

IC (209)204 **Elementary Industrial Chemistry Laboratory** **1(0/0-1/3)**

Abbreviation ELEM IND CHEM LAB

Prerequisite **IC 203 or concurrent to IC 203**

This course is opened for MAJOR ELECTIVE COURSE

Course Description

Chemical reagent preparation, boiler operation, pumps, valves and gauge operation, rotameter operation, fabrication and standard calibration of thermocouples, automatic control system, petroleum production, simple identification of plastics, extraction of metals from ores, pottery and glaze production, preparation and characterization of catalyst, wastewater treatment and chemical waste disposal.

Objective

Students will be experienced with practical works concerning basic equipment, production processes and pollutants management.

Laboratory Topics

Laboratory hours.

1. Chemical reagent preparation	3
2. Boiler operation	3
3. Pumps, valves and gauge operation	3
4. Rotameter operation	3
5. Fabrication and standard calibration of thermocouples	3
6. Automatic control system	3
7. Petroleum production	3
8. Simple identification of plastics	3
9. Extraction of metals from ores	3
10. Pottery and glaze production	6
11. Preparation and property characterization of catalyst	6
12. Wastewater treatment	3
13. Chemical waste disposal	3

Total 45