Viswambhara Educational Society

VAAGDEVI COLLEGE OF ENGINEERING

UGC-Autonomous

Department of Electronics and Communication Engineering

Course Outcomes for B.Tech – ECE-R18 for the academic year 2018-19 onwards

Course Outcome	Year/Semester I/I Sem	Subject Name (Subject Code) LINEAR ALGEBRA AND CALCULUS (B18MA01)	L: 3 T: 1 P: 0 C: 4
After the completion of this course, the students should be able to			
1	Write the matrix representation of a set of linear equations and to analyse the solution of the system of equations.		
2	Find the Eigen values and Eigen vectors and Reduce the quadratic form to canonical form using orthogonal transformations.		
3	Analyse the nature of sequence and series.		
4	Solve the applications on the mean value theorems and Evaluate the improper integrals using Beta and Gamma functions.		
5	Find the extreme values of functions of two variables with/ without constraints.		
Course Outcome	**Year / semester I/I Sem**	**Subject Name (Subject Code) PROGRAMMING FOR PROBLEM SOLVING (B18CS01)**	**L: 4 T: 0 P: 0 C: 4**
After the completion of this course, the students should be able to			
1	Understand how problems are posed and how they can be analyzed for obtaining solutions.		
2	Understanding the fundamentals of C programming.		
3	Learn the sequencing, branching, looping and decision making statements to solve scientific and engineering problems.		

4	Implement different operations on arrays and creating and using of functions to solve problems.		
5	Design and implement different types of file structures using standard methodology.		
Course Outcome	**Year / semester I/I Sem**	**Subject Name (Subject Code) APPLIED PHYSICS (B18PH01)**	**L:4 T: 0 P: 0 C: 4**
After the completion of this course, the students should be able to			
1	Illustrate fabrication of semi conductors, photo detectors, design basis of quantum mechanics		
2	Recall facts of wave optics extend & construct basics of wave optics.		
3	Interpret about lasers, which leads to new innovations and improvements		
4	Elaborate and formulate the study of characterization properties of opto-devices, organize the students to prepare new materials for various engineering applications		
5	Apply basic knowledge on principles and recalls facts of light properties, and motivate for new innovations. analyze applications of optical fibers		
Course Outcome	**Year / semester I/I Sem**	**Subject Name (Subject Code) ENGLISH (B18EN01)**	**L: 2 T: 0 P: 0 C: 2**
After the completion of this course, the students should be able to			
1	Recall the enrichment of comprehension and fluency will be adaptable.		

2	Gain confidence in using language in varied situations		
3	Develops neutralization of accent for intelligibility.		
4	Adapt effective speaking abilities.		
5	Develops and Communicates by stating main ideas relevantly and coherently in speaking & writing.		
Course Outcome	**Year / semester I/I Sem**	**Subject Name (Subject Code) APPLIED PHYSICS LAB (**B18PH02**)**	**L: 0 T: 0 P: 3 C: 1.5**
After the completion of this course, the students should be able to			
1	Operate different equipments related to light & electronics.		
2	Develop experimental skills to design new experiments & circuit design.		
3	Understand about modern equipment like solar cell, optical fiber etc.,		
4	Have Exposure to develop novel semi conductor devices.		
Course Outcome	**Year / semester I/I Sem**	**Subject Name (Subject Code) ENGINEERING WORKSHOP & IT WORKSHOP (**B18ME02**)**	**L: 0 T: 0 P: 3 C: 1.5**
After the completion of this course, the students should be able to			
1	Know the usage of various tools and their applications in carpentry, tin smithy.		
2	Understand the usage of various tools and their application in black smithy, foundry, welding and house wiring.		
3	Make lap joint and dove tail joint in carpentry, scoope, funnel and tray items in tin smithy.		

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Course Outcome	Year / semester I/I Sem	Subject Name (Subject Code) PROGRAMING FOR PROBLEM SOLVING LAB (B18CS02)	L: 0 T: 0 P: 2 C: 1
After the completion of this course, the students should be able to			
1	Understand how problems are posed and how they can be analyzed for obtaining solutions..		
2	Understand basic structure of the C programming, declaration and usage of variables.		
3	Write C programs using operators. Implement different operations on arrays and creating and using of functions to solve problems.		
4	Learn the sequencing, branching, looping and implement different types of file structures and decision making statements to solve scientific and engineering problems.		
Course Outcome	**Year / semester I/II Sem**	**Subject Name (Subject Code) DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS (B18MA02)**	**L: 3 T: 1 P: 0 C: 4**
After the completion of this course, the students should be able to			
1	Identify whether the given differential equation of first order is exact or not		
2	Solve higher order differential equation and apply the concept of differential equation to real world problems		
3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular parallelopiped		
4	Utilize the concept of gradient divergence and curl of a vector field to predict area and volumes.		
5	Evaluate the line, surface and volume integrals and converting them from one to another.		

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Course Outcome	Year / semester I/II Sem	Subject Name (Subject Code) ENGINEERING CHEMISTRY (B18CH01)	L: 3 T: 1 P: 0 C: 4
After the completion of this course, the students should be able to			
1	Recall previous knowledge regarding atomic and molecular structure.		
2	Design polymeric engineering materials. Recall basic organic reactions		
3	Construct batteries and classify different electronics and electrical like cells , electrodes, e.t.c…help them to construct different electrical/ electronic parts.		
4	Examine which type of impurities is present in water, specification of drinking water and explain the corrosion behavior/ activity of metals.		
5	Apply phase rule and adsorption to construct the materials by analyzing their compositions.		
Course Outcome	Year / semester I/II Sem	Subject Name (Subject Code) ENGINEERING GRAPHICS (B18ME01)	L: 1 T: 0 P: 4 C: 3
After the completion of this course, the students should be able to			
1	Learn the development of surfaces.		
2	Understand the projections of solids		
3	Understand the isometric projections.		
4	Understand the orthographic projections.		
5	Make the use of drawings, dimensioning, scales and conic sections.		
Course Outcome	Year / semester I/II Sem	Subject Name (Subject Code) ELECTRICAL CIRCUITS(B18EE04)	L: 3 T: 0 P: 0 C: 3

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After the completion of this course, the students should be able to			
1	Learn basic concepts of electrical circuits, electrical parameters etc		
2	Relate the learned basics to understand the AC and DC circuits		
3	Analyse and solve the electric and magnetic circuits		
4	Learn to demonstrate various network theorems and resonance condition		
5	Apply various network theorems to solve real time application		
6	Assess various above concepts in real world problems		
Course Outcome	**Year / semester I/II Sem**	**Subject Name (Subject Code)** **ELECTRONIC DEVICES AND CIRCUITS(B18EC01)**	**L: 3 T: 0 P: 0 C: 3**
After the completion of this course, the students should be able to			
1.	Explain the semiconductor theory and characteristics of the PN junction diode and Zener diode.		
2.	Compare and contrast the rectifiers with and without filters.		
3.	Understand the construction and voltage- current characteristics of Junction Transistor and illustrate the different configurations of transistor		
4.	Design and analyze the different biasing circuits and amplifier circuits.		

5.	Acquire knowledge about the construction, theory and characteristics of FET and MOSFET.		
Course Outcome	**Year / semester I/II Sem**	**Subject Name (Subject Code) ELECTRONIC DEVICES AND CIRCUITS LAB (B18EC02)**	**L: 0 T: 0 P: 2 C: 1**
After the completion of this course, the students should be able to			
1	Identify and find the values of resistors, capacitors and inductors.		
2	Measure voltage, frequency and phase of any waveform using CRO		
3	Demonstrate the characteristics and operation of electronic devices.		
4	Demonstrate various amplifier circuits.		
Course Outcome	**Year / semester I/II Sem**	**Subject Name (Subject Code) ENGLISH LANGUAGE & COMMUNICATIONS SKILLS LAB (B18EN02)**	**L: 0 T: 0 P: 2 C: 1**
After the completion of this course, the students should be able to			
1	Capable in Better Understanding of nuances of language through audio-visual experience and group activities.		
2	Able to develop Neutralization of accent for intelligibility.		
3	Capable to Speak out with clarity and confidence thereby enhances the employability skills of the students by acquiring knowledge and techniques.		
4	Extends to speak fluent English, through advanced vocabulary to improve quality in speaking.		
Course Outcome	**Year / semester I/II Sem**	**Subject Name (Subject Code)**	**L: 0 T: 0 P: 2 C: 0**

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		ENVIRONMENTAL SCIENCE (B18MC02)	
After the completion of this course, the students should be able to			
1	Recall previously learned ecosystem and find how the biodiversity changes went in the environment.		
2	Demonstrate outlines of types of pollutions and explain in related to day to day life.		
3	Apply models of food chains and energy flow models to solve the identified parameters.		
4	Classify the types of pollutants and distinguish the functions of sustainable development that take part in the environment.		
5	Design the experiments with BOD,COD, OD and estimate the micro organisms which cause contamination and can propose solutions.		