

Program Specification

1. Program Title: Doctor of Philosophy in Food Science (International Program)
2. Mode of study: Full Time (3 years)
3. Registration period: 1st semester: August-December
2nd semester: January-May
4. Typical entry requirements: Master degree in food science, food technology or related field.
5. Program aims/Objectives
 - 5.1 To produce graduates that are specialists and are highly-skilled researchers on food science and technology and related fields.
 - 5.2 To promote the creativity and innovation in the research on food science and technology.
 - 5.3 To strengthen and develop graduates to go forward to international level
6. Program Learning Outcome (PLO)
 - 6.1 Graduates are able to apply and integrate knowledge in food science and technology for advanced research work.
 - 6.2 Graduates will gain skills to support the research work through learning activity both theory and practice and are able to serve in food industry sector.
7. Program structure

Plan 1.1: Research plan	48	credits
a. Thesis	48	credits
b. Compulsory courses (credit non-counted)	5	credits
c. Seminar (credit non-counted)	2	credits
d. Knowledge examination	0	credits
Thesis Defense		
Qualifying examination		
English Proficiency Test		

Compulsory course (credit non-counted)

08117111 Sustainable food processing	3(3-0-6)
08117109 Techniques in scientific communication	2(2-0-4)

Plan 2.1: Course work and research plan	48	credits
a. Thesis	36	credits
b. Compulsory courses	3	credits
c. Compulsory courses (credit non-counted)	2	credits
d. Seminar (credit non-counted)	2	credits
e. Electives courses	9	credits
f. Knowledge examination	0	credits
Thesis Defense		
Qualifying examination		
English Proficiency Test		

Compulsory courses

08117111 Sustainable food processing	3(3-0-6)
08117109 Techniques in scientific communication (credit non-counted)	2(2-0-4)

Elective courses

08218112 Advanced Food Toxicology	3(3-0-6)
08218113 Biochemical Methods for Food Research	3(3-0-6)
08218120 Phase Transition in Foods	3(3-0-6)
08218121 Food Rheology	3(3-0-6)
08218122 Advanced Food Packaging Technology	3(3-0-6)
08218118 Genetic Engineering in Food Industry	3(3-0-6)
08218123 Advanced Industrial Fermentation Technology	3(3-0-6)
08218127 Functional and Medical Food	3(3-0-6)
08218128 Foodomics	3(3-0-6)
08218129 Microbiological Technology for Food Flavor Production	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 : 75,000 THB per semester