

GP-Food

GRADUATE PROGRAM IN FOOD SCIENCE TOHOKU UNIVERSITY

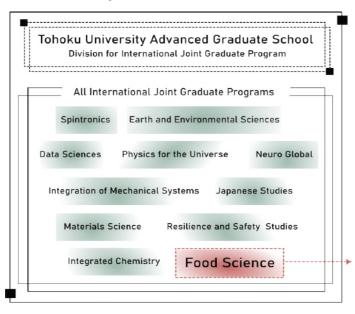
Creating food of the future



Tohoku University Advanced Graduate School International Joint Graduate Program

The International Joint Graduate Program aims to:

- (1) develop advanced human resources that meet modern needs and lead the world,
- (2) create cutting-edge educational programs that enhance the university's research capabilities, and
- (3) address global challenges to achieve a sustainable society.
- GP-Food is the newest program among the eleven International Joint Graduate Programs.



Bringing the wisdom of Tohoku University to solve future food problems

Welcome to the Graduate Program in Food Science (GP-Food). As various challenges directly related to food production, such as population growth and global warming, continue to escalate on a global scale, GP-Food is dedicated to advancing education and research on future foods from a novel perspective to address these pressing issues. The program offers multiple opportunities for participants from diverse graduate schools to engage in discussions about designing the food of the future.

Through an interdisciplinary approach and international collaboration, we aim to prepare program participants to become front-runners in future food production, drawing on the skills and experience they gain through the various activities conducted within GP-Food.

We also hope that the industry will take a keen interest in GP-Food's activities. We are exploring the potential of developing GP-Food as a platform for industry-academia

collaboration in the future. Feedback from both industry and academia on GP-Food's activities would be greatly appreciated.

> Graduate Program in Food Science (GP-Food) Director Professor, Graduate School of Agricultural Science

Tomonori Nochi, PhD

Objective

The program's purpose is to foster the next generation of human resources capable of scientifically designing the food of the future. To meet this purpose, this program will conduct transdisciplinary research on "food science" based on collaboration among the fields of agriculture, medicine, dentistry, pharmacy, literature, and synchrotron

Program learning outcomes

- •Researchers who are able to scientifically design "foods of the future" based on their solid background and an academic understanding of "food."
- Researchers who can independently explore and investigate food, health, and environment-related issues.
- Researchers with solid research expertise, a deep understanding of diverse values and cultures, and outstanding abilities to conduct original research utilizing bioscience and biotechnology-related cutting-edge technologies.
- •Researchers capable of contributing to the development of society with a high sense of purpose and responsibility while considering social and academic needs.
- •Researchers with an international perspective, advanced communication skills, and the ability to promote the advancement of food science research globally.

Curriculum

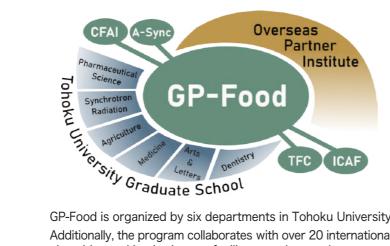
Food Sci. I. Food, production and environment (2 credits) Food Sci. II. Food, function and nutrition (2 credits). Food Sci. III. Food, immune system and health (2 credits). Food Sci. IV. Food, psychology and economy (2 credits), Food Science Food Science kill Development Skill Development Exercise Exercise GP-F00D Short-term overseas Long-term overseas program program 6 months minimum (8 credits) bout 1 week Master PhD Dissertation Thesis

•Master's program students are required to earn 4 credits: at least 2 from the core subjects, 1 from the seminar courses, and 1 from a short-term overseas program.

Doctoral program students are required to earn 17 credits: 8 from the core subjects, 1 from the seminar courses, and 8 from a long-term overseas program.

*Updated as of December 2024

Institutions



GP-Food is organized by six departments in Tohoku University. Additionally, the program collaborates with over 20 international universities and institutions to facilitate student exchanges and overseas research opportunities.

*CFAI: International Education and Research Center for Food and Agricultural Immunology *A-Sync : Center for Agricultural and Life Sciences using Synchrotron Light *TFC: Tohoku Forum for Creativity

*ICAF: Innovation Center for Future Agricultural Production and Food Industry

E-mail: gp-food@grp.tohoku.ac.jp

Promotion Office for the Graduate Program in Food Science Graduate School of Agricultural Science, Tohoku University

E204, Graduate School of Agricultural Science Building, Tohoku University 468-1 Aramaki-Aza-Aoba, Aoba-Ku, Sendai, Miyagi 980-8572, JAPAN Telephone: (+81)-22-757-4491

Website ▶



Overall schedules

	M1	M2	D1	D2	D3
April	Е	ntrance ceremor Orientation	ny I		
May		Course registration	Course registration	Course registration	Course registration
June					
July		Food Science			
August		Short-term Courses			
September		(about 1 week)			
October					
November					
December	Information session			Long-term overseas	
January	Application period			program (6 months)	
February	Entrance	Master thesis Mid-term			PhD dissertation Final
March	examination (QE 1)	examination (QE 2)			examination (QE 3)

Voices from GP-Food students



I conduct taste recall training for healthy people and patients using the basic five tastes and five different sweeteners. At the same time, I aim to develop a new method for taste rehabilitation. Since there are only a few treatments for taste disorders in clinical practice, I would like to devise a future diet for patients who have anorexia or taste disorders. Like the Japanese idiom "A balanced diet leads to a healthy body," diet is a major life-related issue. Let's do delicious and enjoyable food science research



Kenshi Kaku

My study aims to clarify how pesticide exposure during the postnatal developmental period affects central nervous system development by evaluating changes in brain function. In the future, I hope that an appropriate evaluation of the potential risks of pesticides could help create a society that can use pesticides for food production with confidence. Considering that, I think GP-Food is the ideal program for those who want to contribute to food science. I can't wait for you to join and work together with us!



My research focuses on the psychological aspects of human behavior related to a healthy diet, understanding what we need to solve, and the related regulations' limitations. Acceptance, preferences, and satisfaction have been essential to eating and drinking behavior, not only in past and present societies but especially in the future food market. I think GP-Food is the perfect program for you if you are looking for an excellent opportunity to engage in interdisciplinary research at a practical level and broaden the scope of your study.