

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

DEPARTMENT OF ELECTRONICS ENGINEERING

COURSE OUTCOMES

Year/Class/Semester: B.E./ ELX / VII

| Subject | Subject Name | CO's |
|----------------|----------------------------------|---|
| Code | | |
| ELX701 | Instrumentation System Design | At the end of the course student will be able to: CO1- Demonstrate the needs of advancement in instrumentation systems CO2- Select the proper components for pneumatic & hydraulic systems CO3- Choose the transmitter / controller for given process application CO4- Analyze the controller parameters for discrete or continuous type CO5- Design the controller (electronic) for a given process or application |
| ELX702 | Power Electronics | At the end of the course student will be able to: CO1- Discuss trade-offs involved in power semiconductor devices. CO2- Design of triggering, commutation and protection circuits for SCRs. CO3- Analyze different types of single-phase rectifiers and DC-DC converters. CO4- Analyze different types of DC-AC converters (inverters). CO5- Analyze different types of AC Voltage Controllers and Cycloconvertors. |
| EXC703 | Digital Signal Processing | At the end of the course student will be able to: CO1- Demonstrate an understanding of the discrete-time Fourier transform and the concept of digital frequency. CO2- Design FIR and IIR digital filters to meet arbitrary specifications and Develop algorithms for implementation CO3- Understand the effect of hardware limitations on performance of digital filters CO4- Use advanced signal processing techniques and digital signal processors in various applications |
| ELXDLO 7033 | Robotics | At the end of the course student will be able to: CO1- Understand the basic concepts of robotics CO2- Perform the kinematic and the dynamic analysis of robots CO3- Perform trajectory and task planning of robots CO4- Describe importance of visionary system in robotic manipulation |



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

DEPARTMENT OF ELECTRONICS ENGINEERING

| ILO7016 | Cyber Security and | At the end of the course student will be able to: |
|---------|--------------------|---|
| | Laws | CO1- Understand the concept of cybercrime and its effect on |
| | | outside world |
| | | CO2- Interpret and apply IT law in various legal issues |
| | | CO3- Distinguish different aspects of cyber law |
| | | CO4- Apply Information Security Standards compliance during |
| | | software design and development |