# Academic Year 2023 Admissions (Master's Program)

Admission Season	Examination Category Code	
Admission Season	1 <sup>st</sup> Examination	2 <sup>nd</sup> Examination
AY 2023 Spring (April)	1231	1232
AY 2023 Autumn (October)	1233	1234

## 1. Admissions Capacity

		Admissions Capacity		
Graduate Department	Field of Study		Autumn (October)	Total
Computer and Information Systems	CS: Computer Science SY: Computer Systems CN: Computer Network Systems IT: Applied Information Technologies SE: Software Engineering	70	30	100
Information Technologies 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 having graduated from a university provided for in Article 83 of the School Education Law of Japan, or those expected to graduate by March 31, 2023.
- (2) Individuals conferred a bachelor's degree under the provisions of Article 104, Paragraph 7 of the School Education Law (Law No.26, 1947), or those expected to be conferred by March 31, 2023.
- (3) Individuals having completed 16 years of school education abroad, or those expected to complete by March 31, 2023.
- (4) Individuals who have completed 16 years of school education abroad through correspondence courses while living in Japan provided by relevant schools abroad, or those expected to complete by March 31, 2023.
- (5) Individuals who have completed a university program of an educational institute abroad located in Japan (limited to programs which students having completed are recognized as having completed 16 years of relevant school education abroad) authorized by the relevant school education system abroad as those having university programs, and designated separately by the Minister of Education, Culture, Sports, Science and Technology, or those expected to complete by March 31, 2023.
- (6) Individuals who have earned a degree equivalent to a bachelor's degree by completing a program with an enrollment period of at least three years at a foreign university or school (limited to institutes which, in terms of the comprehensive status of their education and research activities, have been evaluated by persons certified by the relevant government or organization abroad, or which have been designated separately by the Minister of Education, Culture, Sports, Science and Technology as corresponding to such an institute), or those expected to earn by March 31, 2023. (The above includes those who have completed a program

- through correspondence courses while living in Japan provided by the relevant school abroad and those who have completed a program of an educational institute authorized by the relevant school education system abroad and designated as such in accordance with the preceding Item)
- (7) Individuals who completed an advanced program of a vocational school in Japan at the date designated by the Minister of Education, Culture, Sports, Science and Technology or later, or those expected to complete by March 31, 2023. The program must be one of those which require academic residency of four years or longer, satisfy the other standards established by the Minister of Education, Culture, Sports, Science and Technology, and have been separately designated by the Minister of Education, Culture, Sports, Science and Technology.
- (8) Individuals who have been designated by the Minister of Education, Culture, Sports, Science and Technology in accordance with the provisions of Article 155, Paragraph 1, Item 6 of the Ruling on the Implementation of the School Education Law of Japan (Ministry of Education Notification No. 5, 1953).
- (9) Individuals who have been admitted to graduate schools in accordance with the provisions of Article 102, Paragraph 2 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.
- (10) Individuals who will have reached the age of 22 as of March 31, 2023 and recognized as having academic ability equivalent or superior to that of individuals having graduated from a university as a result of the individual examination for admission qualifications conducted by the University of Aizu Graduate School.
- (11) Individuals corresponding to any of the following items as of March 31, 2023 and who are recognized as having earned academic credits for courses designated by the University of Aizu Graduate School with excellent grades.
  - a) Individuals who have been enrolled at a university provided for in Article 83 of the School Education Law of Japan for at least three years.
  - b) Individuals who have completed 15 years of school education abroad.
  - c) Individuals who have completed 15 years of school education abroad through correspondence courses while living in Japan provided by relevant schools abroad.
  - d) Individuals who have completed a university program of an educational institute abroad located in Japan (limited to programs which students having completed are recognized as having completed 15 years of relevant school education abroad) authorized by the relevant school education system abroad as those having university programs, and designated separately by the Minister of Education, Culture, Sports, Science and Technology.
- (12) 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 of Aizu 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 2023 Autumn Admission (**1233**, **1234**), the date, "March 31, 2023," shall be read as "September 30, 2023".
- 2: An individual working may apply for and enroll in the master's program while holding a position in a company, 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 (9), (10) or (11) 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 "10. 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 applicant's name, address and ID number (applicable only to the students of the University of Aizu) must be indicated.

It must be submitted by the applicant in person or be mailed by a traceable method such as Acceptance-recorded mail to the address given in (2) below.

#### (2) Address for Submission

Student Recruiting Section, Student Affairs Division, The 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 Period

Applicants falling under the qualification (1), (2), (3), (4), (5), (6), (7), (8) or (10) in "2. Application Eligibility" may apply for both the 1<sup>st</sup> and 2<sup>nd</sup> 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 qualification (9), (11) or (12) in "2. Application Eligibility" are only allowed to apply for the  $2^{nd}$  entrance examinations (1232, 1234).

Applicants shall not be allowed to apply both for the 2<sup>nd</sup> entrance examination for Spring Admission (**1232**) and the 1<sup>st</sup> entrance examination for Autumn Admission (**1233**) at the same time, for which the examination date is the same.

Exam Category Code	Examination Category	Application Period
1231	1st Entrance Examination for AY 2023 Spring Admission	From Friday, June 3 2022 To Friday, June 10, 2022, 5:00 PM (JST)
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	From Monday, December 12, 2022
1233	1st Entrance Examination for AY 2023 Autumn Admission	To Monday, December 19, 2022, 5:00 PM (JST)
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	This examination will be given at the same time as for the 1st Entrance Examination for AY 2024 Spring Admission.

## (4) Application Documents

Fill in the forms clearly either in Japanese or English. Write in English if it is specified.

Please translate documents in any other languages into English or Japanese. Translations, which can be made by the applicant, must be accompanied by an official seal of approval from your university, an embassy, a public notary, or a government-approved institution.

	Application Documents	Applicants	Description
1	Application Form	All	Fill in the provided form (M1e)
	Address Label		Fill in the provided form (M2). Affix photos, which have the applicant's name on the back, to
2	Photo ID Card	All	the designated places in Photo ID Card and Exam Admission Card. The photo must be a portrait measuring 4 cm long and 3 cm wide, taken within 3 months of the date of submission,
	Exam Admission Card		showing the head, shoulders, and upper chest, from the front, against a plain background.

3	Certificate of (Expected) Graduation or Certificate of Enrollment	All	An official certificate issued by the university the applicant attended/is attending. (in English, Not applicable to students of the University of Aizu.)  An applicant from a foreign university must also submit a certificate of Bachelor's degree.
4	Certified Transcript	All	An official transcript issued by the university the applicant attended/is attending. (in 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)  Note: If an applicant in a remote place is not able to obtain a seal or a signature from the expected research advisor, a copy of an e-mail that verifies their agreement should be attached.
6	Letter of Recommendation	All	This should be prepared in English by an applicant's supervisor, etc. who can attest to the applicant's achievements and learning abilities objectively. Use the provided form (M4), which should be put in an envelope and sealed.
7	Official Test Score for English Proficiency	All	A copy of an official score record of TOEIC, TOEFL, IELTS, or Duolingo. (The score must be from a test dated within 2 years of the date of submission).  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.  Note: International students should ideally have English proficiency equivalent to a TOEIC score of 600 or more. At least a TOEIC score of 500 (TOEFL iBT: 40, IELTS: 3.5, Duolingo: 45) is necessary to be an international applicant.
8	Application Fee	All	1st Exam for AY 2023 Spring Admission 2nd Exam for AY 2023 Spring Admission 1st Exam for AY 2023 Autumn Admission 2nd Exam for AY 2023 Autumn Admission The application fee must be paid in Yen in the name of the applicant to the following bank account and a proof of payment must be attached to the reverse side of application form (M1e).  The sender must pay all the remittance/transfer charges to make the amount deposited in the account below becomes exactly 30,000 Yen.  Bank Name: Toho Bank, Aizu Branch Office Account Number: 2268703 Account Holder: The University of Aizu SWIFT Code: TOHOJPJT
9	Return Envelope for Sending the "Exam Admission Card"	All	Prepare a regular-size envelope (120 x 235 mm), write a return address and put a 254 yen stamp on it. (Stamp is not required for students of the University of Aizu.)

10	Course Syllabuses	Applicants falling under qualification (9) or (11)	A document that details the contents of each undergraduate school course in which the applicant is/was enrolled. (in English, Not applicable to students of the University of Aizu.)
11	Statement of Financial Support and Document Proving Assets	International students only	The provided form (M6) 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.  - Certificate of account balance (in English)  A balance of at least two million yen or equivalent is desirable. (Payment at the time of enrollment 287,010 yen, tuition 520,800 yen/year, estimated cost of living 100,000 yen/month)  - Certificate of employment and documents proving annual income (in English).  Notes:  - 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 certificate of reception including information on the recipient period and the amount. (in English)
12	Approval for Application	Relevant applicants	<ol> <li>An individual currently holding a position in a company, etc. must submit an approval for application written in any form by the director of the department/section to which the individual is affiliated.</li> <li>Applicants who are enrolled in another graduate school at the time of application must submit a letter from the current school stating that the student has permission to take the entrance examination.</li> </ol>
13	Other Documents	Relevant applicants	<ol> <li>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.</li> <li>Official record and/or certificate (Copies are acceptable) which certify a score or grade of the GRE, if an applicant has taken the test.</li> </ol>

## 4. Points to note

- (1) Incomplete applications and late applications will not be accepted. Additionally, in certain cases applications may not be accepted for other reasons.
- (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 previous approved.
- (5) An applicant falling under the conditional qualification (1), (2), (3), (4), (5), (6) or (7) in "2. Application Eligibility" must submit a certificate of Graduation and Bachelor's degree at the time of admission. If the applicant becomes unable to fulfill the requirement, his/her admission will be canceled.
- (6) Application documents and application fee will not be returned in the case the admission is canceled for the reason (4) or (5) above.

(7) Please check the latest information on the Web because there may be new exemption measures for the application fee, admission fee, etc. URL: https://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. It is possible to prepare materials for the interview and distribute these materials to the examiners. Also, it is possible to use a projector for the presentation.

#### Notes

- 1: Applicants from fields other than computer science and engineering (hereinafter referred to as the "Applicants 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 applicants falling under the qualification (10) to examine their basic scholastic ability.
- 3: Oral examinations for applicants falling under the qualification (11) or (12) and the Applicants from Other Fields will take about 30 minutes (5-10 minutes for presentation, 20-25 minutes for question-and-answer session).
- 4: With regard to the 2<sup>nd</sup> entrance examination for AY 2023 Autumn Admission (**1234**), 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
1231	1st Entrance Examination for AY 2023 Spring Admission	Saturday, July 9, 2022		Oral Examination:
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	Saturday, February 4, 2023	University of Aizu	Applicants' specialized knowledge in computer science and engineering as well as English language proficiency shall be tested.
1233	1st Entrance Examination for AY 2023 Autumn Admission			
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	This examination will be given at the same time as the 1 <sup>st</sup> Entrance Examination for AY 2024 Sp. Admission.		

Note: The details 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 University website, 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.

URL: https://www.u-aizu.ac.jp/en/admissions/graduate/result/

## (2) Announcement date

Exam Category Code	Examination Category	Date and Time
1231	1st Entrance Examination for AY 2023 Spring Admission	Friday, July 15, 2022, Around 11:00 AM (JST)
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	Emidory Enhancemy 10, 2022, Amound 11,00 AM (IST)
1233	1 <sup>st</sup> Entrance Examination for AY 2023 Autumn Admission	Friday, February 10, 2023, Around 11:00 AM (JST)
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	The result will be announced at the same time as for the 1st Entrance Examination for AY 2024 Spring Admission.

## 7. Admission Procedures

## (1) Necessary Procedures

- a. The documents necessary for admission procedures will be sent to the successful applicants after the announcement of successful applicants. For those who are currently students at the University of Aizu, the documents will be distributed at the Student Affairs Division.
- b. In principle, documents should be submitted by the applicant or proxy in person. If it is difficult to come to the University for procedure, send the documents by a traceable method such as Acceptance-recorded mail. In this case the documents should arrive no later than the date noted in (2) below, and the applicant should contact the Student Recruiting Section by the dates noted below:

AY 2023 Spring Admission: Wednesday, March 8, 2023, 5:00 PM (JST)
AY 2023 Autumn Admission: Friday, August 11, 2023, 5:00 PM (JST)

- 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
1231	1st Entrance Examination for AY 2023 Spring Admission	Eriday March 10, 2022	See the document sent to the successful applicant
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	Friday, March 10, 2023	
1233	1st Entrance Examination for AY 2023 Autumn Admission	Manday Avenut 14, 2022	
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	Monday, August 14, 2023	

## (3) Payment for the first year (AY 2022)

\*Amounts and due dates for AY 2023 are subject to change.

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.

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

#### 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) Living Expenses

Approximately 100,000 yen per month is necessary for living expenses, not including tuition.

### (4) Boarding Houses and Apartment Houses

Students must find accommodations on their own. Accommodation information is available at the University website. URL: <a href="https://www.u-aizu.ac.jp/en/campus/apartment/">https://www.u-aizu.ac.jp/en/campus/apartment/</a>

## 9. Handling of Personal Information

Personal information is handled in accordance with "Act on the Protection of Personal Information Held by Administrative Organs" and "Regulation on the Protection, Etc. of Personal Information Handled by The Public University Corporation, The University of Aizu."

- (1) The personal information including name, address, etc. learned due to submission of an application will be used for 1) admissions selections (Application processing, screening) 2) announcement of results 3) administrative admissions procedures.
- (2) Examination results used for admissions selection may be used for the purposes of post-admission education and instruction as well as the creation of study materials for future admissions selection methods.
- (3) Personal information learned due to submission of an application and the examination results used for admissions selection may be used in regards to admitted students for the purposes of 1) academic affairs (learning support, etc.), 2) student support-related (registration, health management, career support, tuition exemption/scholarship applicant, dorm residency screening) and 3) tasks related to the collection of tuition.

## 10. Preliminary Qualification Examinations

Applicants falling under the qualification (9), (10) or (11) in "2. Application Eligibility" 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" and the applicant's name/address should be written, and must be submitted in person or be mailed by a traceable method such as Acceptance-recorded mail to the address given in 3-(2).

## (1) Applicants falling under the qualification (9) or (11) in "2. Application Eligibility"

Exam Category Code	Examination Category	Document Submission Deadline	Notification of the Result
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	Monday, November 7, 2022 *Documents must arrive no later than 5:00 PM (JST)	By Monday, December 5, 2022
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	The dates will be set as the s Examination for AY 2024 Spr	

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

## (2) Applicants falling under the qualification (10) in "2. Application Eligibility"

Exam Category Code	Examination Category	Document Submission Deadline	Notification of the Result
1231	1 <sup>st</sup> Entrance Examination for AY 2023 Spring Admission	Monday, May 2, 2022 *Documents must arrive no later than 5:00 PM (JST)	By Monday, May 30, 2022
1232	2 <sup>nd</sup> Entrance Examination for AY 2023 Spring Admission	Monday, November 7, 2022 *Documents must arrive no later than 5:00 PM (JST)	By Monday, December 5, 2022
1233	1 <sup>st</sup> Entrance Examination for AY 2023 Autumn Admission		
1234	2 <sup>nd</sup> Entrance Examination for AY 2023 Autumn Admission	The dates will be set at the same time as for the 1 <sup>st</sup> Entrance Examination for AY 2024 Spring Admission.	

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

- 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.
- 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:

- 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.
- 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 teambased 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 "Project 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