

# **Module Synopses**

## Semester One

### 1. CP0403 Dermal Pharmacology & Cosmetic Regulations

This module consists of 15 weeks (45 hours) of lectures and tutorials. Its objective is to give a broad overview of the physiology and histology of the skin, hypersensitivity and immunological skin reactions, common skin disorders and their treatment. Toxicological, phototoxicity and photosensitivity effects from cosmetic ingredients will be included. This module also covers local and international cosmetic regulations, banned substances in cosmetic formulations, labelling and licensing requirements for cosmetic products.

### 2. CP0404 Skincare Raw Materials & Formulations

This module consists of 15 weeks (45 hours) of lectures and tutorials. It provides an overview of ingredients used in skincare products. Formulations, preparations and evaluations will be covered across main areas in personal care from anti-ageing creams to colour lipsticks and sunscreens. New technologies in microemulsions, liposomes, skin lightening and skin delivery systems will be included.

### 3. CP0405 Colloid & Polymer Science

This module consists of 15 weeks (45 hours) of lectures and tutorials. It provides basic knowledge on the principles of colloid and polymer science and its practical applications in cosmetics. Topics will cover dynamics of surfactants at interphases, emulsion theory, solubilized systems, foams and dispersion systems in cosmetic formulations. This module includes an appreciation of the different classes of polymers, organosilicones, their properties and wide ranging applications in cosmetic formulations.

## Semester Two

### 4. CP0401 Hair-care Raw Materials and Formulations

This module consists of 15 weeks (45 hours) of lectures and tutorials. The topics cover a detailed study of surfactants, thickeners, actives, preservatives and other ingredients in hair-care preparations. Different preparation, testing and evaluation methods as well as safety and stability studies will be included.

### 5. CP0402 Perfumery

This module consists of 15 weeks (45 hours) of lectures and tutorials. It provides an overview of the history of the perfume industry and its process of development from conceptualisation to market launch. Raw materials, formulation techniques for creating and matching fragrances as well as fragrance applications will be included. This module updates recent and on-going research in understanding of how humans recognise odours as well as its effects on their overall well-being.

### 6. CP0406 Cosmetic Science Laboratory

This module consists of 15 weeks (45 hours) of practicals where students will have hands-on experience in formulating and evaluating hair and skincare products. The study of different emulsions types in creams and lotions as well as in surfactant systems will be covered. This module allows students to acquire practical skills in both fast and conventional microbiological testing methods for cosmetic products.