

Vidya Vikas Education Trust's Universal College of Engineering, Kaman Road, Vasai-401208

DEPARTMENT OF ELECTRONICS ENGINEERING

COURSE OUTCOMES

Year/Class/Semester: T.E./ ELX/ V

| Subject | Subject Name | CO's |
|---------|--|---|
| Code | | |
| ELX 501 | Microcontrollers and Applications | At the end of the course student will be able to: CO1- Explain 8051 microcontroller architecture. CO2- Develop assembly language programs for 8051 microcontroller. CO3- Design and implement 8051 based systems. CO4- Explain advanced features of Cortex-M3 architecture. |
| ELX 502 | Digital Communication | At the end of the course student will be able to: CO1- Comprehend the advantages of digital communication over |
| | | analog communication and explain need for various subsystems in Digital communication systems CO2- Realize the implications of Shannon-Hartley Capacity theorem while designing the efficient Source encoding technique. CO3- Understand the impact of Inter Symbol Interference in Baseband transmission and methods to mitigate its effect CO4- Analyze various Digital modulation methods and assess them based on parameters such as spectral efficiency, Power efficiency, Probability of error in detection CO5- Explain the concept and need for designing efficient Forward Error Correcting codes. CO6- Realize the areas of application of Digital communication. |
| ELX503 | Electromagnetic Engineering | At the end of the course student will be able to: CO1- Analyze the behavior of electromagnetic waves in different media. CO2- Evaluate various parameters of transmission lines and radiating systems. CO3- Apply computational techniques to analyze electromagnetic field distribution. CO4- Understand different mechanisms of radio wave propagation. |
| ELX504 | Design with Linear Integrated Circuits | At the end of the course student will be able to: CO1- Demonstrate an understanding of fundamentals of integrated circuits. CO2- Analyze the various applications and circuits based on particular linear integrated circuit. CO3- Select and use an appropriate integrated circuit to build a given application. CO4- Design an application with the use of integrated circuit |



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| ELX | Database | At the end of the course student will be able to: |
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| DLO501 | Management | CO1- Understand the fundamentals of a database systems |
| 1 | System | CO2- Design and draw ER and EER diagram for the real life problem. |
| | | CO3- Convert conceptual model to relational model and formulate |
| | | relational algebra queries. |
| | | CO4- Design and querying database using SQL. |
| | | CO5- Analyze and apply concepts of normalization to relational |
| | | database design. |
| | | CO6- Understand the concept of transaction, concurrency and |
| | | recovery. |