

International Affiliated Double-Degree Program  
Summer School

August 3–7, 2009

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

# Contents

## General Information

### Course Details

Nano-technology Engineering Course  
Applied Engineering of Electronic Circuits Course  
Environment Control Engineering Course  
Information Science and Intelligent Systems 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 four courses: Nano-technology Engineering, Applied Engineering of Electronic Circuits, Environment Control Engineering, and Information Science and Intelligent Systems. Students may enroll in only one of the four 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 Friday, June 30, 2009. No fee is required for the registration, but students are responsible for their travel expenses to The University of Tokushima and any other living expenses while in Tokushima.

### 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 3, 10:00-10:30.

Registration begins at 9:30 a.m. Please be prompt.

Place: Kougyou Kaikan.

Opening Remarks:

1. President Dr. Toshihiro AONO (The University of Tokushima).
2. Prof. Kazuo HOSOI (President's Aide for International Affairs, The University of Tokushima).

**Lecture: "Intercultural Communication and English."**

Date and Time: Monday, August 3, 10:30-11:00.

Dr. Walter Carpenter

**Common Lecture**

Date and Time: Monday, August 3, 11:00-12:00.

Dr. Tetsuya SUEKANE

"Global warming on the earth and mitigation technologies."

**Daily Scheduled Lunch Break**

August 3-7: 12:00-13:00.

**(ii) Common Visits to Library and Laboratory**

Meeting Place: In front of the CICEE.

University campus tour.

Meeting Date and Time: Monday, August 3, 13:00-13:45.

Laboratory visit.

Meeting Date and Time: Monday, August 3, 14:00-16:45.

**(iii) (a) Company Field Trip For Students**

Date and Time: Tuesday, August 4, 13:20-18.15

Meeting Place: In front of the CICEE.

Schedule:

13.20 Departure from Tokushima University.

14:15 Arrival at Shikoku Kakoki Company, Kitajima-cho.

15.15 Departure from Shikoku Kakoki Company.

15:45 Arrival at Ryozenji Temple.

16.15 Departure from Ryozenji Temple.

16.45 Arrival at O-asahiko Shrine.

17.15 Departure from O-asahiko Shrine.

17.45 Arrival at Hekisui Dormitory Naruto.

18.15 Arrival at Shinkura Kaikan.

**(b) Faculty Meeting For Professors**

Date and Time: Tuesday, August 4, 13:30-16:15

Place: Room M311, (Mechanical Engineering Building, 3rd Floor)

13:30 -- 14:30 Past and Current Experience

14:30 -- 15:00 Refreshments and Socializing

15:00 -- 16:15 Future Possibilities

**(iv) Closing Ceremony**

Date and Time: Friday, August 7, 13:00-13:30.

Place: Kougyou Kaikan.

Closing Remarks:

1. Prof. Kazuo HOSOI (President's Aide for International Affairs, The University of Tokushima).

**(v) A Japanese Cultural Experience**

Meeting Place: In front of the CICEE.

Meeting Date and Time: Monday, August 7, 13:35.

Schedule:

13.35 Departure from Tokushima University.

14:20 Arrival at *Ai no Yakata* (藍の館).

15:20 Departure from Ai no Yakata (藍の館) Entrance fee : 250 yen

Traditional fabric dying experience: 500yen

16:00 Arrival Awa-Odori Kaikan

17:00 Departure Awa-Odori Kaikan

17.30 Arrival at Shinkura Kaikan

## Nano-Technology Engineering Course

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

### Schedule

	9:00-9:45	10:00-10:45	11:00-11:45	12:00-13:00	13:00-13:45	14:00-14:45	15:00-15:45	16:00-16:45
<b>Mon, August 3</b>		(i)		Lunch break	(ii)			
<b>Tue, August 4</b>	(1)	(2)			(iii) /Faculty Meeting			
<b>Wed, August 5</b>	(3)	(4)	(5)		(6)	(7)	(8)	
<b>Thu, August 6</b>	(9)	(10)	(11)		(12)	(13)	(14)	
<b>Fri, August 7</b>	(15)	(16)	(17)		(iv)	(v)		

- |   |  |
|---|--|
| <p>(1) <b>Fundamentals of transmission electron microscopy</b>,<br/>Dr. Tatsuya OKADA, Prof.</p> <p>(2) <b>Nano-Materials and Their Application</b>, Dr. Wei GAO, Prof.<br/>(Auckland University, New Zealand)</p> <p>(3) <b>An introduction to green composites</b><br/>Dr. Hitoshi TAKAGI, Prof.</p> <p>(4) <b>Lecture of Hard Coatings :Method and Application</b>,<br/>Dr. Manabu YASUOKA (Fujikoshi Co. Ltd)</p> <p>(5) <b>The growth mechanism of nano-structured crystals for noble metals</b> , Dr. Xiaoping SONG, Prof. (Xi'an Jiaotong University)</p> <p>(6) <b>Carbon Nanotubes : Synthesis, Structure, Properties and Applications</b>, Dr. Pankaj KOINKAR, Assist. Prof.</p> <p>(7) <b>Optical processes in semiconductors and its application</b>,<br/>Dr. Takuro TOMITA, Assist. Prof.</p> <p>(8) <b>Material processing with femtosecond laser</b>,<br/>Dr. Shigeki MATSUO, Assoc. Prof.</p> | <p>(9) <b>Structural analysis using synchrotron radiation</b>,<br/>Dr. Kei-ichiro MURAI, Assoc. Prof.</p> <p>(10) <b>Laser-induced fabrication and characterization of nanoparticles</b>,<br/>Dr. Shuichi HASHIMOTO, Prof.</p> <p>(11) <b>Fabrication of SiC Ceramics and it's Application</b><br/>Dr. Han Ki YOON, Prof. (Dong-eui University)</p> <p>(12) <b>Control of body color through cation and anion nonstoichiometries</b>, Dr. Toshihiro MORIGA, Prof.</p> <p>(13) <b>Analyses of trace elements in Biological and Environmental samples</b>, Dr. Tomoki YABUTANI, Assoc. Prof.</p> <p>(14) <b>Biocompatible surface processing technique and implantable biosensor fabrication</b>, Dr. Mikito YASUZAWA, Assoc. Prof.</p> <p>(15) <b>Separation technology</b>, Dr. Masahiro KATOH, Assoc. Prof.</p> <p>(16) <b>The technology of CVD diamond and DLC coating</b>,<br/>Dr. Tae-Gyu KIM, Prof. (Pusan National University)</p> <p>(17) <b>Development of transparent and conductive oxide thin films by using sputtering method</b>,<br/>Dr. Ri-ichi MURAKAMI, Prof</p> |
|---|--|

## Applied Engineering of Electronic Circuits course

**Place: C10 (Information Science and Intelligent Systems Building, 1st Floor)**

### Schedule

	9:00-10:00	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:30	14:30-16:00	16:00-17:45
Mon, August 3		(i)		Lunch break	(ii)		
Tue, August 4	(1)				(iii) /Faculty Meeting		
Wed, August 5	(2)				(3)		
Thu, August 6	(4)	(5)			(6)	(7)	
Fri, August 7	(8)				(iv)	(v)	

- (1) **Video processing and its applications,**  
Dr. Tian SONG, Asst. Prof.
- (2) **Oscillator design: an aspect from nonlinear analysis,**  
Prof. Tetsushi UETA
- (3) **Complex phenomena in coupled nonlinear electronic circuits,**  
Prof. Yoshifumi NISHIO
- (4) **Pattern Matching and its applications,** Prof. Jianru XUE
- (5) **Progress on active materials for electronic devices,** Prof. Youlong XU
- (6) **Basics of neural networks and their applications for biomedical engineering,**  
  
Dr. Masatake AKUTAGAWA, Assoc. Prof.
- (7) **Basic technologies of semiconductor monolithic integrated circuits,**  
Dr. Jin-Ping AO, Assoc. Prof.
- (8) **Extra Lectures**

## Environment Control Engineering Course:

Place: Room A508 ( Civil Engineering Building, 5<sup>th</sup> floor)

### Schedule

	9:00-9:45	10:00-10:45	11:00-11:45	12:00-13:00	13:00-13:45	14:00-14:45	15:00-15:45	16:00-16:45
Mon, August 3		(i)		Lunch Break	(ii)			
Tue, August 4	(1)				(iii) /Faculty Meeting			
Wed, August 5	(2)				(3)			
Thu, August 6	(4)				(5)			
Fri, August 7					(iv)	(v)		

- (1) **Introduction to wind engineering**, Dr. Fumiaki NAGAO, Prof. and Dr. Minoru NODA, Assoc. Prof.
- (2) **Recent developments in earthquake geotechnical engineering**, Dr. Jing-Cai JIANG, Assoc. Prof.
- (3) **Signal processing and data analysis in earthquake engineering**, Dr. Atsushi MIKAMI, Assoc. Prof.
- (4) **Finite element analysis in earthquake engineering**, Dr. Atsushi MIKAMI, Assoc. Prof.
- (5) **Seismic soil-foundation-structure interaction**, Dr. Atsushi MIKAMI, Assoc. Prof.

## Information Science and Intelligent Systems Course

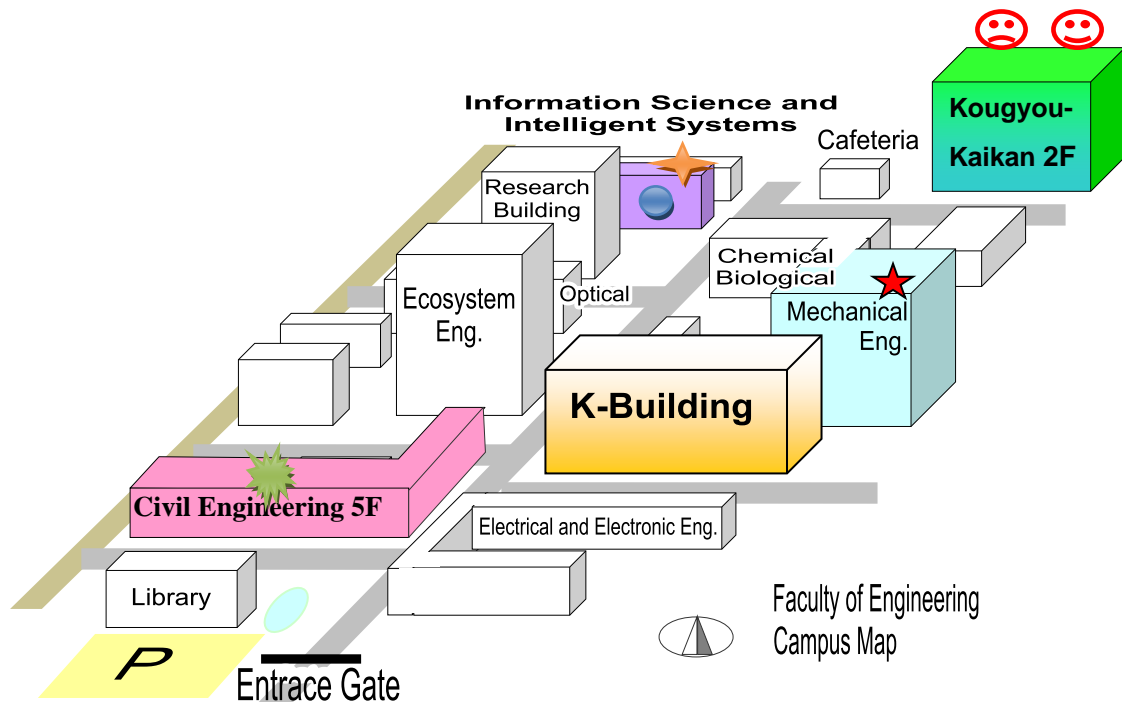
Place: C20 ( **Information Science and Intelligent Systems Building, 2nd Floor**)

### Schedule

	9:00-9:45	10:00-10:45	11:00-11:45	12:00-13:00	13:00-13:45	14:00-14:45	15:00-15:45	16:00-16:45
Mon, August 3		(i)		Lunch Break	(ii)			
Tue, August 4		(1)			(iii) /Faculty Meeting			
Wed, August 5		(2)			(3)		(4)	(5)
Thu, August 6		(6)	(7)		(8)	(9)		
Fri, August 7		(10)			(iv)	(v)		

- (1) **Basic; Quantum Cryptography**, Dr. Shun WATANABE, Assist. Prof. (Assistant :Dr Hitoshi TOKUSHIGE, Assoc. Prof.)
- (2) **Basic; Intelligent Computer Assisted Instruction**, Dr. Hiroyuki MITSUHARA, Assoc. Prof. (Assistant :Dr Kazuhiro MORITA, Assoc. Prof.)
- (3) **Basic; Kalman Filter**, Dr. Kenji IKEDA, Assoc. Prof
- (4) **Advanced; Language Structures in Comparison of Japanese-English-Chinese**, Dr. Yuhua DING, Assist. Prof.
- (5) **Advanced; Pattern Recognition**, Dr. Stephen KARUNGARU, Assist. Prof.
- (6) **Advanced; Multimedia Information Retrieval Technologies**, Dr. Masami SHISHIBORI, Assoc. Prof
- (7) **Demo; Information Retrieval, Music Retrieval, etc.** Dr. Masami SHISHIBORI, Assoc. Prof & Dr. Satoru TSUGE, Assoc. Prof.
- (8) **Advanced; Speech Recognition**, Dr. Satoru TSUGE, Assoc. Prof.
- (9) **Expert; Programming for Speech Recognition**, Dr. Motoyuki SUZUKI , Assoc. Prof. & Dr. Satoru TSUGE
- (10) **Expert; Programming for Image Processing**, Dr. Kenji TERADA Prof. (Assistant: Dr Masao FUKETA, Assoc. Prof.)





☹ Opening Ceremony : Kougyou-kaikan

😊 Closing Ceremony : Kougyou-kaikan

★ Nano-technology Engineering Course: Room M311

● Applied Engineering of Electronic Circuits Course: Room C10

✻ Environment Control Engineering Course: Room A508

★ Information Science and Intelligent Systems Course: Room C20