



# LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution)

Approved by AICTE | Affiliated to Osmania University | Accredited 'A' grade by NAAC |

NBA Accredited UG Programmes: ME, ECE, CSE

## ELECTRICAL AND ELECTRONICS ENGINEERING

**AY:2023-24**

### **EVEN SEMESTER COURSE OUTCOMES**

#### **Semester: VI Semester(Autonomous)**

##### **Course Outcomes: C321 Business Economics and Financial Analysis**

**Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C321.1</b>	Apply the concepts of business economics during his professional and personal life
<b>C321.2</b>	Demonstrate the elasticity of the demand of the product, different types and measurements of elasticity of demand and factors influencing on elasticity of demand
<b>C321.3</b>	Recognize the Production function, features of ISO- Quants and ISO- Costs, different types of internal economies, external economies and law of returns with appropriate examples.
<b>C321.4</b>	Prepare the financial statements of the firm
<b>C321.5</b>	To Analyse the financial statements using ratio analysis and cash flow techniques.

##### **Course Outcomes: C322 Measurements and Instrumentation**

**Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C322.1</b>	Identify the usage of the different types of measuring instruments and understand their construction and operation
<b>C322.2</b>	Operate the energy meter, Power factor meter and frequency meter for real time application
<b>C322.3</b>	Find the R, L and C values using different types of bridges and get the knowledge on transducers.
<b>C322.4</b>	Apply the knowledge about CRO's and instrument transformers to use them effectively.
<b>C322.5</b>	Apply the knowledge of smart and digital metering for industrial applications

##### **Course Outcomes: C323 Microprocessors and Microcontrollers Applications**

**Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C323.1</b>	Analyze 8086 microprocessor architecture & its operations
<b>C323.2</b>	Write assembly language program for a given task
<b>C323.3</b>	Interface Memory & I/O devices to 8086 using peripheral devices
<b>C323.4</b>	Analyze the types of microcontrollers & their architecture
<b>C323.5</b>	Apply the interfacing concept of 8051 microcontroller.

**Course Outcomes: C324 Special Machines****Student will able to**

CO. No.	Description
C324.1	Demonstrate the operation and control of switched reluctance motor.
C324.2	Analyze the performance and control of stepper motors, and their applications.
C324.3	Describe the operation and characteristics of permanent magnet dc motor.
C324.4	Distinguish between brush dc motor and brush less dc motor.
C324.5	Explain the theory of travelling magnetic field and applications of linear motors

**Course Outcomes: C325 Measurements and Instrumentation Lab****Student will able to**

CO. No.	Description
C325.1	Calibration and Testing of Energy meter, Power Factor meters and PMMC Ammeter and Voltmeter
C325.2	Find the amplitude , phase angle and frequency using CRO
C325.3	Apply the bridges to find the Unknown R,L and C parameters in the bridges
C325.4	Measure the 3 phase power using wattmeter and CT's
C325.5	Find the Oil Test using H.T Testing kit and Earth resistance using Megger

**Course Outcomes: C326 Microprocessors and Microcontrollers Lab****Student will able to**

CO. No.	Description
C326.1	Analyze 8086 microprocessor architecture and its operation.
C326.2	Write assembly language program for a given task.
C326.3	Interface memory and I/O devices to 8086 using peripheral devices.
C326.4	Analyze the types of microcontrollers and their architectures
C326.5	Apply the interfacing concept of 8051 microcontroller.

**Course Outcomes: C327 Technical Report Writing****Student will able to**

CO. No.	Description
C327.1	Plan reports in a more efficient manner
C327.2	Make key decisions earlier in the preparation process
C327.3	Describe the generic structure underlying all reports
C327.4	Structure their own reports more clearly
C327.5	Identify and overcome their own report writing difficulties

**Course Outcomes: C328 Technical Seminar**

**Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C328.1</b>	Develop presentation skill.
<b>C328.2</b>	Develop communication skill
<b>C328.3</b>	Understand others points of view
<b>C328.4</b>	Be aware of latest developments

**Course Outcomes: C329 Mini Project****Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C329.1</b>	Conceive a problem statement either from rigorous literature survey or from the requirements raised from need analysis
<b>C329.2</b>	Design, implement and test the prototype/algorithm in order to solve the conceived problem.
<b>C329.3</b>	Write comprehensive report on mini project work.

**Course Outcomes: C3210 Aptitude and Reasoning****Student will able to**

<b>CO. No.</b>	<b>Description</b>
<b>C3210.1</b>	Acquire the grasp of Data analysis and its interpretation through percentages and averages
<b>C3210.2</b>	Calculate the problems pertaining to number series and reasoning ability.
<b>C3210.3</b>	Analyze the number system pattern and determine profit and losses
<b>C3210.4</b>	Evaluate proportions and tackle time framework situations
<b>C3210.5</b>	Understand and apply combinatorics, clock-calendar concepts and geometry of plane and solid figures

# COURSE OUTCOMES

## Semester: VIII Semester(OU)

### Course Outcomes: C421 Advances in Power Electronics

#### Student will able to

Course.No	Outcomes
C421.1	Distiguish the use of different types high power switching devices
C421.2	Analyze the the performance of PWM rectifiers
C421.3	Perform state space modeing of DC -DC converters
C421.4	Apply soft switching converters
C421.5	Analyze the performance and operation of multi level inverters

### Course Outcomes: C422 Smart Grid Technology

#### Student will able to

Course.No	Outcomes
C422.1	Understand the features of smart grid in the context of Indian grid.
C422.2	Gain the Knowledge of DC distribution and Smart grid.
C422.3	Apply the communication technology in the operation and maintenance of smart metering.
C422.4	Analyze the smart grid with integration of renewable energy sources and storage.
C422.5	Analyze the smart power grid system control

### Course Outcomes: C423 Software Engineering

#### Student will able to

Course.No	Outcomes
C423.1	Understand the fundamental principles of software engineering concepts and methodologies.
C423.2	Analyze and model software requirements using appropriate techniques.
C423.3	Design software solutions using appropriate architectural styles and patterns.
C423.4	Implement software solutions using programming languages and development tools.
C423.5	Develop software solutions using programming languages and development tools.

### Course Outcomes: C424 Project WorkPhase -II

#### Student will able to

Course.No	Outcomes
C424.1	Review and finalization of the Approach to the Problem relating to the assigned topic
C424.2	Detailed Analysis/Modelling/Simulation/Design/Problem Solving/Experiment as needed
C424.3	Final development of product/process, testing, results, conclusions and future directions
C424.4	Preparing a paper for Conference presentation/Publication in Journals, if possible
C424.5	Preparing a Dissertation in the standard format for being evaluated by the Department