

Admission in Academic Year 2020 (Master's Program)

Admission Season	Examination Category Code	
	1 st Examination	2 nd Examination
Spring (April), AY 2020	1201	1202
Autumn (October), AY 2020	1203	1204

1. Admissions Capacity

Graduate Department	Field of Study	Admissions Capacity		
		Spring (April)	Autumn (October)	Total
Computer and Information Systems	CS : Computer Science SY : Computer System CN : Computer Network Systems IT : Applied Information Technologies SE : Software Engineering	70	30	100
Information Technology and Project Management	PM : Project Management and IT Specialist	10	10	20

2. Application Eligibility

Individuals who satisfy one of the following requirements:

- (1) Individuals who have graduated from universities or those who are expected to graduate from one by March 31, 2020.
- (2) Individuals who have Bachelor's degrees under Paragraph 4, Article 104 of the School Education Law of Japan, or those who are expected to have one by March 31, 2020.
- (3) Individuals who have completed sixteen years of school education outside Japan, or those who are expected to complete the said school education by March 31, 2020.
- (4) Individuals who have completed sixteen years of school education of foreign countries through correspondence courses while living in Japan provided by schools in the relevant countries, or those who are expected to complete the said school education by March 31, 2020.
- (5) Individuals who have completed a university program of a foreign educational institute located in Japan (limited to programs which students having completed are recognized as having completed sixteen years of school education of relevant foreign countries) authorized by the school education system of relevant foreign countries as those having university programs, and designated separately by the Minister of Education, Culture, Sports, Science and Technology, or those who are expected to complete the said program by March 31, 2020.
- (6) Individuals who have completed specialized programs of specialized training colleges (limited to programs which satisfy the criteria established by the Minister of Education, Culture, Sports, Science and Technology, such as an enrollment period of four years which is required for completion of the relevant programs) designated separately by the Minister of Education, Culture, Sports, Science and Technology, after the date determined by the Minister of Education, Culture, Sports, Science and Technology, or those who are expected to complete the said program by March 31, 2020.

- (7) Individuals who are designated by the Minister of Education, Culture, Sports, Science and Technology, under the Ruling on the Implementation of the School Education Law of Japan, Item 6, Paragraph 1, Article 155.
- (8) Individuals who have been admitted to graduate schools in accordance with the provisions of Paragraph 2, Article 102 of the School Education Law of Japan, and who have been recognized by the University of Aizu Graduate School as having scholastic ability appropriate for education at the University of Aizu Graduate School.
- (9) Individuals who will have reached the age of 22 as of March 31, 2020 and are recognized by the University as having academic achievements equal to or higher than those of a university graduate through an individual inspection of the admission qualifications.
- (10) Individuals satisfying any of the following requirements as of March 31, 2020 and who are recognized as having earned academic credits for courses designated by the University of Aizu Graduate School with excellent results.
 - a) Individuals who have been enrolled at a university for at least three years.
 - b) Individuals who have completed 15 years of course work of school education abroad.
 - c) Individuals who have completed 15 years of school education of foreign countries through correspondence courses while living in Japan provided by schools in the relevant countries.
 - d) Individuals who have completed a university program of a foreign educational institute located in Japan (limited to programs which students having completed are recognized as having completed 15 years of school education of relevant foreign countries) authorized by the school education system of relevant foreign countries as those having university programs, and designated separately by the Minister of Education, Culture, Sports, Science and Technology.
- (11) Individuals authorized for the “Type B” of the University of Aizu Honors Program Integrated Undergraduate-Master’s Program
 - a) Early admission to the Graduate School (Type B1)
 - Students with a GPA of 3.5 or above who have earned at least 100 academic credits included in the graduation requirements by the end of the first semester in their third year.
 - b) Early graduation from the Undergraduate School (Type B2)
 - Students who graduated from the Undergraduate School of the University in three years based on the provisions of the University of Aizu Regulation Concerning Early Graduation.
 - To qualify for early graduation, students must have a GPA of at least 3.75 or above and have earned at least 105 academic credits included in the graduation requirements by the end of the first semester in their third year.

Notes

- 1: With regard to applicants for the AY 2020 Autumn Admission (#1203, 1204), the date, “March 31, 2020,” shall be read as “September 30, 2020”.
- 2: An individual working may apply for and enroll in the Master’s Program while holding a position in a government office or enterprise, etc.
- 3: **Prior to making an application, each applicant must obtain approval from the faculty member from whom the applicant wishes to have instruction and advice about his/her research plan, etc. during his/her enrollment in the Master’s Program.**

- 4: Applicants who wish to apply for the Master's Program under 2-(8), 2-(9) or 2-(10) above are required to go through a preliminary examination regarding eligibility for application under these categories, as a person "recognized by the University" as having met the above-mentioned qualification standards. Please read section 9, "Preliminary Qualification Examinations" carefully, and submit necessary documents for the preliminary examination by the deadline.
- 5: Application requirement (1) above applies to students authorized for the University of Aizu Honors Program Integrated Undergraduate-Master's Program Type A.

About the University of Aizu Honors Program Integrated Undergraduate-Master's Program (hereinafter referred to as the Program)

- Students can complete the Undergraduate School and Master's programs in 5 years.
- Students can complete the Master's Program in 1 year after completion of the Undergraduate School Program in 4 years. (Type A)
- Students can go on to the Master's Program after completion of their third year of the Undergraduate Program. (Type B)
- This Program's categories are as follows:
 1. Type A: Four-year Undergraduate Program + One-year Master's Program
 - Going on to the Master's Program after taking both undergraduate and graduate courses during the fourth year of the Undergraduate School
 2. Type B: Three-year Undergraduate Program + Two-year Master's Program
 - (1) Type B1: Going on to the Graduate School after withdrawal from the Undergraduate Program after completing the third year of the Undergraduate School
 - (2) Type B2: Going on to the Graduate School after completing the Undergraduate Program in three years

*Please inquire at the Student Affairs Division for further details.

*Students accepted to the Program may be eligible to receive scholarships from the University after admission to the Graduate School.

3. Application Procedures

(1) Making the Applications

Application documents must be placed in an envelope, on which the words "Graduate School Application Forms Enclosed" must be written in red, and must be submitted by an applicant in person or be mailed using "Registered Express Mail" or EMS (from outside Japan) to the address given in 3-(2) below. The envelope must indicate the applicant's name, address and ID number (applicable only to the students of the University of Aizu).

Please be sure to use an envelope even if you submit them to the University in person.

(2) Address for Submission

Student Affairs Division, Department for Student Affairs, University of Aizu

Address: Tsuruga, Ikki-machi, Aizu-Wakamatsu City, Fukushima, 965-8580 JAPAN

Phone: [+81] (242)37-2723, Fax: [+81] (242)37-2526

E-mail: admission@u-aizu.ac.jp

(3) Application Deadlines

Applicants falling under the application categories (1), (2), (3), (4), (5), (6), (7), or (9), in section 2 “Application Eligibility” above may apply for both the 1st and 2nd entrance examinations for spring or autumn admission. However, applicants are required to take the application procedure for each of the entrance examinations separately.

With regard to applicants falling under the application category (8), (10) or (11) in section 2, “Application Eligibility” above, these applicants are only allowed to apply for the 2nd entrance examination for Spring Admission (#1202) and the 2nd entrance examination for Autumn Admission (#1204).

Applicants shall not be allowed to apply both for the 2nd entrance examination for Spring Admission (#1202) and the 1st entrance examination for Autumn Admission (#1203) at the same time, for which the examination date is the same.

Exam Category Code	Examination Category	Application Period
1201	1 st Entrance Examination for Spring Admission, AY 2020	From Monday, June 3, 2019 To Monday, June 10, 2019 5:00 p.m.(JST)
1202 1203	2 nd Entrance Examination for Spring Admission, AY 2020 1 st Entrance Examination for Autumn Admission, AY 2020	From Monday, December 9, 2019 To Monday, December 16, 2019 5:00 p.m.(JST)
1204	2 nd Entrance Examination for Autumn Admission, AY 2021	This examination will be given at the same time for the 1 st Entrance Examination for Spring Admission, AY 2021.

(4) Application Documents

Fill in the forms clearly either in Japanese or English. Item 5 must be written in English.

Application Documents		Applicants	Description
1	Application Form	All	Fill in the provided form (M1-English)
2	Address Label	All	Fill in the provided form (M2)
	Photo ID Card	All	Fill in the provided form (M2) and affix photographs, which have the applicant's name on the back, to the designated places on the application. The photo must be a portrait measuring 4 cm long and 3 cm wide, and must have been taken within 3 months of the date of submission. The photo should show the head, shoulders, and upper chest, from the front, against a plain background.
	Exam Admission Card	All	
3	Certificate of (Expected) Graduation or Certificate of Enrollment	All	An official certificate in a sealed envelope should be issued by the university the applicant attended/is attending. (English, Not applicable to students of the University of Aizu.)
4	Certified Transcript	All	An official transcript in a sealed envelope should be issued by the university the applicant attended/is attending. (English, Not applicable to students of the University of Aizu.)

5	Research Plan	All	An applicant must describe contents of the research in English he/she plans to conduct after entering the Master's Program on the provided form. (M3)
6	Letter of Recommendation	All	This should be prepared by an applicant's supervisor, etc. who can attest to the applicant's achievements and learning abilities objectively (in English). (Use the provided form (M4), which should be put in an envelope and sealed.)
7	Application Fee	All	<p>The 1st Exam for Spring Admission, AY 2020 The 2nd Exam for Spring Admission, AY 2020 The 1st Exam for Autumn Admission, AY 2020 The 2nd Exam for Autumn Admission, AY 2020</p> <p>} 30,000 yen per exam</p> <p>The application fee must be paid in Yen to the following bank account. Please make sure to attach proof of payment of fee to the reverse side of application form. (M1-English) Applicants must also pay a remittance charge for the bank transfer of the application fee. Make sure to include the remittance charge in the application fee payment, so that the University will receive no less than 30,000 yen.</p> <p>Bank Name: Toho Bank, Aizu Branch Office Account Number: 2268703 Name of Account Holder: The University of Aizu SWIFT Code: TOHOJPJT</p>
8	Self-addressed Stamped Envelope for Sending the "Exam Admission Card"	All	Prepare a regular-size envelope (120 x 235 mm), write a return address and put a 252 yen Stamp on it. (Stamp is not required for students of the University of Aizu.)
9	Course Syllabuses	Applicants falling under application category (8) or (10)	A document that details the contents of each undergraduate school course in which the applicant is enrolled. (Not applicable to students of the University of Aizu.)
10	Approval for Application	Relevant applicants	<p>① An individual who is currently holding a position in a government office or an enterprise, etc. must submit an Approval for Application written in any form by the director of the department/section to which the individual is affiliated.</p> <p>② Applicants who are enrolled at another graduate school at the time of application must submit a letter or form from the university he/she is enrolled in that states that the student has permission to take the entrance examination.</p>
11	Statement of Financial Support	International students only	<p>The provided form (F6) should be filled out by your sponsor. In addition, you must submit a proof of the name and financial standing (income) of your sponsor (free format). Some examples are listed below. No requirements have been set regarding amounts.</p> <ul style="list-style-type: none"> - Proof of the balance of the sponsor's account(s) issued by a financial institute, which includes the sponsor's name, account balance and the date (<u>in English</u>), or proof of employment and annual income of the sponsor issued by the sponsor's employer (<u>in English</u>). <p>Notes:</p> <ul style="list-style-type: none"> - Those who are applying for financial aid (Scholarship etc.) at the time of application also need to submit above documents. Those who have been accepted as a financial aid (Scholarship etc.) recipient by the time of application must submit a document indicating that fact.

12	TOEFL, TOEIC, etc. Score Record	All	A copy of an official certificate of a TOEFL, TOEIC, IELTS, GEPT, CET, etc. score. The requirement does not apply to native speakers of English or to those whose undergraduate education was administrated in English. However, in the latter case, applicants must submit a document issued by their degree-granting institute proving the official language of instruction of the applicant's undergraduate education.
13	Other Documents	Relevant applicants	<ol style="list-style-type: none"> 1. A description of an applicant's work responsibilities and major achievements on the provided form (M5), if he/she has been engaged in research at a company, etc. For details, refer to the explanatory notes on this form. 2. Official records and/or certificates which certify a score or grade from the GRE (Copies are acceptable), if an applicant has taken the test.

4. Points to note

- (1) Incomplete applications and late applications will not be accepted.
- (2) Once received, application documents and application fees will not be returned under any circumstances.
- (3) Once received, any change in the contents of the application documents will not be accepted.
- (4) Should any false statement be found in the application documents, admission might be canceled even if the applicant's admission has been previously approved.
- (5) **If an applicant falling under the qualification (1), (2), (3), (4), (5) or (6) listed on "2. Application Eligibility" becomes unable to fulfill the requirement, his/her admission will be canceled. (A Certificate of Graduation must be submitted at the time of admission.)**
- (6) In cases (4) and (5) above, application documents and application fee will not be returned.
- (7) Please check the latest information on the Web because there may be new exemption measures for the application fee, admission fee, etc. URL: <http://www.u-aizu.ac.jp/en/admissions>

5. Examination

- (1) Selection Method

Successful applicants shall be selected comprehensively through an oral examination (interview), and by examining application documents.

In the oral examination, applicants' specialized knowledge in Computer Science and Engineering as well as English language proficiency shall be tested. The examination includes a five-minute presentation in English, by each applicant on his/her specialized knowledge (applicant's strengths) related to areas in which he/she plans to specialize in for the Master's Program and research plans, followed by an about ten-minute question-and-answer session based on the presentation. Use of audio-visual aids for presentations, e.g. OHPs and PCs, is not allowed.

Notes

- 1: Applicants from fields other than computer science and engineering (hereinafter referred to as the "Individuals from Other Fields") are required to make presentations on their previous studies (fields of specialization) and their planned research.
- 2: Oral examinations may be given to individuals who apply to the program based on application eligibility category (9) to examine their basic scholastic ability.

- 3: **Oral examinations for individuals who fall under categories 2-(10) or 2-(11) and Individuals from Other Fields shall be about 30 minutes.**
- 4: With regard to the 2nd entrance examination for AY 2020 autumn admission, applicants are requested to check the details of the examination with the most recent student application guide, due to possible changes in the examination content.

(2) Date and Location for the Entrance Examination

Exam. Category Code	Examination Category	Date	Place	Subject
1201	1 st Entrance Examination for Spring Admission, AY 2020	Saturday, July 13, 2019	Research Quadrangles of the University of Aizu	Oral Examination: Applicants' specialized knowledge in Computer Science and Engineering as well as English language proficiency shall be tested.
1202	2 nd Entrance Examination for Spring Admission, AY 2020	Saturday, February 1, 2020		
1203	1 st Entrance Examination for Autumn Admission, AY 2020			
1204	2 nd Entrance Examination for Autumn Admission, AY 2020	This examination will be given at the same time as for the 1 st Entrance Examination for Spring Admission, AY 2021.		

Note: The meeting time will be given at the time when Exam Admission Card is mailed to each applicant.

6. Announcement of Successful Applicants

(1) Announcement methods

The applicant numbers of successful applicants will be posted on the notice board in front of the University of Aizu Research Quadrangles, and successful applicants will receive in writing a notification of successful results. The University will not respond to any inquiries regarding the examination results made by phone, e-mail, or other means.

The results will also be posted on the University website for reference.

URL: <http://www.u-aizu.ac.jp/en/admissions/graduate/result>

(2) Announcement date

Exam Category Code	Examination Category	Date and Time
1201	1 st Entrance Examination for Spring Admission, AY 2020	Around 11:00 a.m. (JST) on Friday, July 19, 2019
1202	2 nd Entrance Examination for Spring Admission, AY 2020	Around 11:00 a.m. (JST) on Friday, February 7, 2020
1203	1 st Entrance Examination for Autumn Admission, AY 2020	
1204	2 nd Entrance Examination for Autumn Admission, AY 2020	The result will be announced at the same time as for the 1 st Entrance Examination for Spring Admission, AY 2021.

7. Admission Procedures

(1) Submission of Documents

- a. The Student Recruiting Section of the Student Affairs Division will distribute necessary documents for admission to successful applicants who are currently students at the University. For other successful applicants, the documents will be mailed after the announcement of successful applicants.
- b. In principle, documents should be submitted by the applicant or proxy. If it is difficult to do so, please send the documents by “Registered Mail.” Please note that documents should be received no later than the “dates for admission procedures period” noted in 7-(2) below. Prior to mailing of documents, make a phone call to the Section by the dates noted below:
Spring Admission, AY 2020: 5 p.m. (JST) on Tuesday, March 3, 2020
Autumn Admission, AY 2020: 5 p.m. (JST) on Wednesday, August 26, 2020
- c. Incomplete documents will not be accepted.
- d. Once received, admission documents will not be returned under any circumstances.
- e. Once received, admission fees will not be returned under any circumstances.
- f. Should any individual fail to complete the admission procedure by the prescribed date, he/she shall be regarded as having declined enrollment in the University.

(2) Date

Exam Category Code	Examination Category	Date	Area and Time
1201	1 st Entrance Examination for Spring Admission, AY 2020	Thursday, March 5, 2020	“Keyaki” in Student Hall, From 1:00 p.m. to 4:00 p.m. (JST)
1202	2 nd Entrance Examination for Spring Admission, AY 2020		
1203	1 st Entrance Examination for Autumn Admission, AY 2020	Friday, August 28, 2020	Student Recruiting Section, Student Affairs Division
1204	2 nd Entrance Examination for Autumn Admission, AY 2020		

(3) Location for the admission procedures

Student Affairs Division, Department for Student Affairs, University of Aizu

(4) Payment for the first year (AY 2019)

Item	Amount	Payment Due
Admission Fee	282,000 yen	Same as the date given in 7-(2) above.
Tuition	520,800 yen	Paid in two installments of 260,400 yen (end of April and October respectively)
Casualty and accident insurance for student's education and research	1,750 yen (for two-years' insurance)	Same as the date given in 7-(2) above.
Comprehensive Insurance for International Students *International students only	3,260 yen (for two years' insurance)	Same as the date given in 7-(2) above.

Amounts and due dates for AY 2020 are subject to change.

Please check the latest information on the Web because there may be new exemption measures for the admission fee, tuition, etc. URL: <http://www.u-aizu.ac.jp/en/admissions/tuition>

8. Other

(1) Scholarships

Applications can be made for a scholarship from the Japan Student Services Organization for Postgraduates, and other scholarships. Details of scholarships will be explained after entrance to the University.

(2) TA System

The University of Aizu offers TA (Teaching Assistant) positions to graduate students. Teaching Assistants will be paid a wage (around 1,000 yen per hour) according to their working hours.

(3) Boarding Houses and Apartment Houses

Students must find accommodations on their own. Accommodation information is available at the Student Health and Welfare Services Section of the Student Affairs Division.

Phone: [+81] (242) 37-2515

E-mail: cl-health-welfare@u-aizu.ac.jp

9. Preliminary Qualification Examinations

Applicants falling under application categories (8), (9) or (10) in item 2 are required to go through the preliminary examination by submitting the documents listed below. When the actual application for the program is made, submission of the original Application Form and other documents excluding those already prepared for the preliminary examination is necessary.

Documents necessary for the preliminary examination must be placed in an envelope, **on which “For the Preliminary Examination” should be written in red**, and must be submitted in person or be mailed using “Registered Express Mail” or EMS (from outside Japan) to the address given in 3-(2).

- (1) Applicants falling under application category (8) or (10) in item 2 above

Exam. Category Code	Examination Category	Document Submission Deadline	Notification of the Result
1202	2 nd Entrance Examination for Spring Admission, AY 2020	Friday, November 8, 2019 (Documents must be received no later than 5:00 p.m.(JST))	By Friday, December 6, 2019
1204	2 nd Entrance Examination for Autumn Admission, AY 2020	The dates will be set as the same as for the 1 st Entrance Examination for Spring Admission, AY 2021.	

Documents for Submission	Description
Copy of the Application Form	See the list of the application documents given in item 3-(4) Application Documents.
Certified Transcript	
Research Plan	
Letter of Recommendation	
Certificate of Enrollment	
Course Syllabuses	

- (2) Applicants falling under category (9) in item 2 above

Exam. Category Code	Examination Category	Document Submission Deadline	Notification of the Result
1201	1 st Entrance Examination for Spring Admission, AY 2020	Tuesday, May 7, 2019 (Documents must be received no later than 5:00 p.m.(JST))	By Friday, May 31, 2019
1202 1203	2 nd Entrance Examination for Spring Admission, AY 2020 1 st Entrance Examination for Autumn Admission, AY 2020	Friday, November 8, 2019 (Documents must be received no later than 5:00 p.m.(JST))	By Friday, December 6, 2019
1204	2 nd Entrance Examination for Autumn Admission, AY 2020	The dates will be set at the same time as for the 1 st Entrance Examination for Spring Admission, AY 2021.	

Documents for Submission	Description
Copy of the Application Form	See the list of the application documents given in item 3-(4) Application Documents.
Certified Transcript	
Research Plan	
Letter of Recommendation	
Certificate of (Expected) Graduation	
Achievement Record	Fill in the provided form (M5) if you have been engaged in research at a company, etc.

Graduate School Admission Policy

The University of Aizu is the first university in Japan solely dedicated to computer science and engineering. Computer science and engineering is a promising and cutting-edge discipline with a wide range of applications, and it is becoming a core for technology regarding knowledge production. True to its founding principles "Starting from Local Communities to the World" and "to Advance Knowledge for Humanity", the University of Aizu has always conducted cutting-edge research and comprehensive education in computer science and engineering with a faculty comprised of highly accomplished researchers from around the world.

The University of Aizu Graduate School was established in April 1997 as a place for pioneering academic research and education that contributes to a global society. The Graduate School aims to develop highly creative individuals by providing diverse courses that incorporate advice from the private sector within a superior educational and research environment. In order to develop the ability of students to solve problems in a global environment, classes are generally taught in English. The University of Aizu Graduate School has set forth the following expectations for qualities of incoming graduate students, and the following basic admission selection policy.

Expected Qualities of Graduate School Students

[Master's Programs]

The Master's Programs seek individuals, from both within and outside Japan, who satisfy the following criteria:

- a. Have acquired basic computer science and engineering knowledge and skills at the University of Aizu, another university or an advanced course of colleges of technology, etc., despite possibly having majored in a field other than computer science and engineering.
- b. Wish to study advanced computer science and acquire engineering knowledge and skills, and possibly project development and management, to play an active role in industry as a researcher, engineer, or team leader.

[Doctoral Program]

The Doctoral Program seeks individuals, from both within and outside Japan, who satisfy the following criteria:

- a. Have sufficient capability and desire to conduct advanced computer science and engineering research, and expect to play a leading role as a scientist/educator in academia or as a researcher, planner, and/or promoter of new projects in industry.
- b. Possess a passionate curiosity, a spirit of taking on new challenges, and a strong desire to research and develop new knowledge for humanity and new systems that are useful to society.

Basic Admission Selection Policy

The University of Aizu Graduate School shall conduct a document screening including research plan and oral examination in English to confirm the applicant's basic computer knowledge and the skills, English proficiency, motivation, and discipline needed to study advanced computer science and engineering. However, under certain circumstances, we may only review the application documents depending on examination category.

Graduate Department of Computer and Information Systems

The Graduate Department of Computer and Information Systems has its foundation in the education and research of the School of Computer Science and Engineering, and it aims to teach and research the structures and functions of information processed by solving actual problems using computer systems.

Problem-solving-approach curriculum is designed for students to proceed researches in two years and offers a “Thesis Research” course, writing Master’s Theses, as a required course. 20 percent of the total required academic credits are allocated to the “Thesis Research” course.

Fields of Study (FoS) had reorganized in AY2012 due to introduction of the new curriculum. This Department has 5 Fields of Study.

- Field of Study CS (Computer Science)
- Field of Study SY (Computer Systems)
- Field of Study CN (Computer Network Systems)
- Field of Study IT (Applied Information Technologies)
- Field of Study SE (Software Engineering)

These Fields of Study are accordingly designed to the Undergraduate curriculum. Therefore, students will be able to make a consecutive research plan throughout undergraduate and graduate school programs and develop their expertise systematically.

○Computer Science (CS)

Keywords: Algorithms, Computational Modeling, Theoretical Computer Science

Students are expected to acquire basic skills required for effective use of the most advanced computer systems and intelligent systems, and to study the fundamental theories which stand at the center of computer science and engineering acquired through the extraction of essential elements from various phenomena. Such study and research should be pursued with an awareness of the practical application of theories in operational systems.

○Computer Systems (SY)

Keywords: Embedded Systems, VLSI Technologies, Computer Devices, Computer Organization, Parallel Processing

This field exposes students to a wide range of computer-architecture-related technologies including embedded systems, VLSI technologies, and computer device technologies. Regarding embedded systems, a broad and deep knowledge of application software, OS, architecture, and electronics are the targets. VLSI technologies cover not only digital design but also physical design and analog electronic circuits. Computer device technologies include both theoretical and practical study and research of micro/nano devices. Parallel processing is a major working horse for computers today and in the future and this field of study aims to teach and expose students to research in the most advanced and innovative computer technologies covering from hardware architecture to application software.

○Computer Network Systems (CN)

Keywords: Computer Network Systems

Computer networking is an indispensable element in modern information and communications services. The research and education in this field address all aspects of communications and networking, including digital communication, multimedia and ubiquitous networking, Internet engineering practice, traffic engineering, and distributed algorithms that are needed to develop computer network systems.

○Applied Information Technologies (IT)

Keywords: Virtual Reality, Multimedia Retrieval, Internet Computing, Human Interface, Robotics, Biomedical Information Technology

Virtual Reality, Multimedia and Biomedical IT are very important and constantly evolving areas in computer science and engineering. The subject areas of these fields include: computer graphics and animation, the Internet and mobile systems for multimedia computing; biomedical multimedia systems, intelligent multimedia systems, mixed and augmented reality, computer music, networked media applications, and computer games.

In response to the rapid development of web technologies, human interfaces and robotics, students are expected to acquire sufficient knowledge and skills to conduct research on and experiment with Web technologies for searching multi-media objects including speech, Human-machine interface technologies, Robot technology available in ubiquitous environments, and analysis of extreme environment exploration and remote sensing.

○Software Engineering (SE)

Keywords: Software Engineering, Parallel distributed & Internet Computing, Programming

Software engineering is a systematic and disciplined approach to developing software that applies both computer science and engineering principles and practices to the creation, operation, and maintenance of software systems. Students enrolled in our field will combine study and research in order to get practical experience in using modern software development techniques and tools as well as participate in developing various applications. They will be able to use knowledge obtained including methods range from how to precisely specify and evaluate problem requirements to how to organize the programming process of the problem solution in real time as well as required and available resources.

Graduate Department of Information Technologies and Project Management

The purpose of the department is to react to the situation by introducing a new educational process where the education through solving practical problems oriented to the IT industry. A variety of opportunities and team-based environment are organized to encourage both cooperation and individual initiatives and leadership. Also the department is to foster internationally educated experts in leading edge information technologies.

The educational program of the department is based on "Software Development Arena" that is on a so called "super-course" which demands roughly 40% of student efforts. As a result of this super-course, students, working in a team, should develop an experimental software system, write four technical reports, and publish at least one research paper in an international conference proceeding. The program supports a team-based and intensive style of study.

○Project Management and IT Specialist (PM)

Keywords: Project Management, Intellectual Property Management, Business & Computer Industry, Cloud Computing

Developing cutting-edge IT specialists who have international education background is an important duty of modern society. This field of study offers courses of basic knowledge and applied technologies to develop highly-reliable and safety software, aiming to develop IT leaders who have a wide spectrum of knowledge on computer system development from basic to applied technologies. Therefore, students are required to take courses from other fields of study to obtain required knowledge for their projects.

Specific goals of PM are;

- Cultivating leading engineers of system development
- Experiencing research and development in an English speaking international environment
- acquiring the latest knowledge and technologies
- Improving necessary qualification to be international researchers and engineers