

Course Title
M.Sc. in Food Science and Technology

Academic Institution: Faculty of Agro-Industry, Prince of Songkla University

Program Title: Master of Science (Food Science and Technology) or M.Sc. (Food Science and Technology)

Program learning outcome (PLO)

PLO1 Apply the knowledge in food science and technology for the development and improvement of food processing or food products, particularly seafoods, halal foods and agricultural products in the southern region.

PLO2 Demonstrate honesty, responsibility and academic ethics.

PLO3 Apply research methodologies to correctly develop research projects.

PLO4 Select the relevant tools or software to increase efficiency in the production process and product development.

PLO5 Search and filter information using information technology for continuous learning.

PLO6 Demonstrate effective English communication skills applicable to academic context.

Philosophy of the Program

The program aims to produce graduates with high level knowledgeable in food science and technology. The learners will be able to create innovative research to meet the needs of the food industry and to apply the profession and communicate appropriately both locally, nationally and internationally with morality and ethics. The program employs progressive learning, including active learning, problem-based learning, project-based learning and work-integrated learning.

PSU's educational philosophy (<http://webagro.psu.ac.th>)

PSU's educational philosophy is managed by

- Progressivism using learning process with the students as the “center of attention” and the basis of “Outcome Based Education” such as active learning, problem-based learning, project-based learning, service learning
- PSU aims to provide students with a lifelong learning approach
- PSU believes that these principles can be met and aided by Prince of Songkla Mahidol Adulyadej's motto “Our soul is for the benefit of mankind”

Program structure:

Course	Plan A1 (Research only)	Plan A1 (Hi-Fi) (Research only)	Plan A2 (Research with course works)
Compulsory	-	-	8
Elective	-	-	6
Thesis	36	36	Seminar 2, Thesis 20
Total	36	36	36

Study plan

Academic year	Semester	Plan A1 and A1 (Hi-Fi)	Plan A2
1	1	850-836 Thesis 9 credits	850-511 Functional Properties of Food Components 3 credits
		*850-561 Seminar1 1 credit	850-531 Advanced Food Processing 3 credits
	Total 9 credits	950-500 Research Methodology 2 credits	
	Total 9 credits	850-xxx Elective course 3 credits	
2	2	850-561 Thesis 9 credits	850-561 Seminar 1 1 credit
		Total 9 credits	850-820 Thesis 4 credits
	Total 9 credits	850-xxx Elective course 3 credits	
2	1	853-836 Thesis 9 credits	850-820 Thesis 8 credits
		*850-562 Seminar2 1 credit	

Academic year	Semester	Plan A1 and A1 (Hi-Fi)	Plan A2
		Total 9 credits	Total 8 credits
	2	853-836 Thesis 9 credits	850-562 Seminar 2 1 credit 850-820 Thesis 8 credits
		Total 9 credits	Total 9 credits
		Total 36 credits	Total 36 credits

* not counting credit

Elective courses 6 credits

850-500	Module: Food Ingredients from Agricultural Processing and Food Industry By-products	6((3)-9-6)
850-501	Module: Advanced Fruit and Vegetable Technology	6((3)-9-6)
850-512	Advanced Food Analysis and Research Instrumentation	3((2)-3-4)
850-513	Functional Foods	3((2)-3-4)
850-514	Functional Food Ingredients and Alternative Food Additives	3((3)-0-6)
850-515	Meat and Poultry Meat Science	3((2)-3-4)
850-516	Advanced Food and Nutrition Toxicology	3((3)-0-6)
850-517	Utilization of By-Products from Fishery Industry	3((2)-3-4)
850-521	Experimental Design in Product Development	3((3)-0-6)
850-522	Sensory Evaluation of Foods	3((2)-3-4)
850-523	Mastering Innovation and Business Innovation Management	3((3)-0-6)
850-532	Physical and Engineering Properties of Food and Biomaterials	3((2)-3-4)
850-533	Membrane Technology in Food and Biotechnology Industries	3((3)-0-6)
850-534	Starch Technology	3((2)-3-4)
850-535	Food Protein Technology	3((2)-3-4)
850-536	Postharvest and Minimal Processing of Fruits and Vegetables	3((2)-3-4)
850-537	Science and Technology of Fat and Oil	3((2)-3-4)
850-541	Advanced Food Microbiology and Food Safety	3((3)-0-6)
850-542	Foodborne Pathogens and Controls	3((2)-3-4)
850-543	Food Safety and Risk Assessment	3((3)-0-6)
850-600	Special Topics in Food Science and Technology	3((3)-0-6)
857-531	Enterprise Diagnosis in Food Industry	3((3)-0-6)

Duration: 2 years

Graduation Requirements

1. Meet the English performance following the regulation issued by Graduate School
2. Fulfill the program requirements with a GPA of at least 3.00 (except Plan A1)
3. Satisfy the proposal examination and thesis with grade S or X
4. Plan A1 publish the academic article from thesis or a part of thesis in a journal which has a peer review at least 1 article
5. Plan A2 publish the academic article from thesis or a part of thesis in a journal or proceeding which has a peer review at least 1 article