## Kejuruteraan Biokimia

Bidang pengajian ini menekankan kepada aplikasi asas kejuruteraan kimia terhadap sistem hidup dan bahan biologi seperti mikrob, sel, enzim, protein, asid nukleik, karbohidrat, minyak dan lemak. Ia melibatkan merekabentuk dan pengembangan proses biologi dan operasi unit bermula dari penyediaan bahan mentah sehingga permurnian produk. Ia juga meliputi tindakbalas bio, fermentasi, biopolimer, biogas, pengkomposan, pemisahan bio, kultur sel tumbuhan dan haiwan, dan biotransformasi. Ia diaplikasikan dalam industri farmasi, nutraseutikal, makanan, bahan-bio, pertanian, alam sekitar, rawatan biologi air sisa, bioremediasi dan tenaga bio.

## Biochemical Engineering

This field of study emphasises the application of chemical engineering fundamentals on living systems and biological materials such as microbes, cells, enzymes, proteins, nucleic acids, carbohydrates, oils and fats. It involves the designing and development of biological processes and unit operations starting from raw materials preparation until product purification. It also covers bioreaction, fermentation, biopolymer, biogas, composting, bioseparation, plant and animal cell culture, and biotransformation. Applications are seen in the pharmaceutical, nutraceutical, food, biomaterial, agricultural, environmental, biological wastewater treatment, bioremediation and bioenergy industries.