Course Deatail Master of Science Program in Food Technology

Course Title: Master of Science Program in Food Technology

Master Degree: Master of Science (Food Technology)

Academic Institution: School of Food Technology, Institute of

Agricultural Technology, Suranaree University

of Technology

Duration: 2 years (August 2024 - July 2026)

Background and Rationale:

Master program in Food Technology at Suranaree University of Technology has been established since 1999. Our mission is to educate and develop graduate students for leadership roles in food industry in Thailand and worldwide. To achieve sustainable growth of food industry, knowledgeable personnel in science and technology is greatly needed for developing new knowledge, research and innovation. The program is designed to equip students with upto-date core competency in Food Science and Technology. State of the art equipment and facilities allow students to learn and gain hand-on experience required for the global job market. Moreover, our program puts emphasis for training graduate students to be independent in scholarly endeavor with professional ethics.

Objectives:

- 1. To produce graduates who have expertise and competences in research and have the ability to apply knowledge for food science and technology development.
- 2. To create new knowledge and innovation for food industry for a rapidly changing world
- 3. To produce graduates who have morality, ethics and domestics and international working ability.

Course Synopsis and Methodology:

Study plan

Study plan for Scheme A1

Year	Trimester 1	Trimester 2	Trimester 3	
1	IAT35 7901 Thesis Plan A	IAT35 7901 Thesis Plan A	IAT35 7901 Thesis Plan A	
	Scheme A1	Scheme A1	Scheme A1	
2	IAT35 7901 Thesis Plan A	IAT35 7901 Thesis Plan A	IAT35 7901 Thesis Plan A	
	Scheme A1	Scheme A1	Scheme A1	

- Study Plan for Scheme A2

Study 1 min 101 Selection 112						
Year	Trimester 1	credits	Trimester 2	credits	Trimester 3	credits
1	xxxxxx Electives	8	xxxxxx Electives	7	IAT35 6801	1
					M.Sc.Seminar I	
2	IAT35 7902 Thesis	10	IAT35 6802	1	IAT35 7902Thesis	8
	Plan A Scheme A2		M.Sc.Seminar II		Plan A Scheme A2	
			IAT35 7902	10		
			Thesis Plan A			
			Scheme A2			

1) Compulsory Courses

M.Sc. Seminar 1 M.Sc. Seminar 2

2) Foundation courses of Food Technology

A student who doesn't hold a Bachelor of Science Program in Food Industry, Food Science, Food Technology, Food Engineering, Food Product Development and Packaging Technology may need to complete the foundation course of Food Technology (Depending on agreement of school)

Principles of Food Microbiology

Principles of Food Chemistry

Principles of Food Processing

Principles of Food Engineering

* Grade will be presented in "S" (Satisfactory) or "U" (Unsatisfactory) and the credit of this course do not count in the credit of Elective Courses 3) Elective Courses

The elective course of Master's degree program includes

- 3.1 Elective course of School of Food Technology
- Food Biotechnology
- Nutraceuticals and Functional Foods
- Cell-Based Assays for Functional Foods
- Shelf-Life Evaluation of Biological Products
- Advanced Food Microbiology
- Microbial Metabolites for Food Industry
- Risk Assessment of Microbiological Safety in Food Industry
- Instrumental Analysis of Food
- Food Carbohydrates
- Food Proteins
- Food EnzymesFood Lipids
- Food Flavors Technology
- Advanced Food Nutrition

- Foods for Immune System
- Starch and Modifications
- Advanced Food Processing
- Food Colloidal and Emulsion Technology
- Food Rheological Technology
- Drying Technology for Agricultural Products
- Phase/State Transition in Foods
- Physical and Engineering Properties of Biomaterials
- Transfer Processes in Food and Bioprocess
- Food Process Evaluation and Improvement
- Statistics for Food Technology Research
- Sensory Evaluation Technology
- Selected Topics in Food Technology
- Special Problems
- 3.2 Thesis related Elective course of graduate program from other institutes in Suranaree university of technology (Depending on agreement of school)
- 3.3 The course of graduate program from the university that has Cooperative Agreement of Double Degree Program with School of food technology, Institute of Agricultural Technology, Suranaree University of Technology (Depending on agreement of school)

4) Thesis

IAT35 7901 Master's thesis Plan A Scheme A1 no less than 45 credits IAT35 7902 Master's thesis Plan A Scheme A2 no less than 28 credits According to Regulations for Graduate Studies, Suranaree University of Technology, 2560 B.E. (2017 A.D.), the student must present thesis proposal and get approval from Thesis Proposal Committee prior to thesis registration.

Graduation Conditions:

According to Regulations for Graduate Studies, Suranaree University of Technology, 2560 B.E. (2017 A.D.), chapter 14, Graduation.

Applicant Qualifications:

Master of Science in Food Technology

Plan A (1) Focus only on doing research or thesis work for cumulative credits of at least 48 credits without course work study.

Plan A (2) Focus on doing research or thesis work with course work study for cumulative credits of at least 48 credits. Students can register Food technological course or others with approval from the school of Food technology.

The thesis work can be done at SUT or at other university or institution within Thailand or abroad. The program structure of each plan is in Table 1

Document Required

- TIPP application form (Download at: https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3)
- Medical Report (If candidates had submitted other health certificates without <u>the TICA</u> <u>medical report form</u>, their application will not be accepted for consideration)
- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree)
- Certificate of Bachelor's degree
- English test score (IELTS > 4.0, or TOEFL (Paper) > 400, International program within 2 years)
- Recommendation Letter (At least 3 people)

Contact:

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For more information:

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***The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.