**Introductory Short Course on Food Science & Technology**

**Overview**

This short course aims to provide participants with an overview of food science & technology. This workshop is targeted at participants who are interested to understand the science and technology to food processing and its commercial significance.

**Course Structure & Content**

|  |  |  |
| --- | --- | --- |
| Day & Time | Session | Facilitator |
| **Day 1**9.00 – 10.30 am | **Module 1** **Mega Food Trends and Opportunities** | Terence Tan |
| 10.30 – 10.45 am | Tea Break |  |
| 10.45 – 12.15 pm  | **Module 2****Science of Food – Part One**Provide an overview of food additives and their roles in processed foods. | Evelyn Ong |
| 12.15 – 1.15 pm | Lunch |  |
| 1.15 – 2.45 pm | **Module 3****Science of Food – Part Two**Develop a better understanding of the interactions between the various components of food through examples. | Valerie Wong |
| 2.45 – 3.00 pm | Tea Break |  |
| 3.00 – 4.30 pm | **Module 4****Product Development Using Design Thinking**Understand the new product development process and the techniques involved. | Martyn Wong |
| 4.30 pm – 5.30pm | **Class Activity** | Tay Chiew Teck |

|  |  |  |
| --- | --- | --- |
| **Day 2**9.00 – 10.30 am | **Module 5****Physico-chemical and sensory evaluation of foods**Provide an overview of the basic qualitative and quantitative analytical methods used for the testing of food components using pH meter, moisture analyser, etc. Introduce the various sensory techniques such as difference tests, descriptive tests and consumer preference tests, what are the pros and cons to these tests, etc. | Ho Seeh Ming/ Chen Ying Jie |
| 10.30 – 10.45 am | Tea Break |  |
| 10.45 -12.15 pm | **Module 6****Food Packaging**Understand the role of food packaging.Appreciate the significance of different packaging techniques for different foods and relate to shelf life of packaged foods. | Tho Pin Da |
| 12.15 – 1.15 pm | Lunch |  |
| 1.15 – 2.45 pm | **Module 7****Science of Food Processing** Understand the principle of food processing and food preservation techniques employed in the food industry including fermentation, heat treatment, dehydration, freezing, irradiation and preservatives.Appreciate the various preservation techniques and its effect on food quality. | Tay Chiew Teck |
| 2.45 – 3.00 pm | Tea Break |  |
| 3.00 – 3.30 pm | **Tour of the FIRC facilities** | Tay Chiew Teck |
| 3.30pm – 5.00 pm | **Module 8****Food Quality System**Provide an overview of the different food quality management systems. | Chia Xin Hui/Tay Chiew Teck |
| 5.00pm – 5.30 pm | **Question & Answer Session****Post-Course Evaluation** | Tay Chiew Teck |