

CY243 Engineering Chemistry

Credit: 3 -0- 0- 3

Approval: Approved in 1st Senate

Students intended for: B. Tech

Elective or Core: Elective

Semester: Odd/Even

Prerequisite: Consent of the faculty member

Course objective:

The main objectives of the course are to introduce the B. Tech students to the basic chemistry of important engineering materials used in industry. In particular, the students will learn some important areas of chemistry which is more relevant in engineering context.

Course content:

Fats, oils, soaps and detergents, explosives and propellants, lubricants, synthetic dyes, cements, insulators, paints, composite materials, natural and synthetic rubbers, liquid crystals, ionic liquid, polymers, petroleum and petrochemicals, plastics, corrosion and its control, water treatment, fuel and combustion, environmental chemistry, adhesives, ceramics, organic electronics.

Text Books:

Engineering Chemistry: P.C. Jain & Monika Jain

A Text Book of Engineering Chemistry: by Shashi Chawla

Organic Chemistry: by P.Y. Bruice

References:

Chemistry in Engineering and Technology: by J.C. Kuriacose & J.Rajaram

Engineering Chemistry: by O.G. Palanna