

Program Specification

1. Program Title : Master of Science Program in Food Science
2. Mode of the study : Full time (2 years)
3. Semester period :

1st semester August – December

2nd semester January – May
4. Typical entry requirements : Bachelor's degree in Food science, Food technology, Agro-industry, or related field.
5. Program aims / Objectives
 - 5.1 To enable student to obligate in food science study, research, and sustainability concept of problem solving in food industry.
 - 5.2 To provide advance in food science and technology research.
6. Program Learning Outcomes (PLO) :
 - 6.1 Students will be able to analyze, synthesize, and integrate knowledge in food science and technology for creative research to result in sustainability beneficial to food industry.
 - 6.2 In order to goal the stated outcome, learning activities managing to consolidate both of theory and laboratory practices and research work which could serve food industrial requirements.

7. Program structure

Plan A Type A1	36	credits
a) Thesis	36	credits
b) Compulsory courses (credit non-counted)	5	credits
c) Thesis seminar (credit non-counted)	1	credits
d) Knowledge examination	0	credits
Thesis defense		
Comprehensive examination		
English proficiency test		

Compulsory courses

08117111 Sustainable food processing	3 (3-0-6)
08117112 Techniques in scientific communication	2 (2-0-4)

Plan A Type A2	36	credits
a) Thesis	12	credits

b) Compulsory courses	12	credits
c) Elective courses	12	credits
d) Thesis seminar (credit non-counted)	1	credits
e) Knowledge examination	0	credits
Thesis defense		
Comprehensive examination		
English proficiency test		

Compulsory courses

08117111 Sustainable food processing	3 (3-0-6)
08117112 Techniques in scientific communication	2 (2-0-4)
08117108 Experimental designs in food research	3 (3-0-6)
08117110 Instrumentation and physicochemical measurement for foods	3 (2-3-6)
08117113 Research progress	1 (1-0-2)

Elective courses

08117217 Food plant and process design	3 (3-0-6)
08117225 Lactic acid bacteria in food industry	3 (3-0-6)
08117228 Chemistry of food colorants	3 (3-0-6)
08117230 Science and technology of fishery products	3 (3-0-6)
08117234 Food gels and colloids	3 (3-0-6)
08117235 Food carbohydrates	3 (2-3-6)
08117238 Shelf-life evaluation of food products	3 (2-3-6)
08117242 Science and technology of starch	3 (2-3-6)
08117243 Food industry management	3 (3-0-6)
08117244 Advanced food processing	3 (3-0-6)
08117246 Current issues in food science	3 (3-0-6)
08117247 Advanced food science	3 (3-0-6)
08117248 Food enzymology	3 (2-3-6)
08117249 Food additives	3 (3-0-6)
08117250 Food proteins	3 (2-3-6)
08117251 Microbial management in food industry	3 (3-0-6)
08117252 Science and technology of meat	3 (2-3-6)
08117253 Purchasing management and warehouse technology	3 (3-0-6)
08117254 Data analyzing in fundamental and advance	3 (2-3-6)

08117255 Science in bread	3 (2-3-6)
08117256 Nutritional biochemistry	3 (3-0-6)
08117257 Immunoassays in food	3 (3-0-6)
08117258 Food nutrition and nutrient enrichment technology	3 (3-0-6)
08117259 Standard and law for food business	3 (3-0-6)
08117260 Advanced food product development	3 (2-3-6)
08117261 Functional foods and nutraceuticals	3 (3-0-6)
08117262 Science and technology of edible fat and oil products	3 (2-3-6)
08117263 Phytochemicals	3 (3-0-6)
08117264 Extraction and separation technology of bioactive compounds	3 (2-3-6)
08117265 Chemistry and technology of food flavor	3 (3-0-6)

8. Facilities available

8.1 Laboratory rooms

8.2 Research instruments e.g. HPLC, GC-MS, Rheometer, Rapid Visco-Amylograph (RVA), Fermenter, Rancimat, UV-Vis Spectrophotometer, Laminar flow, Brookfield viscometer, Texturometer, etc.

9. Career prospects

- a) Food scientists or food technologists in food factory, being responsible in product research and development, planning and production control, or food quality control or quality assurance.
- b) Authorized food scientists government official.
- c) Owner or self-employed food related business.

10. Tuition fee : 26,000 THB per semester