

Department of Basic Science Engineering

Course Outcome Statement				
I SEM Common to both cycles	Course:	Code: 18MAT11 Course Name: Calculus and Linear Algebra	Faculty: Prof. Amrutha, Prof. Kshama Jain, Prof. Uma Devi R, Prof. Mahesh K S, Prof. Ramya N, Prof. Arpita Kar & Prof.	
		Statement	Academic Year: 2019 – 20	
	Course 101.1	Apply the knowledge of calculus to solve problems related to polar curves and its applications in determining the bentness of a curve		
	Course 101.2	Learn the notion of partial differentiation to calculate rates of change of multivariate functions and solve problems related to composite functions and Jacobians		
	Course 101.3	Apply the concept of change of order of integration and variables to evaluate multiple integrals and their usage in computing the area and volume		
	Course 101.4	Solve first order linear/nonlinear differential equations analytically using standard methods.		
	Course 101.5	Make use of matrix theory for solving system of linear equations and compute eigen values and eigen vectors required for matrix diagonalization process.		
Course Outcome Statement				
I / II SEM PHYSICS CYCLE	Course:	Code: 18PHY12/22 Course Name: Engineering Physics	Faculty: Prof. Nayana B L, Prof. Kanchana S K, Prof. Savitha V, Dr. Shivraj Watage & Prof. Chethan P B	
		Statement	Academic Year: 2019 – 20	
	Course 102.1	Understand various types of oscillations and their implications, the role of shock waves in various fields and recognize the elastic properties of materials for engineering applications.		
	Course 102.2	Realize the interrelation between time varying electric field and magnetic field, the transverse nature of the EM waves and their role as optical fiber communication.		
	Course 102.3	Compute Eigen values, Eigen functions, momentum of Atomic and Subatomic particles using Time independent 1-D Schrodinger's wave equation.		
	Course 102.4	Apprehend theoretical background of laser, construction and working of different types of laser and its applications in different field		
	Course 102.5	Understand various electrical and thermal properties of materials like conductors, semiconductors and dielectrics using different theoretical models		
	Course Outcome Statement			
	Course:	Code: 18ELE13/23 Course Name: Basic Electrical Engg.	Faculty: ECE Dept.	Academic Year: 2019 – 20
		Statement		
	Course 103.1	Analyse D.C and AC circuits.		
	Course 103.2	Explain the principle of operation and construction of single phase transformers and discuss concepts of electrical wiring, circuit protecting devices and earthing.		
	Course 103.3	Explain the principle of operation and construction of DC machines and AC machines		
	Course Outcome Statement			
	Course:	Code: 18CIV14/24 Course Name: Elements of Civil Engg.	Faculty: Civil Dept.	Academic Year: 2019 – 20
	Statement			
Course 104.1	Mention the applications of various fields of Civil Engineering			
Course 104.2	Compute the resultant of given force system subjected to various loads			
Course 104.3	Comprehend the action of Forces, Moments and other loads on systems of rigid bodies and compute the reactive forces that develop as a result of the external loads			
Course 104.4	Locate the Centroid and compute the Moment of Inertia of regular and built-up sections			
Course 104.5	Express the relationship between the motion of bodies and analyze the bodies in motion			
Course Outcome Statement				
Course:	Code: 18EGDL15/25 Course Name: Engineering Graphics	Faculty: Prof Puneet H M, Prof Srinivas Chari, Prof Balakrishna G, Prof Praveen B C	Academic Year: 2019 – 20	

Statement			
Course 105.1	Prepare engineering drawings as per BIS conventions mentioned in the relevant codes		
Course 105.2	Produce computer generated drawings using CAD software.		
Course 105.3	Use the knowledge of orthographic projections to represent engineering information I concepts and present the same in the form of drawings.		
Course 105.4	Develop isometric drawings of simple objects reading the orthographic projections of those objects.		
Course 105.5	Convert pictorial and isometric views of simple objects to orthographic views.		
Course Outcome Statement			
Course:	Code: 18PHYL16/26 Course Name: Engineering Physics Lab	Faculty: Prof. Nayana B L, Prof. Kanchana S K, Prof. Savitha V, Dr. Shivraj Watage & Prof. Chethan P B	Academic Year: 2019 – 20
Statement			
Course 106.1	Apprehend the concepts of interference of light, diffraction of light, Fermi energy and magnetic effect of current		
Course 106.2	Understand the principles of operation of optical fibers and semiconductor devices such as photodiode, and NPN transistor using simple circuits		
Course 106.3	Determine elastic moduli and moment of inertia of given materials with the help of suggested procedures.		
Course 106.4	Recognize the resonance concept and its practical applications		
Course 106.5	Understand the importance of measurement procedures, honest recording and representing the data; reproduction of final results		
Course Outcome Statement			
Course:	Code: 18ELEL17/27 Course Name: Basic Electrical Engg. Lab	Faculty: ECE Dept.	Academic Year: 2019 – 20
Statement			
Course 107.1	Identify the common electrical components and measuring instruments used for conducting experiments in electrical laboratory		
Course 107.2	Compare power factor of lamps		
Course 107.3	Explain the principle of operation and construction of DC machines and AC machines		

Course Outcome Statement			
Course:	Code: 18EGH18 Course Name: Technical English I	Faculty: Prof. Chitra and Prof. Girija	Academic Year: 2019 – 20
Statement			
Course 108.1	Use grammatical English and essentials of language skills and identify the nuances of phonetics, intonation and flawless pronunciation		
Course 108.2	Implement English Vocabulary at command and language proficiency		
Course 108.3	Identify common errors in spoken and written communication		
Course 108.4	Understand and improve the non verbal communication and kinesics		
Course 108.5	Perform well in Campus recruitment, engineering and all other general competitive examinations.		

Course Outcome Statement			
Course:	Code: 18CHE12/22 Course Name: Engineering Chemistry	Faculty: Dr. Srinivas, Dr. Venkatesh S, Prof. Murali T G, Prof. Sushma B S & Dr. Prakashaiah B G	Academic Year: 2019 – 20
Statement			
Course 102.1	Use of free energy in equilibria, rationalize bulb properties and processes using thermodynamic considerations electrochemical energy systems		
Course 102.2	Causes & effects of corrosion of metals and control of corrosion, Modification of surface properties of metals to develop resistance to corrosion, wear, tear, impact etc. by electroplating and electroless plating.		
Course 102.3	Production and Consumption of energy for industrialization of country and living standards of people. Electrochemical and concentration cells. Classical, modern batteries and fuel cells. Utilization of solar energy for different useful forms of energy.		
Course 102.4	Environmental pollution, waste management and water chemistry.		
Course 102.5	Different techniques of instrumental methods of analysis. Fundamental Principles of nano materials.		

**I /II SEM
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Course Outcome Statement			
Course:	Code: 18CPS13/23 Course Name: 'C' Programming and Problem Solving	Faculty: CSE / ISE Dept.	Academic Year: 2019 – 20
	Statement		
Course 103.1	Explain the basics of computer system and C programming language.		
Course 103.2	Apply the knowledge of control statements to write C programs to solve a given problem.		
Course 103.3	Write C programs using arrays and strings.		
Course 103.4	Modularize the given problem using functions and structures.		
Course 103.5	Define and use pointers to write efficient C programs.		
Course 103.6	Design and develop solutions to real world problems by using computer programming .		
Course Outcome Statement			
Course:	Code: 18ELN14/24 Course Name: Basic Electronics	Faculty: ECE Dept.	Academic Year: 2019 – 20
	Statement		
Course 104.1	Analyze the working of diode and apply in rectifiers, filter circuits, Zener, LED		
Course 104.2	Analyze the working of FET,Mosfet, SCR		
Course 104.3	Analyze simple circuits like amplifiers (inverting and non inverting), comparators, adders, integrator and differentiator using OPAMPS		
Course 104.4	Understand the working of BJT and application		
Course 104.5	Compile the different building blocks in digital electronics using logic gates and implement simple logic function and to Understand the functioning of a communication system		
Course Outcome Statement			
Course:	Code: 18EME15/25 Course Name: Elements of Mechanical Engg.	Faculty: Prof Chetan C S,Prof Anjankumar D, Prof Geetha C, Prof Venkatesh G,Prof Puneet H M.	Academic Year: 2019 – 20
	Statement		
Course 105.1	Learn the fundamental concepts of energy, its sources and conversion.		
Course 105.2	Comprehend the basic concepts of thermodynamics.		
Course 105.3	Understand the concepts of boilers, turbines, pumps, internal combustion engines and refrigeration		
Course 105.4	Distinguish different metal joining techniques.		
Course 105.5	Enumerate the knowledge of working with conventional machine tools, their specifications.		
Course Outcome Statement			
Course:	Code: 18CHEL16/26 Course Name: Engineering Chemistry Lab	Faculty: Dr. Venkatesh S, Prof. Murali T G, Prof. Sushma B S & Dr. Prakashaiah B G	Academic Year: 2019 – 20
	Statement		
Course 106.1	Handling different types of instruments for analysis of materials using small quantities of materials involved for quick and accurate results		
Course 106.2	Carrying out different types of titration for estimation of concerned in materials using comparatively more quantities of materials involved for good results		
Course Outcome Statement			
Course:	Code: 18CPL17/27 Course Name: 'C' Programming and Problem Solving Lab	Faculty: CSE / ISE Lab	Academic Year: 2019 – 20
	Statement		
Course 107.1	Understanding a functional hierarchical code organization.		
Course 107.2	Ability to define and manage data structures based on problem subject domain.		

Course 107.3	Ability to work with textual information, characters and strings.
Course 107.4	Ability to work with arrays, and understanding the concept of functions
Course 107.5	Ability to work with handling the errors

Course Outcome Statement				
II SEM Common to both cycles	Course:	Code: 18MAT21 Course Name: Advanced Calculus and Numerical Methods	Faculty: Prof. Kshama Jain, Prof. Mahesh K S, Prof. Uma Devi R, Prof. Nagendra Naik, Prof. Arpita Kar, Prof. Anusha, Prof. Pooja N & Prof. Pooja K	Academic Year: 2019 – 20
		Statement		
	Course 201.1	Illustrate the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals		
	Course 201.2	Demonstrate various physical models through higher order differential equation and solve such linear ordinary differential equations		
	Course 201.3	Construct a variety of partial differential equations and solution by exact methods/method of separation of variables.		
	Course 201.4	Explain the applications of infinite series and obtain series solution of ordinary differential equation.		
	Course 201.5	Apply the knowledge of numerical methods in the modeling of physical and engineering phenomena.		

Course Outcome Statement				
II SEM Common to both cycles	Course:	Code: 18EGH28 Course Name: Technical English II	Faculty: Prof. Jeslin	Academic Year: 2019 – 20
		Statement		
	Course 208.1	Identify common error in spoken and written communication		
	Course 208.2	Get familiarized with English vocabulary and language of proficiency		
	Course 208.3	Improve nature and style of sensible writing and acquire employment and working place communication skills.		
	Course 208.4	Improve their technical communication skills through technical reading and writing practices		
	Course 208.5	Perform well in campus recruitment, engineering and all the general competitive examinations		

NOTE:
100 series 101...etc First semester subjects including Practicals, Projects etc.,
200series 201...etc Second semester subjects including Practicals, Projects etc.,
300 series 301...etc Third semester subjects including Practicals, Projects etc.,
400 series 401...etc Fourth semester subjects including Practicals, Projects etc.,
500 series 501...etc Fifth semester subjects including Practicals, Projects etc.,
600 series 601...etc Sixth semester subjects including Practicals, Projects etc.,
700 series 701...etc Seventh semester subjects including Practicals, Projects etc.,
800 series 801...etc Eighth semester subjects including Practicals, Projects etc.,