control methods.
			CO3	Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
			CO4	Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
			CO5	Classify chemical fuels and grade them through qualitative analysis.
			CO6	Relate the concept of green chemistry to modify engineering processes and materials.
2	ES102CS	PROGRAMMING FOR PROBLEM SOLVING	CO1	Choose appropriate data type for implementing programs in C Language
			CO2	Design and implement modular program involving input output operations, decision making and looping constructs
			CO3	Implement search and sort operation on arrays and modularize the code with functions so that they can be reused.
			CO4	Apply the concept of pointers for implementing programs on dynamic memory management and string handling
			CO5	Design and implement programs to store data in structures and files

			CO6	Create, Read and Write to and from simple text and binary files
3	BS101MT	MATHEMATICS-I	CO1	To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n th root test, Leibnitz's test, and also analyzing the nature of series.
			CO2	To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envelopes of family of curves.
			CO3	To Find Partial derivatives of functions of two variables using concept of limits and continuity. Derivatives of composite and implicit functions, Jacobians
			CO4	To Examine the behavior of higher order partial derivatives using Taylor's series and the concepts of maximum and minimum of functions of two variables.
			CO5	To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
			CO6	To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
			4	BS154CH
CO2	Identify different parameters of water considering environmental issues			
CO3	Estimate different types of instruments for estimation of small quantities of chemicals used in industries and scientific and technical fields.			
CO4	Explain the synthesis of drug and polymer materials.			
CO5	Classify experiments applying the fundamentals of chemistry			
CO6	Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.			
5	ES152CS	PROGRAMMING FOR PROBLEM SOLVING LAB	CO1	Choose appropriate data type for implementing programs in C Language
			CO2	Design and implement modular program involving input output operations, decision making and looping constructs
			CO3	Implement search and sort operation on arrays and modularize the code with functions so that they can be reused.

			CO4	Apply the concept of pointers for implementing programs on dynamic memory management and string handling
			CO5	Design and implement programs to store data in structures and files
			CO6	Create, Read and Write to and from simple text and binary files
6	ES154ME	WORKSHOP/MANUFACTURING	CO1	Identify and use marking out tools , hand tools ,measuring equipment and to work to prescribed tolerances
			CO2	To provide hands on experience about use of different engineering materials , tools , equipments and processes those are common in the engineering field.
			CO3	To gain a good basic working knowledge required for production of various engineering products.
			CO4	To study different hand operated power tools , uses and their demonstration.
			CO5	Adopt safety practices while working with various tools .
			CO6	Have an idea of different computer operations.



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GROUP-A (MECH & CSE) SEM-II

A.Y 2018-19

S N o	Course Code	Course Title	CO No.	Course Outcome
1	HS101EG	ENGLISH	CO 1	Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment towards their (students') goal and society
			CO 2	Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.) and use language accurately for effective communication.
			CO 3	Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in formal and informal ambience.
			CO 4	Compile information of various aspects of English diction – Develop creativity in writing skills by framing paragraphs, essays, official letters, technical reports, etc
			CO 5	Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the learners develop the ability to be creative.
			CO 6	Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
2	BS102M T	MATHEMATICS-II	CO 1	To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
			CO 2	To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family of curves.
			CO 3	To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of composite and implicit functions, Jacobians
			CO 4	To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum and minimum of functions of two variables.
			CO 5	To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.

			CO 6	To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
3	BS104CH	CHEMISTRY	CO 1	Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro analytical techniques and working of batteries.
			CO 2	Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion control methods.
			CO 3	Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
			CO 4	Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
			CO 5	Classify chemical fuels and grade them through qualitative analysis.
			CO 6	Relate the concept of green chemistry to modify engineering processes and materials.
4	ES102CS	PROGRAMMING FOR PROBLEM SOLVING	CO 1	Choose appropriate data type for implementing programs in C Language
			CO 2	Design and implement modular program involving input output operations, decision making and looping constructs
			CO 3	Implement search and sort operation on arrays and modularize the code with functions so that they can be reused.
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			CO 5	Design and implement programs to store data in structures and files
			CO 6	Create, Read and Write to and from simple text and binary files
5	HS151CS	ENGLISH LAB	CO 1	Acquire a good knowledge of phonetics to pronounce words on the lines of R.P., applying right stress and intonation.
			CO 2	Develop the skill of effective listening
			CO 3	Acquire a good sense of both verbal and non-verbal cues to be employed during communication with others.
			CO 4	Develop the confidence to present themselves in the competitive platform – JAM, and Public Speaking.
			CO 5	Take effective part in individual and group activities – Group Discussion and Debate.

			CO 6	Efficiently Participating in mock interviews and formal presentations.
6	ES152CS	PROGRAMMING FOR PROBLEM SOLVING LAB	CO 1	Choose appropriate data type for implementing programs in C Language
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7	BS154CH	CHEMISTRY LAB	CO 1	Apply and determine the concentration of liquid samples working as an individual and also as a team member
			CO 2	Identify different parameters of water considering environmental issues
			CO 3	Estimate different types of instruments for estimation of small quantities chemicals used in industries and scientific and technical fields.
			CO 4	Explain the synthesis of drug and polymer materials.
			CO 5	Classify experiments applying the fundamentals of chemistry
			CO 6	Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
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			CO6	Test for efficiency of electrical machines
8	ES156CE	ENGINEERING GRAPHICS	CO1	Recall terms & conventions of engineering design and justify its place in society
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			CO5	Create working drawings
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