

Course Code

24CH101

ENGINEERING CHEMISTRY

Theory Course with Laboratory Component
(Common for I semester B.E. – CSE, B.Tech–AIDS and
II semester B.E. – CSE(CS))

OBJECTIVES

The course will enable the learners to:

- To gain a comprehensive knowledge on polymers utilized in various industrial sectors.
- To knowledge on the fundamental principles of energy storage devices.
- To gain insights into the basic concepts and applications of chemical sensors and cheminformatics.
- To identify the different types of smart materials and explore their applications in Engineering and Technology.
- To assimilate the preparation, properties and applications of nanomaterials in various fields.

COURSEOUTCOMES:

Upon completion of the course, the students will be able to:

CO1: To examine the role of polymers in different industrial sectors.

CO2: To identify the suitability of batteries for various fields.

CO3: To apply the fundamental principles of chemical sensors, cheminformatics and their applications across various industries.

CO4: To analyze the types of smart materials used in various engineering fields.

CO5: To explore the applications of nanomaterials in various fields, considering their advantages and limitations.

CO6: To integrate the concepts of chemistry for various engineering applications.

LIST OF EQUIPMENTS FOR A BATCH OF 30 STUDENTS

S.No.	Description of Equipment	Quantity
1.	Conductivity meter	12Nos.
2.	pH meter	12Nos.
3.	UV-Visible Spectrophotometer	2 Nos.
4.	Potentiometer	12 Nos.
5.	Photo reactor	1 Nos.

Area of Physics Laboratory (in Sq.m):167.84Sq.m.

Name of the Laboratory In-charge: Dr.N.SAIKUMARI

CourseCode

24CH201

**CHEMISTRY FOR ELECTRICAL AND
ELECTRONICS ENGINEERING**

Theory Course with Laboratory Component

(Common for II Semester B.E.- ECE and EE(VLSI))

OBJECTIVES:

The course will enable the learners to:

- To acquire knowledge on the fundamental principles of energy storage devices.
- To provide an overview of corrosion, its types and corrosion control methods.
- To gain insights into the basic concepts and applications of chemical sensors and cheminformatics.
- To identify the different types of smart materials and explore their applications in engineering and technology.
- To assimilate the preparation, properties and applications of nanomaterials in various fields.

COURSEOUTCOMES:

Upon completion of the course, the students will be able to:

CO1: To identify the suitability of batteries for various fields.

CO2: To analyze the different types and impacts of corrosion, and evaluate methods for corrosion control and prevention.

CO3: To apply the fundamental principles of chemical sensors, cheminformatics and their applications across various industries.

CO4: To analyze the types of smart materials used in various engineering fields.

CO5: To explore the applications of nanomaterials in various fields, considering their advantages and limitations.

CO6: To integrate the concepts of chemistry for various engineering applications.

LIST OF EQUIPMENT FOR A BATCH OF 30 STUDENTS

S.No.	Description of Equipment	Quantity
1.	Conductivity meter	12Nos.
2.	pH meter	12Nos.
3.	UV-Visible Spectrophotometer	2 Nos.
4.	Potentiometer	12 Nos.
5.	Photo reactor	1 Nos.

Area of Physics Laboratory (in Sq.m):167.84Sq.m.

Name of the Laboratory In-charge: Dr.N.SAIKUMARI