Forensic Chemistry – Scientific Approach to Crime

Investigations

Objectives:

This is a 30 hours online programme aims to explain the scientific principles and techniques behind the work of forensic scientists which are related to the chemical science in particular. And also illustrated with numerous case studies in and around the region. Students will be able to understand the different methodology involved in forensic sciences in particular focus on the chemical analysis.

Eligibility:

All B.Sc. / M.Sc. students who have a Chemistry background.

Contents:

Introduction to Forensic Chemistry, branches of and cases involved in Forensic chemistry, Crime scene investigation. Separation of complex mixtures using chromatography and extraction methods, Spectroscopic techniques – UV, IR and Mass spectroscopy and elemental analysis, Finger print analysis – chemical methods, Narcotics and Drugs, Forensic toxicology, Analysis of fibre, paints and polymers, chemical analysis of glass and soil, Chemistry of fire and explosives.

Each chapter is followed by a case study.

Learning outcomes:

After successful completion of this course candidate will be able to relate some of the basic facts concepts and principles relating to the chemical analysis involved in forensic science.