

Master of Science in Fishery Science and Technology Program

The Faculty of Fisheries offers the professional multidisciplinary program in Fishery Science and Technology. We aim to produce and develop researchers who will work in the fishery field through our research oriented program.

- Curriculum Structure

A regular two year program requires a minimum of 36 credits. The program is shaped into six modules to fulfill the knowledge branch of fisheries. The structure of our program is divided into two plans depending on the applicant's aim and experience.

Plan A1 consists of 36 credits for the thesis. The additional audited class participation is required as Seminars and Core Courses for a total of 8 credits.

Plan A2 consists of 12 credits of the thesis and a further 24 credits for course work.

- Thesis	12 credits
- Core Courses	8 credits
Seminar	2 credits
Fishery Resources and Food Security	3 credits
Research Methods in Fishery Science and Technology	3 credits
- Elective Course	16 credits

The students can select at least 12 credit courses from one module and a minimum of 4 credits from affiliated module.

Six modules are offered as follows:

Module I Aquatic Biodiversity and Ecology e.g.

Advanced Phycology

Advanced Taxonomy, Evolution, Physiology and Ecology of Fish

Primary Productivity of Waters

Advanced Limnology

Ecology of Freshwaters

Morphology and Physiology of Seagrasses, Seagrass Community

Advanced Planktonology, Ecology and Biogeography of Marine Plankton

Fish Reproductive Biology and Strategies

Physiology of Crustacean

Behavior of Aquatic Animals

Marine Biological Diversity

Marine Geochemistry

Module II Aquatic Resources and Environmental Management e.g.

Aquatic Toxicology and Hazard Evaluation

Biology of Polluted Water

Coastal and Marine Fishery Management

Inland Fishery and Environmental Management

Fishery Resource Economics

Fishery Environmental Economics

Risk Management in Fisheries

Social Analysis for Fishery Management

Spatial Analysis for Fishery Resources Management

Geoinformatics Application in Fisheries Science

Management Information System in Fisheries

Statistical Analysis for Fishery Research

Environmental Impact Assessment in marine Ecosystems

Estuarine Pollution

Module III Aquaculture Technology e.g.

Advanced Freshwater Aquaculture and Mariculture

Hormone in Aquaculture

Aquaculture Project Planning

Immunology of Aquatic Animals

Applications of Chemicals and Drugs in Aquaculture

Aquatic Animal Genomics and Genetic Improvement

Aquatic Animal Nutrition

Aquatic Animal Feed Processing Technology

Algal Propagation

Diseases and Parasites of Aquatic Animal

Fish Pathology

Sustainable Aquaculture Management

Module IV Fishing Technology e.g.

Fishing Population Dynamics

Fisheries Stock Assessment

Fishery Industrial Development

Remote Sensing in Oceanography

Applied Radiometry to Oceanography

Acoustic Techniques for Fishery Resources Assessment

Deep Sea Fisheries

Marine Affairs

Sustainable Utilization of Marine Resources

Responsible Fishing Technology

Module V Fishery Biotechnology e.g.

Bioactive Substance from Algae

Fishery Product Biotechnology

Marine Natural Products

Pigments in the Sea

Marine Environmental Biotechnology

Module VI Fishery Post-harvest Technology e.g.

Food Additives in Fish and Fishery Products

Seafood Nutrition

Fish Oils

Marine Biotoxins

Protein in Fish and Fish Product

Enzyme from Fish

Food Safety and Quality Management Systems in Fish Processing Plant

Fishery Product Development

Advanced Fish Processing

System Analysis and Management in Fish Processing Industry

- Postgraduate (Master) Program on Tropical Fisheries with International Linkage

In the master program, we offer the international linkage program for students who intend to take selective courses in program member schools at Kagoshima University, Sam Ratulangi University and University of the Philippines Visayas. A student who wants to register for the linkage program shall notify us at the time of entry.

- Qualifications and Admission Requirements

1. An applicant must hold a Bachelor in Science degree or other related field enclosed with research background as thesis.

2. Adequate command of spoken and written English is required for admission. Non-native English-speakers must submit one of the following English language proficiency test results:

- TOEFL overall score of 520 (PBT)/ 190 (CBT)/ 61(iBT) or above
- IELTS overall score of 5.5 or above
- CU-TED score equivalent to TOEFL (iBT) score of 61 or above

For applicants with an international education, qualifications will be approved individually.

3. Three letters of recommendations are required.

4. The applicants who aim to participate in Plan A1Program must have at least one paper published in a journal, academic publication or an academic conference proceedings.

Doctor of Philosophy in Fishery Science and Technology Program

The Faculty of Fisheries offers a doctoral program to serve as a focus of multidisciplinary studies and research in Fishery Science and Technology. The applicants will gain a deeper understanding of their fields of interest through research upon completion of the program.

- Curriculum Structure

A regular three to five year program requires a minimum of 52 and 75 credits, respectively. The program has six modules to fulfill the knowledge branch of fisheries. The structure of the program is divided into two plans depending on the applicant's aim and experience.

Plan 1 is a research oriented program with the aim of producing an innovative thesis. This plan is classified into two formats.

- Plan 1.1 is designed for students with a master's degree. A regular three year program requires 52 credits of thesis. The additional audited class participation is required as Core Courses for a total of 10 credits.

- Plan 1.2 is designed for students with a bachelor's degree. A regular five year program requires 75 credits of thesis. The additional audited class participation is required as Core Courses for a total of 15 credits

Plan 2 is a research oriented program with the objective of achieving high quality research as well as academic advancement and development of occupational skill, and requires additional study participation.

This plan is classified into two formats.

- Plan 2.1 is designed for students with a master's degree. A regular three year program requires 36 credits of thesis and a further 16 credits for course work.

- Plan 2.2 is designed for students with a bachelor's degree. A regular five year program requires 48 credits of thesis and a further 27 credits for course work.

Course	Study Plan/credits			
	Plan 1.1	Plan 1.2	Plan 2.1	Plan 2.2
Thesis	52	75	36	48
Core Course				
- Seminar	4*	6*	4	6
- Fishery Resources and Food Security	-	3*	-	3
- Green Technology in Fishery	3*	3*	3	3
- Advanced Research Methods in Fishery Science and Technology	3*	3*	3	3
Elective Course	-	-	6	12
Total	52	75	52	75

*audit class participation

- Elective Course

The Plan 2.1 students can select a minimum of 3 credits courses from module and minimum of 3 credits from affiliated module.

Six modules and offered as follow:

Module I Aquatic Biodiversity and Ecology e.g.

Biogeochemistry of Benthic Boundary Layer

Hydro-Ecological and Carrying Capacity for Integrated Water Resources Management

Physiological Ecology of Algae

Osmotic and Ionic Regulation in Marine Animals

Marine Benthos

Marine Microbial Ecology

Module II Aquatic Resources and Environmental Management e.g.

Bioassay in Water Pollution Study

Hydro-Ecological and Carrying Capacity for Integrated Water Resources Management

Tropical Fishery Resource Management

Advanced Impact Assessment in Fishery Development

Small-scale Fishery Management

Fishery Conflict Management

Marine Pollution Monitoring and Mitigation

Petroleum Oil in Marine Environment

Module III Aquaculture Technology e.g.

Intensive Aquaculture System

Vaccine Application in Aquatic Animals

Applied Population Genetics for Aquaculture

Aquaculture Pond Bottom Soil Management

Shrimp Pathology

Virology of Aquatic Animals

Module IV Fishing Technology e.g.

Ecological Dynamics of Tropical Fishery Resources

Wave in Oceanic and Coastal Waters

Module V Fishery Biotechnology e.g.

Applied Phycology

Advanced Algal Biotechnology

Bio-Product from Aquatic Resources

Bioactive Marine Natural Products

Module VI Fishery Post-harvest Technology e.g.

Advanced Fishery Product Analysis

Aquatic Food Proteins

Seafood Enzymes

The Plan 2.2 students can select a minimum of 9 credits courses from one module and a minimum of 3 credit from the affiliated module. The student can participate in the courses offered from the master's program under the supervision of thesis committee.

- Qualifications and Admission Requirements

1. An applicant must hold a Bachelor or a Master of Science degree or other related field with a research background as thesis.

2. Applicants who aim to participate in Plan 1.1 or 1.2 Program must have a paper published in a journal or academic publication or academic conference proceedings.

3. Applicants who aim to participate in Plan 1.2 or 2.2 Program are required to have a GPA of at least 3.0 on a 4.0 scale. For the different assessment system, qualifications will be approved individually

4. Adequate command of spoken and written English is required for admission. Non-native English-speakers must submit one of the following English Language proficiency test results with a minimum score:

- TOEFL overall score of 520 (PBT) / 190(CBT) / 61(iBT) or above
- IELTS overall score of 5.5 or above
- CU-TEP score equivalent to TOEFL (iBT) score of 61 or above

For applicants with an international education, qualifications will be approved individually.

5. Three letters of recommendation are required

6. An applicant must submit the concept paper of her/his dissertation research.

- Estimated Academic Fees*

65,000 THB/semester

The fee does not include costs of textbooks and research work.

- Academic Calendar Year

First Semester	August to December
Second Semester	January to May

- Online Submission and More Details

<http://www.interprogram.ku.ac.th>

<http://www.grad.ku.ac.th>

<http://www.fish.ku.ac.th>

- Scholarships for International Students

Students can apply for the international scholarship and research funding from the Graduate School, Kasetsart University. For more information, Please visit <http://www.grad.ku.ac.th/eng.../>