

INTEGRAL UNIVERSITY, LUCKNOW DEPARTMENT OF CHEMISTRY B.Sc. (Hons.) Industrial Chemistry

Program Educational Objectives (PEOs)	 Bachelor course in Industrial Chemistry offers the synergism of basic concepts of Chemistry with Industrial applications. The main objective of this degree course is to produce graduates with enhanced skills, knowledge and research aptitude to carry out higher studies or research and development in the various industrial areas. Develop proficiency in application of current aspects of industrial chemistry. Students will be able to use chemical techniques relevant to academia and industry, generic skills and global competencies including knowledge and skills that enable the students to undertake further studies in the field of industrial chemistry or a related field, and work in chemical and non chemical sector. Imparting an education that includes communication skills, the ability to work in a team with leadership quality, devoted to societal problems with an ethical attitude.
Program Specific Outcomes (PSOs)	 Prepares the students for immediate entry to the workplace with sound theoretical, experimental knowledge in the area of fuels and energy, environment, health, foods, cosmetics, polymers and related multidisciplinary fields. Overall, the course offers basic foundation in chemistry which enables the students to understand the concepts in chemical processing, engineering and industrial development. Students will be able to design, execute, record and analyse the results of chemical experiments. Students will be able to work effectively in a group in the classroom, laboratory, industries and field-based situations. Become efficient in using standard operating procedures and will be well versed with the regulations for safe handling and use of chemicals.
Program Outcomes (POs)	 Understanding- To demonstrate, solve and an understanding of major concepts in all disciplines of chemistry. Effective reading/writing skills- Excellent communication skills to transmit complex technical information related to chemistry in a clear and concise written and verbal manner as oral presentations and compilation in the form of scientific reports. Social skills- To develop awareness of the impact of chemistry on the environment, society, and development outside the scientific community. Problem solving- Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions. Ethics-Solve the problem and also think methodically, independently and draw a logical conclusion. Environmental Management- Understand the issues of environmental contexts and sustainable development. Lifelong learning- Students will be capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development.