Module Synopses

Year One

1. CP0516 Applied Food Chemistry

   Provides students with a strong foundation in the chemistry of lipids, proteins and carbohydrates and a working knowledge of the behaviour of food components on processing and storage. Students will also have practice in the evaluation of the properties of food components in various food products.

2. CP0517 Food Processing

   Provides students with an understanding of the principles of current and potential food preservation methods. Hands-on experience on the use of the various food processing equipment will also be included.

3. CP0518 Applied Food Microbiology

   Provides students with the theoretical and practical knowledge in evaluating the characteristics and activities of important microorganisms in foods, with emphasis on pathogens and spoilage organisms. Practicals in both the conventional and rapid, automated methods will be emphasised.

4. CP0519 Food Analysis

   Provides students with the essential knowledge of advanced analytical instrumentation, as well as practical skills on food residue analysis in a modern laboratory. In addition, quality assurance measures on testing methodologies will also be covered in this module.

5. CP0520 Food Quality Management

   Provides students with the knowledge and understanding of the principles involved in quality management, food standards and in the legislative aspects of food quality.

6. CP0521 Food Bioengineering

   Provides students with an understanding of the principles of fermentation, enzyme technology and the technology of genetically modified (GM) foods.Topics covered in fermentation and enzyme technology will focus on the key concepts and principles of the operation and regulation of batch and continuous systems. As for topics related to the technology of GM foods, an understanding of the technology, applications and issues involved in the development of transgenic plants will be dealt with.

Year Two

7. CP0506 Food Product Development

Provides students with advanced technologies on experimental designs, applied statistics and sensory evaluation for application in food product development.

8. CP0514 Food Ingredients

   Provides students with a broad understanding of the roles of food ingredients including nutraceuticals in the development of processing of functional food. Discussion on the application of innovative ingredients to meet consumers' demand for great taste combined with nutritional benefits is included. A working knowledge on the safety evaluation and the regulation of functional ingredients with respect to the regulatory bodies will also be included. Students will also have practice in the formulation and evaluation of suitable ingredients/additives in formulated foods.

9. CP0524 Food Marketing and Project Management

   Provides students with the ability to develop and implement marketing plan for new and existing food products. It covers the key topics in understanding how marketing strategies are developed, as well as the critical issues pertaining to the successful communication and implementation of the plan to various stake holders. It also provides students with an understanding of project management procedures and techniques. The students will also learn to apply quantitative operations research technique to plan and optimise project scheduling and resource utilisation.

10. CP0522 Nutrition and Metabolism

    Provides students with knowledge of human nutritional requirements, nutritional related diseases, the effect of handling and processing on nutrients in food and practice in planning meals for specific requirements. It also gives students the opportunity to develop a basic scientific understanding of metabolic processes and its application to food quality and the impact of nutrition on health.

11. CP0523 Food Packaging Technology

    Provides students with knowledge of the principles involved in the selection of food packaging materials; a working knowledge of the concept of food packaging techniques, active packaging technologies; packaging of specific food products; package labelling and the impact of packages on the environment.

12. BA5204 Supply Chain Management

    Introduces the contemporary concepts, principles and business practices in the supply chain management areas. The main focus is on the factors affecting the design, impact and development of supply chain management solutions. To discuss the importance of using information technology to integrate and share information with internal and external parties across the supply chain activities.

13. CP002 YZ Final Year Project (Parts I & II)

Enables students to apply knowledge, analytical and trouble-shooting skills in a supervised project.