Food, Nutrition & Culinary Science



What's in your favourite snack of crisps or instant noodles? Why do food manufacturers add chemicals to our packaged food? What safeguards are in place to ensure quality and food safety? Are the tastiest foods also the "unhealthiest"? What makes the "healthy" so beneficial for us?

Consumer interest in, and desire for, healthier snacks and meals are fuelled by easy access to information about food, shifting demographics, the mainstream acceptance of wellness ideals and changing eating habits. With improving awareness about the impact of diet on health, the high prevalence of lifestyle diseases and the ever-increasing healthcare costs, there is a big demand for tasty yet healthier food. Food must look as good as it tastes and taste as good as it looks!

This course explores these issues and more, as students receive practice-oriented training and learn to integrate food science, nutrition and culinary disciplines in their work. They will discover the science behind food and how its components react with each other and impact our health. Equipped with basic culinary and baking skills, students will learn how to develop innovative, healthier and safer food as well as plan and evaluate meals for different population groups.

Elective subjects in applied nutrition, food technology and central kitchen technology allow students to pursue their passion and deepen their knowledge and skills in these respective areas. The food science and technology subjects will equip them for the challenging food industry in developing innovative, healthier and safer foods – through the use of the latest processing technology, functional food ingredients and techniques of preservation. The nutrition and health-related subjects will provide them with the knowledge and skills to create and evaluate healthier meals for different population groups, assess their nutritional status, develop nutrition education programmes, and manage dietrelated diseases. The culinary subjects give students a firm foundation in cooking and baking, an appreciation of our heritage cuisine and the use of modern catering technology to support efficient mass food production in a central kitchen setting.

With a curriculum designed to meet the skills and competencies detailed in the Skills Framework, opportunities for local and global internships and real-world collaborative projects with the industry, our students are made career-ready for the food and healthcare industries.

Career Opportunities

Our graduates can embark on a career in the food and healthcare industries. You may be employed as an assistant food technologist, QA/QC executive, nutrition/dietetic technologist, nutrition/health educator or junior R&D chef.

Graduation Requirements

Cumulative Grade Point Average : min 1.0 TP Fundamentals Subjects : 40 credit units

Diploma Subjects

Core Subjects: 63 credit units

Elective Subjects: min 17 credit units

Total Credit Units Completed: min 120 credit units

Application

Apply during the Joint Admissions Exercise following the release of the GCE O Level results. For other categories of local applicants, please refer to the section on "Admission and Requirements". For international students, please refer to the section on "Information for International Students".

Entry Requirements for Singapore-Cambridge GCE O Level Qualification Holders

To be eligible for consideration for admission, applicants must obtain 26 points or better for the net ELR2B2 aggregate score (i.e. English Language, 2 relevant subjects and best 2 other subjects, including CCA Bonus Points) and meet the minimum entry requirements of this course. CCA cannot be used to meet the minimum entry requirements.

For details on GCE O Level Minimum Entry Requirements, refer to page 6.

Course Structure

TP FUNDAMENTALS (TPFun) SUBJECTS				
SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS	
ACS1005	Communication & Information Literacy (IComm)	1	2	
ACS1006	Workplace Communication (WkComm)	1	2	
ACS1007	Persuasive Communication (PComm)	1	2	
AGS1002	Global Studies	1	3	
AGS1003	Managing Diversity at Work*	1	3	
AGS1004	Global Citizenship & Community Development*	1	3	
AGS1005	Expressions of Culture*	1	3	
AIN1001	Innovation & Entrepreneurship	1	2	
GCC1001	Current Issues & Critical Thinking	1	2	
LEA1011	Leadership: Essential Attributes & Practice 1	1	1	
LEA1012	Leadership: Essential Attributes & Practice 2	1	1	
LEA1013	Leadership: Essential Attributes & Practice 3	1	1	
LSW1002	Sports & Wellness	1	2	
MCR1001	Career Readiness 1	1	1	
MCR1002	Career Readiness 2	1	1	
MCR1003	Career Readiness 3	1	1	
TGL1001	Guided Learning	1	3	
ASI3031	Student Internship Programme	3	16	
* Students must choose one of these three subjects or TGL1001 Guided Learning.				

DIPLOMA SUBJECTS – CORE SUBJECTS					
SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS		
ABC1011	Fundamental Culinary Techniques	1	4		
ABC1012	Fundamental Baking Techniques	1	4		
ACH1009	Principles of Inorganic & Physical Chemistry 1	1	4		
AFS1001	Food Chemistry	1	5		
AMA1004	Statistics for Applied Science	1	3		
AMB1004	Basic Microbiology	1	3		
ANT1002	Basic Nutrition & Food	1	4		
ANT1004	Basic Anatomy & Physiology	1	3		
AFS2007	Food Additives	2	4		
AFS2009	Sensory Science	2	4		
AFS2011	Food Preservation	2	4		
AFS2012	Food Safety Management	2	4		
ANT2011	Nutrition Across the Life Span	2	4		
AFS3008	Product Development & Marketing	3	5		
AMP3016	Major Project	3	8		

DIPLOMA SUBJECTS – ELECTIVE SUBJECTS				
SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS	
ABC2022	Heritage Cuisine	2	4	
ABC2023	Catering Technology	2	4	
ACH2004	Principles of Instrumental Analysis	2	4	
AFS2010	Food Quality Assurance	2	4	
ANT2009	Community Health & Nutrition	2	4	
ANT2010	Principles of Biochemistry & Physiology for Nutrition	2	4	

DIPLOMA SUBJECTS – ELECTIVE CLUSTER SUBJECTS

Students will be required to read an Elective Cluster offered by the School and complete a minimum of 9 credit units. The Elective Cluster to be offered by the course, and the subjects under this Cluster, are summarised below.

SUBJECT CODE	SUBJECT	LEVEL	CREDIT UNITS			
Food Technology_						
AFS3009	Food Packaging Technology	3	4			
AFS3010	Food Processing Technology	3	5			
Applied Nutrition						
ANT3004	Practical Sports Nutrition	3	4			
ANT3005	Clinical Nutrition & Dietetic Practice	3	5			
Central Kitchen Technology						
ABC3010	Central Kitchen Operations	3	7			
ABC3011	Productivity Management	3	2			