Time Table for JUSST Program and Global Education Subjects in 2010-Fall Semester(2010.10.6 現在) 平成22年度秋学期(後期)国際科目時間割(短期留学プログラム生用)

Day 曜日	Class Period 授業時間	Subject Name 授業名	Department 所属学科等	Lecturer 教員名	Class Room 教室	Note 備考
Monday 月曜日	1 (0900-1030)	Communication Systems	CIPE	TOYAMA, Noboru (外山昇)	P-B114	
	2 (1040-1210)	Radio Wave Engineering	CIPE	TOYAMA, Noboru (外山昇)	P-B114	
	3 (1300-1430)					
	4 (1440-1610)	Quality and Reliability Engineering: The Japanese Way	J	SUZUKI, Kazuyuki (鈴木和幸)	西 W5-209	
	5	Go Playing and Computing	I	MURAMATSU, Masakazu (村松正和)	西 W9-115	
	(1615-1745)	VLSI Devices and Technology	S	NOZAKI, Shinji (野﨑眞次)	西 W3-407	*2
	6 (1750-1920)	UEC Academic Skills IVB (Comprehensive Reading & Summary Writing)	CIPE	SUZUKI, Masahisa (鈴木雅久)	P-B114	
Tuesday 火曜日	1 (0900-1030)					
	2	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	(1040-1210)	Lifelong Learning in Sports (Aikido)	Sports Unit	KIKKAWA, Kazutoshi (吉川和利)		
	3 (1300-1430)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
		Lifelong Learning in Sports (Aikido)	Sports Unit	KIKKAWA, Kazutoshi (吉川和利)		
	4 (1440-1610)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	5	Computer Networks	Ι	SUZUKI, Kenji (鈴木健二)	W9-116	
	(1615-1745)	Modern Optics and Photonics	S	TOMITA, Yasuo (富田康生)	W2-201	
	1 (0900-1030)					
Wednesday 水曜日	2 (1040-1210)	UEC Academic Skills IB (Computer Literacy)	CIPE	SUZUKI, Masahisa (鈴木雅久)	C-401	
	3 (1300-1430)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	4 (1440-1610)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	5 (1615-1745)	Digital Signal Processing		HAMANO, Nobuo (濵野亘男)	P-B114	
	6 (1750-1920)	UEC Academic Skills VB (Maths & Scientific Writing)	CIPE	SUZUKI, Masahisa (鈴木雅久)	P-B114	
Thursday 木曜日	2 (1040-1210)	Advanced Information Theory	I	KURKOSKI, Brian	W1-217	
		Experimental Electronics Laboratory #1/3	S	(林茂雄)	W6-217	
		Lifelong Learning in Sports (Table tennis, Tennis, Training & Fitness)	Sports Unit	北川(KITAGAWA), 額谷 (NUKATANI),泉本(SENSUI)		
	3 (1300-1430)	Experimental Electronics Laboratory #2/3	S	HAYASHI, Shigeo (林茂雄)	W6-217	
		Visual Media Design	J	KANEKO, Masakatsu (兼子正勝)	W2-201	
	4 (1440-1610)	Interactive Computer Graphics	J	HASHIMOTO, Naoki (橋本直己)	W9-115	
		Experimental Electronics Laboratory #3/3	S	HAYASHI, Shigeo (林茂雄)	W6-217	
	5 (1615-1745)					
	6 (1750-1920)	UEC Academic Skills IIB (Cross-Cultural Communication)	CIPE	SUZUKI, Masahisa (鈴木雅久)	P-B117	
Friday 金曜日	1 (0900-1030)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	2 (1040-1210)	Japanese Language & Culture (日本語・日本文化)	CIPE		Class Room in P-Building 2F	*1
	3 (1300-1430)	UEC Academic Skills IIIB (Research & Presentation)	CIPE	SUZUKI, Masahisa (鈴木雅久)	情報基盤セン タ(GR-105)	
	4 (1440-1610)	Computational Complexity	I	TARU1, Jun (垂井淳)	E6-204	
		TV Broadcasting Engineering	CIPE	TOYAMA, Noboru (外山昇)	P-B114	
	5 (1615-1745)	Communication Systems Laboratory	CIPE	TOYAMA, Noboru (外山昇)	P-B114	

New Departments at UEC Faculty of Informatics and Engineering: J: Department of Communication Engineering & Informatics I: Department of Informatics M: Department of Mechanical Engineering & Intelligent Systems S: Department of Engineering Science

*1: Not Available for Regular Undergraduate Students(学部生聴講不可) *2:English language proficiency required (受講にあたり,英語能力条件有)

平成22年度秋学期

Fall Semester, 2010

電気通信大学・短期留学プログラム

UEC Exchange Program

Japanese University Studies in Science and Technology (JUSST)

Center for International Programs and Exchange (CIPE)

The University of Electro-Communications (UEC), Japan

E-mail jusst@fedu.uec.ac.jp

Enrolment http://130.153.137.70/abroad/

Communication Systems

Lecturer Course Description

Professor Noboru TOYAMA (toyama@fedu.uec.ac.jp)

Course Description

This course must be taken concurrently with the course "Communication Systems Laboratory." First two classes will be review sessions that concentrate efforts on familiarizing tudents with the basic mathematical knowledge including the subjects listed in the prerequisites. Students who do not have confidence in those items are requested to make extra efforts to catch up with other students during the first two classes. This course together with Communication System Laboratory." discusses in depth how digital and analog communication systems work. The basic tools used here are waveform analyses. Topics covered in this course are, signal analysis, the Fourier spectrum, the autocorrelation function, power spectrum, line coding, intersymbol interference, roll-off filters, the discrete Fourier transform, the Hilbert transform, and various types of modulation. Some experiments in threshold effects in the presence of noise are included. From the first chapter up to chapter 7 of the textbook will be covered during the course hours. The remaining chapters will be covered in the course given in the spring semester.

Textbook

Modern Digital and Analog Communication Systems, Third Edition, by B.P. Lathi (Oxford University Press, 1998)

Pre-requirement

Trigonometric identities, Integrals, Fourier series, and some othert basic knowledge of mathematics, and LCR circuits.

Radio Wave Engineering

Lecturer

Professor Noboru TOYAMA

Course Description

This course will cover the basic ideas of radio waves, radio propagation and antennas. The subject will include the following:

- 1. Fundamentals of Electromagnetic Theory
- 2. Characteristics of Electromagnetic Waves
- 3. Wave Propagation
- 4. Antennas
- 5. Recent Topics of Radio Waves and Antennas
- 6. Some

experiments on the selected items from the above will also be given.

Textbook

Pre-requirement

GO -- Playing and Computing

Day of Class :Monday #5、Class Room : W9-115、 Lecturer Name : Masakazu MURAMATU Extension :5344 muramatu@cs.uec.ac.jp Textbook : none

Pre-requirement : Basic Skill in Programming and Data structure

Course Description :

(Objectives)

GO is a board game played by putting black and white stones alternately. The rule is extremely simple, but you must learn many tactics to play GO. Strategy is also important, and even more difficult to master. Japan, China, and Korea have professional GO players organization. While computers can easily beat the best human player in Chess, it is only these three years that computers can play GO as well as average amateur players. In this sense, GO is by far deep and difficult.

In the first part, you learn how to play the game of GO. Then, the course is focused on developing programs to play GO. Various techniques needed in writing such programs are shown.

Finally, you will study by observing the fourth UEC Cup computer GO competition held at UEC on November 27th and 28th.

(Outline of Class and Contents)

1 Introduction 10/18 -- Part I --2 The Rule and Basic Tactics 10/25 3 Capturing Stones 11/1 4 Dead or Alive 11/8 5 Playing GO 11/15 -- Part II --6 Game Tree 11/22 8-12 Observation of the UEC Cup on Computer GO on Nov. 27th and 28th. 13 Knowledge based programs 12/6 14 Probability based techniques I 12/13 15 Probability based techniques II 12/21 NOTE: 8-9 are assigned to the observation of UEC Cup on November 27th. 10-11 are assigned to the observation of UEC Cup on November 28th. (Assessment Policy) Attendance 50%, Report 50%.

VLSI Devices and Technology

This course consists of series of lectures and labs covering device physics of silicon bipolar transistors and MOSFET's and VLSI process technology and exposes you to state-of-the-art semiconductor process equipment in the clean room.

This will include the following topics:

- 1. Bipolar transistors
- 2. MOS capacitors
- 3. MOSFET's
- 4. CCD's, MOS memories (DRAM, SRAM, EPROM, Flash)
- 5. VLSI process technology

Prerequisites: semiconductor physics or equivalent courses

Recuturer

Prof. Shinji NOZAKI

Computer Networks

Lecturer Name Dr. Kenji SUZUKI

E-mail suzuki@cs.uec.ac.jp Textbook provide documents if necessary. Prerequirement None

Course Description

(Objectives)

The rapid progress of computer and communication technology enable us to access various information systems and services by using PC and cellular phones. This lecture covers the fundamental technology of computer communications such as communication architecture and protocols as well as communication and information systems.

(Outline of Class and Contents)

Lecture and /or group discussions are the key methods. In some occasions, we will invite some experts from the industries to discuss specific topics on computer networks. The following topics are included.

1. Current services and functions of computer networks

- 2. Network Architecture(Role of network architecture, OSI reference model)
- 3. Communication Protocols

(Packet communications, TCP/IP, Routing, Messaging, and File Transfer Protocols)

4. Information Systems

(Distributed and centralized systems, Enterprise Information systems) (Assessment Policy)

Reports and presentations are evaluated in the lecture

Modern Optics and Photonics

Objectives

This is an introductory-level course in the ever-increasing field of modern optics. It includes rayand wave-descriptions of light propagation and image formation with coherent light. An introduction to holography and optical information processing is also given as an example of parallel and multi-dimensional data handling capabilities of light. Furthermore, it contains discussions of photonic devices (such as lasers, amplifiers, light modulators and detectors) and fiber-optic communications systems.

Outline of Class and Contents

Topics in 90-minute lectures will include:

- 1. Geometrical (ray) optics
- 2. Wave optics
- 3. Fourier optics
- 4. Electromagnetic and crystal optics
- 5. Guided-wave and fiber optics
- 6. Introduction to fiber-optic communications

Prerequisites

A good understanding of introductory electromagnetics and linear systems theory may be helpful.

Textbook

Instructor's notes will be provided. Material will also be taken from the following optional textbooks:

- 1. Yariv, Optical Electronics in Modern Communications, Oxford Univ. Press, Oxford, 1997.
- 2. S.G. Lipson et al., Optical Physics, 3rd ed., Cambridge Univ. Press, Cambridge, 1995.
- 3. B.E.A. Saleh and M.C. Teich, Fundamentals of Photonics, Wiley, New York, 1991.

Lecturer

Prof. Yasuo TOMITA

Digital Signal Processing

Objectives

An increasing number of electronic systems today, to name a few: television, audio and wireless communication systems, rely heavily on digital signal processing technologies for achieving their superb performance and sophisticated functionalities. Aim of this course is to introduce the basic concepts and techniques underlying the digital signal processing along with a few examples of practical applications.

Outline of Class and Contents

The course will focus on fundamental concepts of discrete-time signals and systems including the following subjects:

- 1. Discrete-time representation of signals
- 2. Z-transform and discrete- time system analysis
- 3. Sampling and aliasing
- 4. Transform analysis of linear time-invariant systems
- 5. Design of IIR and FIR filters
- 6. Discrete Fourier Transform and Discrete Cosine Transform
- 7. Topical subjects

Prerequisites

Fundamental knowledge of AC circuits and linear systems is helpful.

Textbook

Discrete-Time Signal Processing, 2nd edition A.V. Oppenheim et al., Prentice-Hall

Lecture

Prof. Nobuo HAMANO

Quality and Reliability Engineering; The Japanese Way

Communication Systems

Lecturer Course Description

Professor Kazuyuki SUZUKI (suzuki@se.uec.ac.jp)

Course Description (ver 2006 to be corrected for 2010)

lot of Japanese products have been spreading out all over the world. One of these reasons is high quality and reliability of Japanese products. Quality control(QC) in Japan has developed after World War 2, and now the Japanese way of QC is adopted in USA, Europe and Asia. In USA, reliability and quality are categorized in different fields but in Japan they are considered to be closely related each other. This lecture course focuses on the philosophy, ideas and scientific method used to build quality and reliability into products and systems. Also, recent development of information technology has been changing the way of QC and Reliability Engineering. This new aspects is also dealt with.

 World Wide Quality Revolution
History of Quality and Quality Control, Origin of "Made in Germany", Japanese TQC and its Spread to the World, Rally of USA.
Quality Assurance(QA) and Total Quality Management

Meaning of Quality, What is QA? New Product Development and QA, Quality Functional Development, Four leading principles of Japanese TQC.

3. Statistical Quality Control

 $\rm QC$ seven tools, New QC seven tools, Statistical Process Control, Design of Experiments

4. Reliability Engineering

Structure of Reliability, QA steps and Reliability Methods, Systems Reliability, Failure Analysis and Design Review, Statistical Reliability Methods, FMEA and FTA, Information Technology and RE.

Advanced Information Theory

Credit :2 ([Contact Hour: 1.5h/w + Exercise Hour: 0.5h/w] x 15 weeks)

Day of Class : Thursdays #2

Class Room :

Lecturer Name : Brian Kurkoski and Hideki Yagi

Extension: 5295

E-mail : kurkoski@ice.uec.ac.jp

Recommended (but not required) textbooks :

Thomas M. Cover and Joy A. Thomas, Elements of Information Theory 2nd Edition, Wiley-Interscience, Aug. 1991.

David J. C. MacKay, Information Theory, Inference & Learning Algorithms, Cambridge University Press, June 2002.

Pre-requirement

A previous course on information theory or coding theory is required. Previous courses in discrete mathematics or linear algebra are desirable.

Course Description:

URLhttp://www.lit.ice.uec.ac.jp/kurkoski/ait/

(Objectives)

Information theory is a field concerned with mathematical aspects of information and communication. Modern communication systems are based on these ideas, which are normally divided into the areas of "channel coding" and "source coding".

The focus of this class is channel coding. In particular, the goal of this class is understanding of Shannon's well-known channel coding theorem, as well as the understanding of how it applies to practical communication systems. Mutual information and channel capacity, used to evaluate channel reliability are explained. The channel coding theorem will be explained. Recent developments in error-correcting codes and decoding algorithms will be reviewed and explained. Codes based upon lattices, and their decoding algorithms will be discussed.

(Outline of Class and Contents)

Lecture 1: Overview, models of digital communications systems

Lecture 2: Low-density party-check (LDPC) code construction

Lecture 3: Belief-propgation decoding of LDPC codes

Lecture 4: Encoding of LDPC codes

Lecture 5: Probabilistic inference: Interference channels and the BCJR algorithm

Lecture 6: Probabilistic inference: Turbo codes

Lecture 7: Probabilistic inference: Lattice codes

Lecture 8: Probabilistic inference: Gaussian mixtures for lattices

Lecture 9: Lattices for the AWGN channel

Lecture 10: Capacity of the memoryless channel

Lecture 11: Channel coding theorem: proof

Lecture 12: Channel coding theorem: proof converse

Lecture 13: Notable linear codes: Hamming codes and Reed-Solomon codes

Lecture 14: Capacity-achieving codes: iterative codes

Lecture 15: Capacity-achieving codes: concatenated codes

(Assessment Policy)

Homework: 40% Midterm project: 30% Final project: 30%

Visual Media Studies

Masakatsu Kaneko

kaneko@hc.uec.ac.jp

Course Description

The purpose of the lectures is to understand how and of what elements visual media contents are constructed. As representative examples of visual media, we consider movie (video) and manga (comic). Movie is composed not only of what you see (picturesque images), but also of what limits those images (frames) and what "is" between the images (montage).

The montage, one of the key concepts of visual media, is "temporal" for movie, and "spacial" for manga. At the first half of lectures, we give theoretical explanations, and at the second half, we lean in practice by making a "movie-comic" content.

Meaning

- 1. Introduction
- 2. Historical Overview of visual media
- 3. Elements of visual media: frame and montage
- 4. Frame 1: size, angle
- 5. Frame 2: composition
- 6. Temporal montage: video
- 7. Spatial montage: manga
- 8. (Extra)
- 9. Content making practice 1: Guidance
- 10. Content making practice 2: Planning
- 11. Content making practice 3: Shooting and editing
- 12. Content making practice 4: Editing and programming
- 13. Content making practice 5: Editing and programming
- 14. Review and discussion
- 15. Conclusion

Interactive Computer Graphics

Day of Class :Thursday #4 Class Room :W9-115

Lecturer Name : Associate Professor Naoki HASHIIMOTO

Extension : 5345 E-mail : international@ims.cs.uec.ac.jp

Textbook :

Documents will be opened after each class through the internet.

Pre-requirement:

A fundamental knowledge of compute, its programing and architecture.

Course Description:

(Objectives)

This class will lecture about interactive computer graphics technologies, including fundamental knowledge and latest hot topics. And also, this class will train your logical thought and presentation skill through some short presentations.

(Outline of Class and Contents)

<Lecture Topics:>

- 1) Computer Graphics History and Techniques
- 2) Virtual Reality Technology
- 3) CPU & GPU Technology
- 4) Projection Technology
- 5) Motion Capture Technology
- 6) Computer Animation Technology

<Presentation Topics:>

Novel technologies and services for supporting and enriching our life and society.

More detailed information will be opened by following site: http://www.ims.cs.uec.ac.jp/~naoki/lecture/international/2010/

(Assessment Policy) attendance: 35% presentation: 35% reports: 30%

Experimental Electronics Laboratory

Objectives

This course aims for providing the students, who may have no practical knowledge of electrical circuits, with the basics of electronics.

Outline of Class and Contents

The student builds every other week the following six electrical circuits on the solderless breadboard and measure and analyze various properties:

- 1. Transformer-coupled circuits involving C or L
- 2. Transformer-coupled resonant circuits involving L and C
- 3. Op-amp based circuits with application to analog filter
- 4. DC abd AC characteristics of transistor
- 5. Single-stage transistor amplifier
- 6. Logic gates featuring RS-flip flop and full adder

Prelab lectures are given in the no-experiment week after the reports on the preceding subject have been assessed. An optional project, Z80-based single-board computer and machine-language programming, is also available.

Textbook

Laboratory Manual (free)

Lecturer

Prof. Shigeo HAYASHI

Computational Complexity

Credit :2 ([Contact Hour: 1.5 h/w + Exercise Hour: 3.0 h/w] x 15 weeks) Day of Class :Friday #4 Class Room : E6-204 Lecturer Name : Dr. Jun TARUI Extension : 5249 E-mail : tarui@ice.uec.ac.jp Textbook :no required textbook

Pre-requirement :Students taking this course should have taken an introductory course on algorithms.

Course Description:

(Objectives)

Computational Complexity studies questions such as "Which computational problems have efficient algorithms?" and "Do quantum computers have more computational power than classical computers?". This course aims to give students an introduction to Computational Complexity.

(Outline of Class and Contents)

The first half of the course will be about the following variety of algorithmic paradigms:

(1) randomized algorithms,

(2) learning algorithms,

(3) on-line algorithms,

(4) approximation algorithms.

The second half will be about:

(1) complexity classes including the important classes \mathbf{P} and \mathbf{NP}

(2) theory of NP-completeness, and (3) theoretical cryptography.

(Assessment Policy)

Based mainly on homework reports.

TV Broadcasting Engineering

This course will cover the fundamental principles of Broadcasting Systems. Subjects to be covered will include;

- 1. Basic terrestrial broadcasting system
- 2. Basic satellite broadcasting system
- 3. Basic Digital satellite broadcasting system
- 4. Basic terrestrial digital broadcasting system
- 5. Introduction to the state-of-the-art broadcasting technologies such as Large-Screen Plasma Display, Mobile receiver, SNG, etc.
- 6. Hot topics on recent broadcasting engineering will be introduced in the class. All students in the class will participate in discussions.

Lecturer

Prof. Noboru TOYAMA

Communication Systems Laboratory

Lecture Code	2010ATLR10		
Lecture Title	Communication Theory Laboratory		
Credit	1 ([Contact Hour: 1.5h/w + Exercise Hour: 0.5h/w] x 15 weeks)		
Day of Class	Friday #5		
Lecturer	rProfessor Noboru TOYAMA		
Extension	15744		
E-mail	toyama@fedu.uec.ac.jp		
Textbook	^{"Modern} Digital and Analog Communication Systems, Third Edition, by		
	B.P.Lathi (Oxford University Press, 1998).		
	Trigonometric identities, Integrals, Fourier series, some basic		
Prerequisites	knowledge of probabilities and LCR circuits. Students are encouraged		
	to take "Communication Systems" open at the fall semester.		
	This course is an exercise session for the course "Communications		
	Theory. "This course must be taken concurrently with the course		
	"Communications Theory." Students will be given problems directly		
	related to the lecture given in "Communications Theory." By solving		
Course Description	the problems students can understand the real aspects of the theory		
Course Description	given in the lecture. Some experiments related to the lectures will also		
	be given.		
	Assessment policy:		
	The same scores given in the course "Communications Theory."		

UEC Enrollment Policy for Exchange Program "JUSST"

H-1. Academic Credits, which you successfully obtain during your Exchange Study at the UEC, are eligible to transfer at your home university after you go back to your university. However, it is highly recommended for you to discuss with your academic coordinator about the procedure of academic credits transfer between the UEC and your home university.

H-2. UEC's one semester consists of 15 weeks, where one class unit is 2.0 hours long, (90 minutes class) including a break.

H-3. Our JUSST Exchange Program consists of two academic parts, : one for class and another for research activity. Therefore, they have to take classes as required, besides all exchange students have to carry out a research project in the areas of electro-communications and information systems during the period of their study time at UEC.

The followings are the outline of our JUSST Exchange Program.

Core Subjects

Elementary/Intermediate Japanese Language	6-7 Credits	8.0-14.0 hours/week (Two Semester)
UEC Academic Skill #1 (Computer Literacy)	2 Credits	2.0 hours/week (First Semester only)
UEC Academic Skill #2 (Cross-Cultural Communication)	2 Credits	2.0 hours/week (First Semester only)
UEC Academic Skill #3 (Research & Presentation)	2 Credits	2.0 hours/week (Two Semester)
Elective Subjects		
Scientific & Engineering Classes (minimum 3 subjects)	2-3 Credits	2.0-3.0 hours/week
Experiment/Sports Classes	1 Credit	2.0 hours/week
Research Work		
Individual Study for Undergraduate	N/A	Full Time
Independent Study for Postgraduate	N/A	Full Time

If you have a research supervisor at UEC, you have to work in their research office more than 10 hours a week during semester. Normally research students are expected to work during off-semester time.

Elementary/Intermediate Japanese Language Classes are half-intensive courses, where each class has 12.0 contact hours per week. A full-intensive course is designed for students who have no Japanese Language knowledge, and who are going to enrol as a regular postgraduate student at the UEC a half-year later. These Elementary/Intermediate Japanese Language courses for JUSST Exchange Study Program are the half load of the full-intensive course.

H-4. All the new JUSST Exchange Students have to take all the core subjects mentioned-above in their first semester. If you fail in any of these core subjects in your first semester, JUSST Academic Board for JUSST Exchange Study Program may review on your student enrolment status in the JUSST Exchange Study Program, where it maybe result in going back to your home university straight after your first semester.

H-5. All the Undergraduate JUSST Exchange Students have to take three (3) subjects at minimum every semester from the areas of science and engineering, on top of that you have to take all the core subjects every semester in our JUSST Exchange Study Program. Please note that Postgraduate Exchange Students are expected to carry out research project under the UEC research supervisor during their JUSST Exchange Study Program.

H-6. All the Postgraduate JUSST Exchange Students have to take three (3) subjects at minimum for one year (two semesters) from the areas of science and engineering on top of that you have to take all the core subjects every semester in our JUSST Exchange Study Program. You may be able to drop Japanese Language Classes in your second semester if your research supervisor approves it for your intensive research work after your preparation progress in your first semester.

H-7. The followings are the typical enrolment samples for JUSST Exchange Study Program:

[Undergraduate Students]

- (1) UEC Academic Skill #1, #2 and #3 are core subjects. Everyone has to take these classes for his/her first semester.
- (2) UEC Academic Skill #3 is required for everyone during his/her 2nd semester, too.
- (3) Japanese Language Study (6 classes=12.0 hours/week) is also core subject for every semester. Everyone has to take it.

If you have higher standard of Japanese language proficiency than what the UEC prepare for JUSST Exchange Study Program, you can take other Japanese language and cultures that are offered in the regular students program of the UEC Faculty and Departments.

- (4) JUSST Exchange Students have to take more than 3 subjects in the areas of Science and Engineering for each semester, on top of UEC Academic Skills Classes and Japanese Language Classes.
- (5) JUSST Exchange Students are eligible to take subjects and classes that are offered by UEC Faculty of Electro-Communications, and Graduate School of Electro-Communications and Graduate School of Information Systems. Please note that these classes are generally offered in Japanese Language.
- (6) If undergraduate students take Individual Study for Undergraduate, they can apply for the exemption of taking Japanese Language Study in their second semester through their research supervisor after consultation with JUSST Coordinator.

[Postgraduate Students]

- (1) UEC Academic Skill #1, #2 and #3 are core subjects. Everyone has to take them for his/her first semester.
- (2) UEC Academic Skill #3 is required for everyone during his/her 2nd semester, too.
- (3) Japanese Language Study (6 classes=12 hours/week) is also core subject for every semester. Everyone has to take it.

If you have higher standard of Japanese language proficiency than what the UEC prepare for JUSST Exchange Study Program, you can take other Japanese language and cultures that are offered in the regular students program of UEC Faculty and Departments.

(4) Students have to take more than 3 subjects and classes in the areas of Science and Engineering during their

enrolment as an Exchange Student at the UEC (normally one year), on top of UEC Academic Skills Classes and Japanese Language Classes.

- (5) Students are eligible to take subjects and classes that are offered by UEC Faculty of Electro-Communications, and Graduate School of Electro-Communications and Graduate School of Information Systems.
- (6) If Students take Independent Study for Postgraduate, they can apply for the exemption of taking Japanese Language Study in their second semester through their research supervisor after consultation with JUSST Coordinator.

H-8. JUSST Exchange Students can also take other classes and lectures, which are originally designed for UEC regular students. Mostly they are given in Japanese language. In this case, you have to be confident with your Japanese language and you must have permission from professors. These class lists are available at UEC Homepage (http://www.fedu.uec.ac.jp/JUSST/)

H-9. More than 80% attendance is required to obtain any academic credit for each class and lecture. The same condition applies to you for the satisfactory of Japanese Immigration requirements relating to your enrolment status.