



VidyaVikas Education Trust's
Universal College of Engineering, Kaman Road, Vasai-401212

APPLIED SCIENCE AND HUMANITIES

Academic year: 2017-18

Year/Sem: F.E./ II

Branch: ALL FIRST YEAR

Subject Code	Subject Name	CO's
FEC201	Applied Mathematics-II	Students will able to: CO1: Apply the concept of first order and first degree D.E to Engineering problems. CO2: Apply the concepts of Higher order L.D.E. to the Engineering problems. CO3: Understand the concepts of Beta and Gamma function to Engineering problems. CO4: Apply SCILAB programming techniques to solve DE to model complex engineering activities. CO5: Apply concepts of double integral of different coordinate systems to the engineering problems. CO6: Apply concepts of triple integral of different coordinate systems to the engineering problems.
FEC202	Applied Physics-II	Students will able to: CO1: Adequate to understand and calculate fundamental parameters of Interference diffraction. CO2: Understand principle, working and application of different type of laser and Optical fiber. CO3: Differentiate different co-ordinate system, and basic fundamental of Maxwell's equation. CO4: Understand concepts of focusing and will able to formulate application of CRO and its analysis. CO5: Synthesis and compare different methods of production Nanomaterial and application of it.
FEC203	Applied Chemistry -II	Students will able to: CO1: Get the idea about of different types of fuels, including their production, refining methods and combustion mechanism. CO2: Calculate the quantity of air and oxygen required for the complete combustion of fuels. CO3: Get the idea about the mechanism of corrosion, method of prevention of corrosion. Also understand the properties and uses of various alloys. CO4: Get the idea Composite Materials, Incorporate knowledge of green synthesis of various chemical with calculation of atom economy by various methods.
FEC204	Engineering	Students will able to:



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	Drawing	CO1: Know and understand the conventions and the methods of engineering drawing. CO1.1: Apply the basic principles of projections in 2D drawings. CO2: Read a given drawing. CO3: Apply the basic principles of projections in converting 3D view to 2D drawing. CO4: Visualize an object from the given two views. CO5: Use CAD tool to draw different views of 3D object and use CAD tool to draw an object in 3D.
FEC205	Structured Programming Approach	Students will able to: CO1: Get the idea of basics of computer programming and steps to solve problems using algorithm and flowchart. CO2: Get the idea about the fundamentals of c programming like tokens, operators, data input and output functions. CO3: Use various branching, looping and control structures to solve various problems. CO4: Solve problems using functions, recursive functions and how to use various storage classes in programs. CO5: Concept of array and the various applications of array. Students will know the concepts and applications of string, structures and union. CO6: How to use dynamic memory allocation using pointers and manipulation of files using various functions in c.
FEC206	Communication Skills	Students will able to: CO1: Develop the ability to understand the importance of communication fundamentals and its usage in social context. CO2: Not only understand the process of oral communication but also develop message generating and delivery skills, gain insight into their own speaking styles. CO3: Acquire the letter writing skills and produce letters in any given situation, paying attention to the writers objectives, the reader's needs, the reader-writer relationship and the context. CO4: Learn all the important aspects of reading including skimming, scanning, note-making and also study the importance of listening skills. CO5: Learn to use new vocabulary and learn the essentials of grammar-tenses, voice vocabulary and use of grammatically correct sentences. CO6: Learn to assimilate and disseminate technical or formal information as well learn to write technical descriptions, instructions and definitions.