



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

Department of Electronics Engineering

**Course Outcome (CO) for each course:**

After completing the course, the student will

Year/Class/ Semester: T E ETRX / V

Subject Code	Subject Name	COs
EXC 501	MICROCONTROLLER & APPLICATIONS	CO1 Difference between microprocessor and microcontroller, explain advantages of microcontroller 8051. CO2 Design assembly programming for applications of 8051 microcontroller hardware and software. CO3 Explain architecture of ARM7 and assembly programming for the same. CO4 Student will get the idea of applications for data transfer.
EXC 502	DESIGN WITH LINEAR INTEGRATED CIRCUITS.	CO1 Understand the fundamentals and areas of applications for the Integrated Circuits using OPAMP. CO2 Design filters, oscillators and nonlinear application like generators, rectifiers and comparators CO3 Design Special Purpose Integrated Circuits like 555 timer with real time applications CO4 Understand the differences among different voltage regulators and their uses and analyze types of ADC, DAC.
EXC 503	ELECTROMAGNETIC ENGINEERING	CO1 Qualitatively describe and quantitatively compute nature of electric or magnetic fields produced due to different charge distributions. CO2 Describe the propagation of electromagnetic waves in free space and other media. CO3 Calculate potentials of boundary value problems using FEM,FDM CO4 Identify various problems affecting wave propagation and their effects on antennas.
EXC 504	SIGNALS AND SYSTEMS	CO1 Understand the fundamental characteristics/classification of Signals and Systems CO2 Understand the process of sampling and apply State Space analysis for continuous and discrete time LTI System. CO3 Apply the Laplace Transform to analyze continuous



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		and discrete time signals and systems CO4 Analyze characteristics of discrete time signals and systems by using Z -Transform CO5 Apply the Fourier Transform to analyze continuous and discrete time signals and systems CO6 Evaluate ESD, PSD, Autocorrelation, cross-correlation and the relationship between them
EXC 505	DIGITAL COMMUNICATION	CO1 Understand the basic concept of information theory and source coding and probability theory in communication system. CO2 Understand the various line codes and pulse shaping for optimum transmission. CO3 Understand various digital modulation techniques CO4 Understand concept of error control codes and spread spectrum modulation.