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Royal University of Phnom Penh

Faculty of Engineering
Department of Bioengineering

Honor Bachelor Program in

Food Technology and Engineering

REGISTER NOW

2,500 \$/year

30 students

Why Us?

- English as medium of instruction
- Extraordinary Curriculum developed with Osaka Metropolitan University (OMU) and Swedish partner Universities
- Apply modern curriculum framework CDIO adopted from Massachusetts Institute of Technology (MIT)
- High Experience instructors trained by OMU and Swedish partner universities
- Full equipped laboratories support by Sweden-RUPP and HEIP projects
- Opportunity for Master program

Scholarships (to pay)

- 1000 \$	5 seats
- 1250 \$	15 seats
- 1500 \$	10 seats
- 2500 \$	-

3 Carrier Paths

- Production:
 - Production operator
 - Section head/ team leader/line operator
 - Supervisor/production planner
- QA and QC
 - QC technician/assistant
 - QA&QC supervisor/executive
- Research and Development
 - Assistant food technologist
 - Food technologist/ R&D chef

How to apply!

Download online application:

Application Submit until 30-01-23

Entrance exam: 01-02-23

Result Announcement: 10-02-23

Registration until: 15-02-23

Start: 01-03-23

Contact us!

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Telegram: <https://t.me/+fAogcsiX7j01NGM0>



Osaka Metropolitan University



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Program Description

Introduction

The bachelor program of Engineering in Food Technology and Engineering was established on ... February 2022. The Program focus on the most need of food technologist and engineer in food industry to support and push forward Cambodia's development on agro-industry sustainably. Program the address gaps in knowledge and skills and promotes high commitment to the development of agro-industry and food security. The program was developed with the participation of experts and researchers from Osaka Prefecture University. This program is designed to provide students with the knowledge, skills, and experience necessary for successful career in food technology in Cambodia as well as in Southeast Asia.

Background

The food industry is an issue that has been clearly identified as an important national goal in accordance with the Cambodia Industrial Development Policy 2015-2025 (Royal Government of Cambodia). The policy is designed to prepare the country for the transition from a low-income to middle-income economy in 2030 and high-income economy in 2050 by promoting industrial development. The essence of this action is to maintain the country's sustainable economic growth and environment through economic diversification, increase competitiveness and increase productivity. Promoting the development and research of agro-industry and development in Science, Technology, Engineering and Mathematics (STEM) is a necessary measure. The national Council for Science and Technology of Cambodia, an institution for the promotion of science and technology, has identified 6 priority areas for research and development for 2017-2020, two of which are biotechnology and engineering agriculture.

Cambodia's food processing industry has an urgent need to train human resources at the undergraduate level with advance production and process, innovative research and development to ensure food safety. Food security and environment issues require consideration of agricultural soil and biomass. In addition, we need to strengthen the cycle of application of plant nutrients in order to increase sustainable agricultural yields and reduce the import and synthetic inorganic fertilizers. Crop protection, in addition to the use of synthetic pesticides, is one that need to be addressed through the use of biological technique, for example, the development of new varieties that can adapt to different soil types, climatic condition in a region and in a country. This program educates talented and innovative technical professional who can strengthen the food and biotechnology industry in the country. Also, we aim to be a hub for biotechnology and food education research in Cambodia. Therefore, our vision for next 10 years is to initiate a national doctoral program food technology sector. To achieves these, this program is supported by the

Curriculum

Higher Education Improvement Project (HEIP) under the technical support of Osaka prefecture University (Japan), Lund University (Sweden), Swedish University of Agricultural Science (Sweden), and Umea University (Sweden).

Vision

Bachelor of Engineering Program in Food Technology and Engineering aims to produce graduates who are competent and ready to work in the 21st century, by developing soft skills: creativity, communication, Teamwork, cognitive thinking (Engineering Reasoning & problem solving) and self-learning process with knowledge of food science and technology.

Objectives

1. Competent in principles of food technology and Engineering
2. Able to integrate theoretical, practical and professional experience in a classroom or a real-world setup
3. Have 21st Century skills (CDIO): creative, communication skills and collaboration skills to work effectively.
4. Able to continuous self-development and have moral and ethical principles of professional practice

Program learning Outcome: Food Technology

Knowledge (Competent in principle of food technology and engineering)

1. Understand fundamental theory of basic sciences to explain the technical skills including nutrition, chemistry, food safety, quality, sensory quality, from produces to finish food products
2. Explain the phenomena during preparation, processing, and storing of food product in aspect of chemical, physical, biological changes
3. Understand all necessary food law, regulation and standards

Cognitive (thinking)

4. Apply science and engineering principles in food manufacturing as model or real-world
5. Be able to apply scientific method to food science problems
6. Apply the entrepreneurial and leadership skills
7. Commit to the highest standards of professional integrity and ethical values
8. Understand the importance of responsibility, dependability, punctuality, courtesy, sensitivity, respect for others, and effort in the work place, sustainable manner.

Curriculum

Interpersonal skill (CDIO)

9. Able to work effectively either individually, in team and across multi-disciplinary setups
10. Able to commit to lifelong learning.

Communication, numeric, ICT skill

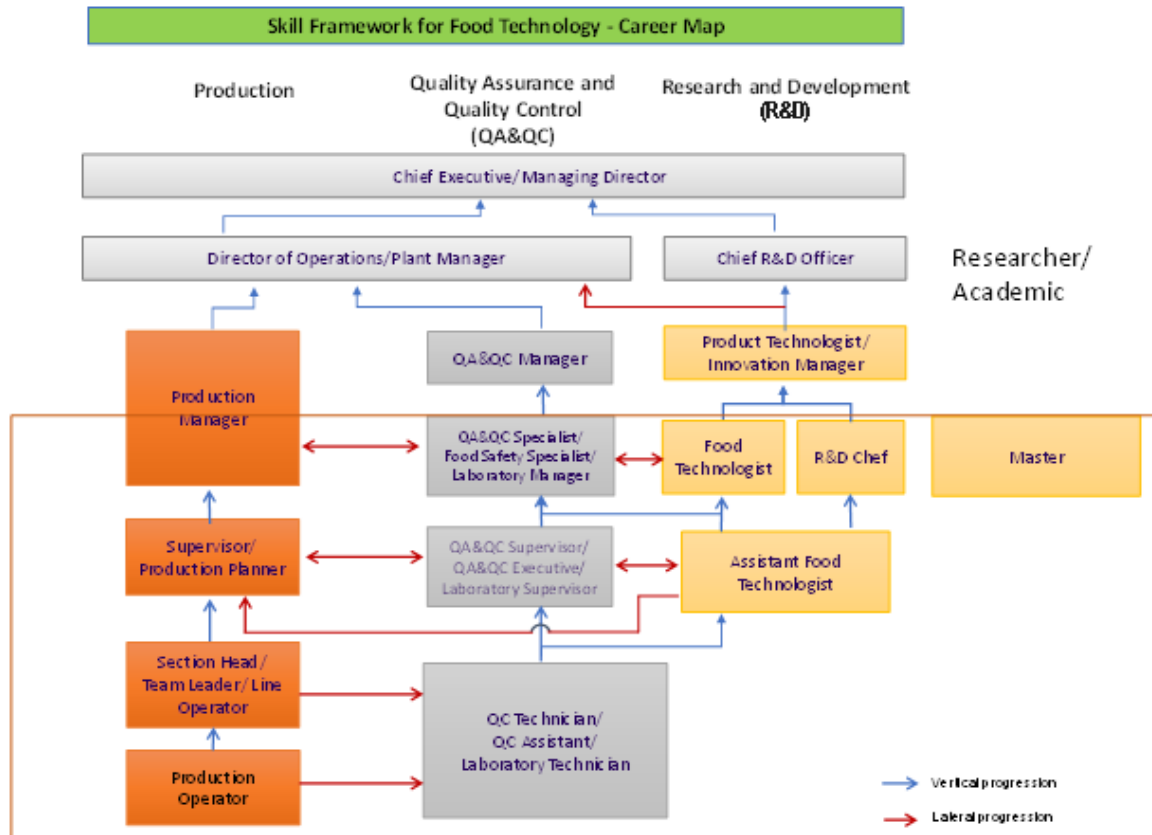
11. Write clear and concise technical reports and scientific writing, and communicate clear and concise technical presentations and data
12. Apply principles from statistics and basic mathematics to food technology and engineering problems

Psychomotor skill

13. Able to operate scientific equipment, analytical equipment, and processing machinery properly/professionally
14. Operate Scientific Modeling and Simulation software



Career Paths



The Career Map serves as a reference to reflect the available job roles and possible career pathways in the Food Manufacturing Sector. The career progression pathways would depend on individual aspiration, performance, capability, experience and company needs.

Food Technology and Engineering has good job perspectives. Graduates generally find a job in food industry, agro-industry, or at the government, universities or institutes. Around 10% of the graduates will pursue a Ph.D degree. There are three categories of job

