



Tohoku University Global COE program:
“World Center of Education and Research for Trans-disciplinary Flow Dynamics”

International Internship Program Student Award 2009 Application Guideline

The purpose of International Internship hosting is by accepting doctoral course students from overseas, to support flow dynamics research and contribute to the formation of Tohoku University Global COE “World Center of Education and Research for Trans-disciplinary Flow Dynamics” (hereafter the GCOE).

The program, by receiving students from overseas research institutions/universities for a short period of time (1 to 6 months) at Tohoku University, or by dispatching Tohoku University students to overseas institutions/universities for short period of time (1 to 6 months), offers the participating students opportunities to experience different culture, to meet eminent researchers and educationists, and, to work for his/her own research works complimentary to his/her background research work with proper supervisory support of the visiting university/institution. The GCOE is expecting the participating students in this program will grow in future as world class leaders with strong competencies in various fields.

The program aims to encourage the program participating students to work in the joint research works between Tohoku University and foreign universities, furthering the development of his/her researcher’s network and overseas research bases.

1. Qualification of the receiving students at Tohoku University

- Doctoral course students at universities/institutions in foreign countries/districts with close connections/ relationships with Tohoku University having multi-stage network arrangement as follows:
 - Universities that have a liaison office with Tohoku University. (**)
 - Departments that have concluded an International Academic Exchange Agreement with Institute of Fluid Science (IFS), Tohoku University. (***)

- Universities that have concluded an International Exchange Agreement with Tohoku University, coordinated by Institute of Fluid Science (IFS), Tohoku University. (***)
 - Universities and Institutions that are currently conducting joint research projects with Institute of Fluid Science, Tohoku University (IFS).
 - Universities/institutions that have close connections/relationships with program members of the GCOE (*) and other researchers of Tohoku University.
- Doctoral students who are participating in this International Internship Program should first be approved and recommended either by a member of the GCOE, by Division of Mechanical Engineering, Graduate School of Engineering, Tohoku University, or, by Institute of Fluid Science, Tohoku University.
 - Students should have sufficient communication skills.
 - Students are expected to contribute to the development of the International Internship Program of the GCOE with injections of different views and perspectives of international environment.

2. Number of interns to be accepted a year by the GCOE at Tohoku University.

Approximately 10

3. Length of Time Period of International Internship Program for each Student.

Generally, more than 1 month and less than 6 months from April 1st, 2009 through March 20th, 2010. You may need to obtain a valid visa to enter Japan. Please check with relevant authorities.

4. Support Content from the GCOE

Allowable expenses provided by the GCOE for each participating International Internship Student include the followings, 1) , 2) and 3), provided the maximum total provided does not exceed 1,500,000 JPyen.

- 1) A round-trip air ticket to Sendai, Japan from your current residential place with the

cheapest economy-class rate.

- 2) Actual cost of accommodation (e.g. standard university-owned dormitory arranged by the GCOE)
- 3) Living allowance of a day of approx. 2,500 JPyen.

5. Obligations of International Internship Students

- The Students must be covered by oversea travel insurance (including personal liability insurance) during the period of internship.
This program is not responsible for accidents or illness which may occur during the stay of the Students.
- The students must submit report papers of their works in the specified format designated by the GCOE. The reports thus submitted to the GCOE may be released in public at a later date.
- The students must attend and report the results of their work at the GCOE Research Exchange Meetings.
- The Students are encouraged to report the research results during the course of the International Internship Program at international conferences, or utilize the research results as a part of their doctoral thesis.

6. Selection and Guideline

A completed application form and a recommendation letter by your supervisor are necessary to be submitted to the GCOE. Awarded students shall be notified promptly by E-mail from the GCOE Office, after the reviewing process is completed. Awarded Students for the International Internship Program (hereafter the Awarded Students) are expected to perform the followings during the period:

- 1) The Awarded Students contribute to the formation of the GCOE.
- 2) The Awarded Students perform his/her own research works in the Internship period.
- 3) The Awarded Students participates in International Joint Research Programs carried out by cooperation between Tohoku University and the Partner universities/institutions. It is desirable that the Awarded Students participate in joint research programs carried out by supervisors of the host-side and oversea researchers.

The GCOE especially recommend the students to apply for this program, who are

currently involved in the Joint International Research works with Tohoku University, by participating through the GCOE Multi Stage Network.

7. Application Procedure

Applicant is requested to download the application form from the website depicted below, fill in the application form, obtain two recommendation letters, one from the current supervisor and the other one from the accepting supervisor at Tohoku University, and send the documents by postal mail to the following address. (Please mark in red, "GCOE Application Form Inside" on the envelope.)

<http://www.ifs.tohoku.ac.jp/gcoe/eng/application/index.html>

Send to:

Tohoku University Global COE "World Center of Education and Research for Trans-disciplinary Flow Dynamics" Katahira 2-1-1, Aoba-ku, Sendai, Miyagi-ken 980-8577 Japan Telephone/Fax: +81-22-217-5301
E-mail: office@gcoe.ifs.tohoku.ac.jp

Deadline:

Two (2) months prior to the planned departure date.

Recruitment may be closed upon the maximum numbers of International Internship Program students for the year should be fulfilled.

* Program Members of Tohoku University Global COE Program “World Center of Education and Research for Trans-disciplinary Flow Dynamics”

Name	Affiliated Department, position title
Shigenao MARUYAMA	Institute of Fluid Science, Prof.
Toshiyuki TAKAGI	Institute of Fluid Science, Prof.
Masami NAKANO	Institute of Fluid Science, Prof.
Kazuhiro NAKAHASHI	Department of Aerospace Engineering, Graduate School of Engineering, Prof.
Jun ISHIMOTO	Institute of Fluid Science, Assoc. Prof.
Makoto OHTA	Institute of Fluid Science, Assoc. Prof.
Kaoru MARUTA	Institute of Fluid Science, Prof.
Mamiko SASAO	Department of Quantum Science and Energy Engineering, Graduate School of Engineering, Prof.
Takatoshi MIURA	Department of Chemical Engineering, Graduate School of Engineering, Prof.
Goro MASUYA	Department of Aerospace Engineering, Graduate School of Engineering, Prof.
Hideya NISHIYAMA	Institute of Fluid Science, Prof.
Hideaki KOBAYASHI	Institute of Fluid Science, Prof.
Taku OHARA	Institute of Fluid Science, Prof.
Akira MIYAMOTO	New Industry Creation Hatchery Center, Prof.
Junichiro MIZUSAKI	Institute of Multidisciplinary Research for Advanced Materials, Prof.
Michio TOKUYAMA	WPI Research Center : Advanced Institute for Materials Research, Prof.
Seiji SAMUKAWA	Institute of Fluid Science, Prof.
Tetsuya KODAMA	Graduate School of Biomedical Engineering, Prof.
Takashi TOKUMASU	Institute of Fluid Science, Assoc. Prof.
Shigeru OBAYASHI	Institute of Fluid Science, Prof.
Yu FUKUNISHI	Department of Mechanical Systems and Design, Graduate School of Engineering, Prof.
Keisuke ASAI	Department of Aerospace Engineering, Graduate School of Engineering, Prof.
Keisuke SAWADA	Department of Aerospace Engineering, Graduate School of Engineering, Prof.
Hidetoshi HASHIZUME	Department of Quantum Science and Energy Engineering, Graduate School of Engineering, Prof.
Takatoshi ITO	Institute of Fluid Science, Assoc. Prof.

Research cooperation members of Tohoku University Global COE Program “World Center of Education and Research for Trans-disciplinary Flow Dynamics”

Yuriko TAKESHIMA	Institute of Fluid Science, Assistant Professor
Hideyuki AOKI	Department of Chemical Engineering, Graduate School of Engineering, Associate Professor
Takehiko SATO	Institute of Fluid Science, Associate Professor
Hideo MIURA	Fracture and Reliability Research Institute, Graduate school of Engineering, Professor
Hiroo YUGAMI	Department of Mechanical Systems and Design, Graduate School of Engineering, Professor
Shigeru YONEMURA	Institute of Fluid Science, Associate Professor
Nozomu HATAKEYAMA	Department of Applied Chemistry, Graduate School of Engineering, Associate Professor
Hiroyuki MIKI	Institute of Fluid Science, Senior Assistant Professor
Kazuhisa SATO	Institute of Multidisciplinary Research for Advanced Materials, Assistant Professor
Katsuhide OHIRA	Institute of Fluid Science, Professor
Atsuki KOMIYA	Institute of Fluid Science, Senior Assistant Professor
Yuka IGA	Institute of Fluid Science, Assistant Professor

** Oversea liaison office:

1) The University of New South Wales
2) The university of Sydney
3) Moscow State University
4) KTH Royal Institute of Technology
5) Syracuse University
6) Korea Advanced Institute of Science and Technology
7) Institut National des Sciences Appliquées de Lyon (INSA-Lyon)

***International Exchange Agreement

- University-wide agreements

Università degli Studi di Roma "La Sapienza"
RWTH Aachen University
University of Science and Technology of China
Université Pierre Marie Curie (Paris VI)
Nanjing University
Pohang University of Science and Technology
National Taiwan University
The University of Nottingham
Helsinki University of Technology
The University of Auckland
Tampere University of Technology
Ecoles Centrale Group (Lyon, Paris, Lille, Nantes, Marseille)
Novosibirsk State University
Pusan National University
Xi' an Jiaotong University
Beihang University
Siberian Branch of Russia Academy of Science
Tsinghua University
National University of Singapore, Faculty of Engineering
Jilin University
Nanjing University of Aeronautics and Astronautics

– Departmental agreements

Cranfield University Aerospace
University of Toronto, Institute for Aerospace Studies (UTIAS)
Institute for Fluid Mechanics, University of Karlsruhe(TH)
Research Institute for Technical Physics and Materials Science of the Hungarian Academy of Sciences
Institute of Plasma Physics, Academy of Sciences of the Czech Republic
School of Mechanical and Aerospace Engineering, Nanyang Technological University
Electrical Engineering Faculty, Politehnica University of Bucharest
Institute of Theoretical Physics, Chinese Academy of Sciences
Institute of Power Mechanical Engineering and Mechanics Moscow Power Engineering Institute(Technical University)
Budapest University of Technology and Economics

Institute of Physics, Chinese Academy of Sciences
Mechanical Engineering Department, Faculty of Engineering, University of Trieste
School of Mechanical Engineering, National Technical University of Athens
National Applied Research Laboratories(NARL), National Nano Device Laboratories(NDL)
School of Mechanical Engineering, Sungkyunkwan University
University of Kentucky, College of Engineering
Rice University, George R. Brown School of Engineering
Semmelweis University, Faculty of Pharmacy