

International Affiliated Double-Degree Program

Summer School

August 1–5, 2011

Center for International Cooperation in Engineering Education
Graduate School of Advanced Technology and Science
The University of Tokushima
Tokushima, Japan

Sponsors

- ✧ Center for International Cooperation in Engineering Education (CICEE).
- ✧ The University of Tokushima.
- ✧ International Center, The University of Tokushima.
- ✧ FD Committee, Faculty of Engineering, The University of Tokushima.
- ✧ Faculty of Integrated Arts and Science, The University of Tokushima.

Contents

Course Details

- (i) Nanotechnology and Materials Science Engineering Course
- (ii) Electrical and Electronic Engineering Course
- (iii) Civil and Environment Engineering Course

General Information

The Center for International Cooperation in Engineering Education (CICEE) at The University of Tokushima is pleased to announce that it will be hosting a summer school program for engineering graduate students who are studying at The University of Tokushima or its partner institutions. This program offers the following three courses: Nanotechnology and Materials Science Engineering, Electrical and Electronic Engineering, and Civil and Environment Engineering Course. Students may enroll in only one of the three courses. All courses are offered in English by both guest lecturers and faculty members of The University of Tokushima.

Registration

Students are required to submit a registration form to the CICEE Office by e-mail, fax or post prior to the program, no later than Tuesday, May 31, 2011. Registration fee is 3000 Yen for students and participants are responsible for their local travel expenses to The University of Tokushima and any other living expenses while in Tokushima except accommodation.

Schedule

Each course has its own schedule for most of the period of the Summer School. Additionally, here is the common schedule for all participants.

(i) Opening Ceremony

Date and Time: Monday, August 1, 9:00 a.m.- 9:50 a.m.

Registration begins at 8:30 a.m. Please be prompt.

Place: M705, Mechanical Engineering Building, Josanjima campus

Opening Remarks:

1. Prof. Susumu Kagawa (President, The University of Tokushima, Japan)
2. Prof. Tokuo Ohnishi (Dean, Faculty of Engineering,
The University of Tokushima, Japan)
3. Prof. Kiyoshi Fukui (Director, International Center,
The University of Tokushima, Japan)

(ii) Common Lectures

1. Common Lecture 1

Date and Time: Monday, August 1, 10:00-10:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Miura Hajime (The Faculty Integrated Art and Science,
The University of Tokushima)

Title: Physical activity may help keep aging healthy

2. Common Lecture 2

Date and Time: Monday, August 1, 11:00-11:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Sato Masaya (The Faculty Integrated Art and Science,
The University of Tokushima)

Title: "Culture of Giant Trees"

3. Common Lecture 3

Date and Time: Tuesday, August 2, 9:00-9:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Hiroyoshi Sei (Institute of Health Biosciences,
The University of Tokushima)

Title: "Biological clock and its mechanism"

4. Common Lecture 4

Date and Time: Wednesday, August 3, 9:00-9:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Matoba Hideki (The Faculty Integrated Art and Science,
The University of Tokushima)

Title: "Resistance training for health promotion"

5. Common Lecture 5

Date and Time: Wednesday, August 3, 10:00-10:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Ohashi Makoto (The Faculty Integrated Art and Science,
The University of Tokushima)

Title: "A critical overview of "Culture in TOKUSHIMA"

From the stand point of "traditional" and "modern culture" in Japan

6. Common Lecture 6

Date and Time: Thursday, August 4, 9:00-9:50.

Place: M705, Mechanical Engineering Building, Josanjima campus

Prof. Shuo-Yan Chuo (Dean, Office of international Affair
National Taiwan University of Science and Technology, Taiwan)

"Data Mining and Technology-enabled Services"

(iii) Intercultural meeting

Date and Time: Wednesday, August 3, 18:00

Place: University Cafeteria, Josanjima campus

(iv) Field Trip For Students

Date and Time: Friday, August 5, 8:00-16.00

Meeting Place: In front of the CICEE office, First floor, K building

Trip 1:

Schedule:

8:00	Departure from Tokushima University.
9:00	Awaji bridge, Maiko
12:00	Lunch
13:00	Departure from Awaji bridge
13:30-	Sightseeing around Awaji bridge
15.00	Departure from Awaji
16.00	Arrival at Nichia Hall, Shinkura campus

Trip 2:

8:00	Departure from Tokushima University.
9:00	Marine Cruise, Hiwasa
12:00	Lunch
13:00	Departure from Marine Cruise, Hiwasa
13:30-	Sightseeing around Marine Cruise
15.00	Departure from Hiwasa
16.00	Arrival at Nichia Hall, Shinkura campus

(v) Closing Ceremony

Date and Time: Friday, August 5, 16:00-17:00.

Place: Nichia Hall, Shinkura Campus

Closing Remarks:

1. Prof. Makoto Wada (Vice President, The University of Tokushima).
2. Prof. Tokuo Ohnishi (Dean, Faculty of Engineering, The University of Tokushima)

Nanotechnology and Materials Science Engineering Course

Place: M 311 (Mechanical Engineering Building, 3rd Floor)

Schedule

Day/ Time	Monday August 1	Tuesday August 2	Wednesday August 3	Thursday August 4	Friday August 5
9:00 9:50	Opening ceremony	Common lecture 3 (Hiroyoshi Sei)	Common lecture 4 (Matoba Hideki)	Common lecture 6 (Shuo-Yan Chuo)	Field trip (8:00 to 16:00)
10:00 10:50	Common lecture 1 (Miura Hajime)	Lecture 4 (Amr S. Helmy)	Common lecture 5 (Ohashi Makoto)	Lecture 10 (Hitoshi Takagi)	
11:00 11:50	Common lecture 2 (Sato Masaya)	Lecture 5 (Mark Jones)	Lecture 6 (Hassan Mahfuz)	Lecture 11 (Keiji Minagawa)	
13:00 13:50	Lecture 1 (Christoph Rehbock)	Laboratory visit I	Lecture 7 (Koichi Ute)	Lecture 12 (Yun-Hae Kim)	
14:00 14:50	Lecture 2 (Keizo Nakagawa)	Laboratory visit II	Lecture 8 (Syuichi Hashimoto)	Lecture 13 (Yoshihiro Deguchi)	
15:00 15:50	Lecture 3 (Yasuhiro Mizutani)	Laboratory visit III	Lecture 9 (Tomoki Yabutani)	Lecture 14 (Masashi Kurasina)	Closing ceremony (16:00- 16:30)

Titles :

1. Christoph Rehbock : Gold nanoparticles, bioconjugation and liquid flow technique
2. Keizo Nakagawa : Catalytic application of silica-coated metal nanoparticles
3. Yasuhiro Mizutani : Fundamental of optics for material science
4. Amr S. Helmy : Harnessing second order non-linearities in monolithic laser cavities using nano-structuring
5. Mark Jones : X-ray diffraction: a tool for materials characterization
6. Hassan Mahfuz : Nanoparticle reinforcement into polymers for structural nanocomposites
7. Koichi Ute : Polymers in daily life
8. Syuichi Hashimoto : Optical properties gold nanoparticles
9. Tomoki Yabutani : Analysis of ultra-trace metals
10. Hitoshi Takagi : An introduction to environment-friendly polymer materials
11. Keiji Minagawa : Rheology of stimuli-responsive materials
12. Yun-Hae Kim : Development of green ship technology by composites
13. Yoshihiro Deguchi : Industrial applications of Laser Diagnostics
14. Masashi Kurasina : Syntheses and properties of nano-sized materials

Common Activities

- (i)** Opening Ceremony
- (ii)** Intercultural meeting
- (iii)** Field trip
- (iv)** Closing ceremony

Electrical and Electronic Engineering Course

Place: K307, K602, K201,K206 (K Building)

Schedule

Day/ Time	Monday August 1	Tuesday August 2	Wednesday August 3	Thursday August 4	Friday August5
9:00 9:50	Opening ceremony	Common lecture 3 (Hiroyoshi Sei)	Common lecture 4 (Matoba Hideki)	Common lecture 6 (Shuo-Yan Chuo)	Field trip (8:00 to 16:00)
10:00 10:50	Common lecture 1 (Miura Hajime)	Lecture 3 (Nishino) (K602)	Common lecture 5 (Ohashi Makoto)	Lecture 13 (Hojo) (K206)	
11:00 11:50	Common lecture 2 (Sato Masaya)	Lecture 4 (Nishino) (K602)	Lecture 9 (Ueta) (K201)	Lecture 14 (Hojo) (K206)	
13:00 13:50	Lecture 1 (Nagase) (K307)	Lecture 5 (Wang) (K602)	Lecture 10 (Ueta) (K201)	Lecture 15 (Ao) (K206)	
14:00 14:50	Lecture 2 (Nagase) (K307)	Lecture 6 (Wang) (K602)	Lecture 11 (Uwate & Nishio) (K201)	Lecture 16 (Ao) (K206)	
15:00 15:50	Laboratory visit I	Lecture 7 (Zhang) (K602)	Lecture 12 (Uwate & Nishio) (K201)	Laboratory visit 2	Closing ceremony (16:00- 16:30)
16:00 16:50		Lecture 8 (Zhang) (K602)			

Titles :

1. Masao Nagase : The Basis of Graphene: a new carbon nano-material.
2. Katsushi Nishino : Physics and fabrication of photonic semiconductor devices.
3. Shaoping Wang : Prognostics and health management of aircraft system.
4. Guan-Jun Zhang : Smart power transformer and oil-paper insulation monitoring and diagnostics.
5. Tetsushi Ueta : Oscillation conditions in circuits and systems.
6. Yoko Uwate & : Solving combinatorial optimization problems exploiting neural networks and chaos.
Yoshifumi Nishio
7. Masahide Hojo : Power electronics for high penetration of renewable energies.
8. Jin-Ping Ao : Semiconductor device and its application.

Common Activities

- (i)** Opening Ceremony
- (ii)** Intercultural meeting
- (iii)** Field trip
- (iv)** Closing ceremony

Civil and Environmental Engineering Course

Place: Room A408 (Civil Engineering Building, 5th floor)

Schedule

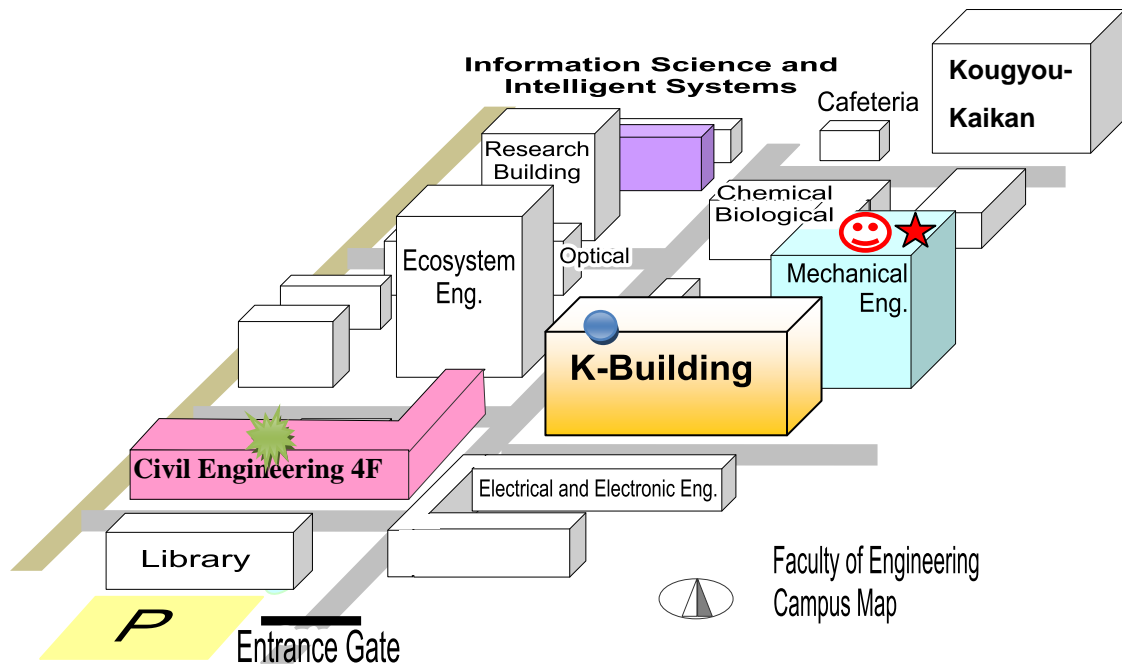
Day/ Time	Monday August 1	Tuesday August 2	Wednesday August 3	Thursday August 4	Friday August 5
9:00 9:50	<i>Opening ceremony</i>	Common lecture 3 (Hiroyoshi Sei)	Common lecture 4 (Matoba Hideki)	Common lecture 6 (Shuo-Yan Chuo)	<i>Field trip</i> <i>(8:00 to 16:00)</i>
10:00 10:50	Common lecture 1 (Miura Hajime)	Lecture 3 (Takao Ueda)	Common lecture 5 (Ohashi Makoto)	Lecture 11 (Takeshi Watanabe)	
11:00 11:50	Common lecture 2 (Sato Masaya)	Lecture 4 (Yasunori Kozuki)	<i>Laboratory visit II</i> (Wind Eng. Lab)	<i>Laboratory visit III</i> (Concrete Eng. Lab)	
13:00 13:50	Lecture 1 (Ryosuke Uzuoka)	Lecture 5 (Jing-Cai Jiang)	Lecture 8 (Fumiaki Nagao and Minoru Noda)	Lecture 12 (Hideo Yamanaka)	
14:00 14:50	<i>Laboratory visit I</i> (Geotechnical Eng. Lab)	Lecture 6 (Jing-Cai Jiang)	Lecture 9 (Bao Viet Nguyen)	Lecture 13 (Xiaowei Tang)	
15:00 15:50	Lecture 2 (Tsuneo Ohsumi)	Topic 7 (Atsushi Mikami)	Lecture 10 (Bao Viet Nguyen)	Lecture 14 (Xiaowei Tang)	<i>Closing ceremony</i> <i>(16:00- 16:30)</i>

Title:

1. Ryosuke Uzuoka : Soil-water-air coupled analysis with porous media theory.
2. Tsuneo Ohsumi : The mechanics of earthquake and faulting.
3. Takao Ueda : Maintenance and repair of concrete structures.
4. Yasunori Kozuki : Restoration of eutrophicated coastal environment.
- 5-6. Jing-Cai Jiang : New developments in slope stability and back analysis of slope failures.
7. Atsushi Mikami : Observed ground motions during the 2011 Tohoku-Oki earthquake.
8. Fumiaki Nagao and : Introduction to wind engineering.
Minoru Noda
- 9-10. Bao Viet Nguyen : To determine behavior of shaft friction of bored piles based on axial deformation measurement.
11. Takeshi Watanabe : Introduction of nondestructive testing (NDT) of concrete.
12. Hideo Yamanaka : Urban transport strategies and bicycle promotion planning.
- 13-14. Xiaowei Tang : Engineering behaviour of marine soils and deformation mechanism of offshore foundations.

Common Events

- (i)** Opening Ceremony
- (ii)** Intercultural meeting
- (iii)** Field trip
- (iv)** Closing ceremony



😊 **Opening Ceremony** : Room No. 705, Mechanical Engineering Building, Josanjima campus.

😞 **Closing Ceremony** : Nichia Hall, Shinkura campus.

★ **Nanotechnology and Materials Science Engineering Course**: Room No. M311

🔵 **Electric and Electronic Engineering Course**: Room No. K307, K602, K201 and K206

🌟 **Civil and Environment Control Engineering Course**: Room A408