Bachelor of Science Program in Food Science and Technology

General Information

Degree Designation : Bachelor of Science Program in Food Science and Technology

Total Credits : 142 credits

Graduate : 4 years

Academic Year

The academic calendar mostly consists of two semesters (Two-semester system). Each semester is not less than 15 weeks. The summer session is scheduled to meet the requirements of each

1 st semester	: June - September
2 nd semester	: November – February
Summer semester	: March – May

Course Structure

A : General Education Course

B : Major Course

C : Free Elective Course

A : General Education (30 credits)

1. Language and Communication (9 credits)

- Fundamental Course (6 credits) :

Course ID	Course name	Credits
1551001	Fundamental English	3(3-0-6)
1551002	English for Communication	3(3-0-6)

- Free Elective (3 credits) :

Course ID	Course name	Credits
1541001	Thai Language Usage Skills	3(3-0-6)
1541002	Language and Communication for Specific Purposes	3(3-0-6)
1561001	Japanese for Communication	3(3-0-6)
1571001	Chinese for Communication	3(3-0-6)
1571002	Fundamental Chinese for Tourism	3(3-0-6)
1661001	Korean for Communication	3(3-0-6)
1691001	Fundamental Burmese	3(3-0-6)
1691002	Burmese for Communication	3(3-0-6)

2. Humanities (6 credits)

Course ID	Course name	Credits
1001003	Human Behavior and Self-Development	3(3-0-6)
1001005	Thinking and Decision Making Skill	3(3-0-6)
1511001	Ethics and Human Beings	3(3-0-6)
1511002	Facts of Life	3(3-0-6)
1521001	Buddhism	3(3-0-6)
1631001	Information for Study and Research	3(3-0-6)
2011001	Aesthetics of Visual Arts	3(3-0-6)
2051001	Aesthetics of Performing Arts	3(3-0-6)
2061001	Music Appreciation	3(3-0-6)
3501001	Leadership Development	3(3-0-6)
3501003	Personality Development and the Arts of Socializing	3(3-0-6)

3. Social Sciences (6 credits)

Course ID	Course name	Credits
2501001	History of Thai Society and Culture	3(3-0-6)
2501003	Public Mind and Civic Social Engagement	3(3-0-6)
2501004	Interdisciplinary Social Science for Development	3(3-0-6)
2501005	Kamphaeng Phet Studies	3(2-2-5)
2521001	Globalization and Localization	3(3-0-6)
2521002	ASEAN Studies	3(3-0-6)
2541001	Human Beings, Community, and Environment	3(3-0-6)
2541002	Local Resource Management	3(3-0-6)
2551002	Fundamental Knowledge on Thai Politics and Government	3(3-0-6)
2561001	Introduction to Laws	3(3-0-6)
3501004	Business Initiation	3(3-0-6)
3531001	Finance in Daily Life	3(3-0-6)
3541001	Entrepreneurship	3(3-0-6)
3591002	Sufficiency Economy	3(3-0-6)

4. Mathematics, Science, and Technology (6 credits)

Select courses in subjects 1. - 4. (3 credits)

Course ID	Course name	Credits
1161001	Sports and Recreation for Quality of Life	3(2-2-5)
1161002	Exercise for Health	3(2-2-5)
4001002	Science and Technology for Daily Life	3(3-0-6)
4001003	Environments and Natural Resources Conservation	3(3-0-6)
4071001	Health and Health Care	3(3-0-6)
4091001	Mathematics in Daily Life	3(3-0-6)
4091003	Mathematics and Decision Making	3(3-0-6)
4121001	Computer and Information Technology	3(2-2-5)
4121005	Website Design and Development	3(2-2-5)
4121006	Package Software for Application	3(2-2-5)
5001001	Agriculture in Daily Life	3(3-0-6)
5071001	Food for Health	3(3-0-6)
5501001	Technology in Daily Life	3(3-0-6)

B : Major Course (106 credits)

Core subjects (45 credits)

Course ID	Course name	Credits
4002251	English for Science	3(3-0-6)
4011103	General Physics and Laboratory	4(3-3-7)
4021103	General Chemistry and Laboratory	4(3-3-7)
4022301	Organic Chemistry and Laboratory 1	4(3-3-7)
4022401	Physical Chemistry and Laboratory 1	4(3-3-7)
4022501	Biochemistry and Laboratory 1	4(3-3-7)
4031301	General Biology and Laboratory	4(3-3-7)
4091401	Calculus and Analytic Geometry 1	3(3-0-6)
4112201	Introduction to Probability and Statistics	3(3-0-6)
5072101	Analytical Chemistry for Food Science and Technology	3(2-3-5)
5072201	Introduction to Microbiology for Food Science and Technology	3(2-3-5)
5072401	Food and Nutrition	3(3-0-6)
5073001	English for Food Science and Technology	3(2-3-5)

Major Requirement (42 credits)

Course ID	Course name	Credits
5072001	Introduction to Food Science and Technology	3(2-3-5)
5072301	Food Processing 1	3(2-3-5)
5072601	Sensory Evaluation	2(1-2-3)
5073101	Food Chemistry	4(3-3-7)
5073102	Food Analysis	3(2-3-5)
5073103	Instruments for Food Analysis	3(2-3-5)
5073201	Food Microbiology	4(3-3-7)
5073302	Food Processing 2	3(2-3-5)
5073501	Industrial Plant Sanitation and Food Laws	3(2-3-5)
5073502	Food Quality Assurance	3(2-3-5)
5073601	Experimental Design and Statistics in Food Science and	3(2-3-5)
5074301	Principles of Food Engineering	4(3-3-7)
5074601	Seminar in Food Science and Technology	1(1-0-2)
5074602	Research Project in Food Science and Technology	3(1-4-4)

Major Elective Course (12 credits)

Course ID	Course name	Credits
5072302	Principles of Agricultural Products Preservation	3(2-3-5)
5073301	Food Packaging	3(2-3-5)
5073303	Planning and Production Control of Food Industry Plant	3(2-3-5)
5073503	Food Safety	3(2-3-5)
5073603	Food Product Development	3(2-3-5)
5073701	Cereal and Cereal Product Technology	3(2-3-5)
5073702	Bakery Technology	3(2-3-5)
5073703	Milk and Milk Product Technology	3(2-3-5)
5073704	Meat and Meat Product Technology	3(2-3-5)
5073705	Biotechnology in Food Industry	3(2-3-5)
5074102	Food Additives	3(2-3-5)
5074103	Functional Food	3(2-3-5)
5074302	Computer Applications in Food Industry	3(2-3-5)

Course ID	Course name	Credits
5074501	Occupational Health and Safety for Food Industry	3(2-3-5)
5074701	Fruit and Vegetable Technology	3(2-3-5)
5074702	Fat and Oil Technology	3(2-3-5)
5074703	Sugar Technology	3(2-3-5)
5074704	Fishery Product Technology	3(2-3-5)
5074706	Beverage Technology	3(2-3-5)

Professional Experience or Cooperative Education (7 credits)

Select a plan

Course ID	Course name	Credits
5073801	Preparation for Professional Experience in Food Science and Technology	2(90)
5074802	Field Experience in Food Science and Technology	5(450)
5073802	Co-operative Education Preparation in Food Science and Technology	1(45)
5074803	Co-operative Education in Food Science and Technology	6(540)

C: Free Elective Course (6 credits)

Freely choose any courses provided by the university. The courses chosen must not have been taken before by the student and must not be the compulsory non-credit courses.