Graduate School of Innovative Life Science

Major of Biological Information Systems
Major of Advanced Nanosciences and Biosciences
(Ph.D. Program)

Guidelines for Recruitment of Students

For admission in October 2023

General Admission
Special Admission for Adult Students
Special Admission for International Students
Special Admission for Persons with Disability

June 2023

University of Toyama

The contents of these guidelines for recruitment of students may be changed in light of the spread of the novel coronavirus infection.
Please be sure to obtain the latest information from the following website.
https://www.u-toyama.ac.jp/

Contents

Admission Policy

(Major of Biological Information Systems)

【Admission Policy】

This course gives education and research experience that foster profound expertise in the field of biological information system and broadly traversing areas of learning. For that purpose, a certain level of expertise in the field of life science and biotechnology obtained at a master's course of a graduate school or its equivalent is prerequisite. This course accepts such candidates who are willing to deepen their expertise concerning biological information system science and, at the same time, are willing to attend lectures and seminars for knowledge and skills of other research areas with an interdisciplinary interest and eventually become useful members of a society.

【Basic Policy of Selection (types of examinations and evaluation methods)】

<General Admission>

Based on the results of the written examination, the oral examination, and the certificate of grade report, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

<Special Admission for Adult Students and International Students>

There is no written examination. Based on the oral examination and the certificate of grade report, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

<Special Admission for Persons with Disability>

Based on the certificate of grade report, the results of a short essay, and the oral examination, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

(Major of Advanced Nanoscience and Biosciences)

【Admission Policy】

This course gives education and research experience that foster profound expertise in the field of nanoscience and bioscience based upon molecular science and life science, and broadly traversing areas of learning. Certain level of expertise in the field of molecular science and life science obtained at a master's course of a graduate school or its equivalent is prerequisite. This course accepts such candidates who are willing to deepen their expertise and at the same time, are willing to attend lectures and seminars for knowledge and skills of other research areas with an interdisciplinary interest and eventually become useful members of a society.

【Basic Policy of Selection (types of examinations and evaluation methods)】

<General Admission>

Based on the results of the written examination, the oral examination, and the certificate of grade report, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

<Special Admission for Adult Students and International Students>

There is no written examination. Based on the oral examination and the certificate of grade report, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

<Special Admission for Persons with Disability>

Based on the certificate of grade report, the results of a short essay, and the oral examination, a candidate's scholastic ability after master's degree and their motivation of learning are judged.

General Admission（For admission in October 2023）

1. Number of students for recruitment

Major	No. of students for recruitment
Biological Information Systems	A few
Advanced Nanosciences and Biosciences	A few

(Note) - **Applicants must consult a tutor of the preferred education field in advance about the direction, etc. for education and research, etc.**

2. Qualification for application

A person who corresponds to one of the following requirements

(1) A person who has a Master’s degree or professional degree and a person who is expected to receive the degree by September 2023

(2) A person who has received a degree equivalent to a Master’s degree or professional degree in other countries and a person who is expected to receive the degree by September 2023

(3) A person who has taken courses of correspondence education offered by a school in other countries or in Japan and received a degree equivalent to a Master’s degree or professional degree and a person who is expected to

receive the degree by September 2023

(4) A person who has completed the courses of an educational institution that is positioned in Japan as a school that offers courses for a foreign graduate school in the school education system of that country and designated separately by the Minister of Education, Culture, Sports, Science and Technology and received a degree equivalent to a Master's degree or professional degree and a person who is expected to receive the degree by September 2023

(5) Hold or are expecting to obtain a Master degree or equivalent by the end of September 2023, through course completion at the United Nations University (hereinafter referred to as UNU) as prescribe in Article 1 paragraph 2 of the Act on Special Measures Incidental to Enforcement of the Agreement between the United Nations and Japan regarding the Headquarters of the United Nations University (Act No.72 of 1976), which was established under the December 11,1972 resolution of the General Assembly of the United Nations.

(6) Persons who have been recognized by the Graduate School of Medicine and Pharmaceutical Sciences for Education as having academic ability equal to or higher than that of a person holding a master's degree after having completed required course at the United Nations University or an educational institution in a foreign country described in (4) and passed the examination or the equivalent of examination that was prescribed in Article 16 paragraph 2 of the Rules on Graduate Schools.

(7) A person who is designated by the Minister of Education, Culture, Sports, Science and Technology (Notification No. 118 of the Ministry of Education in 1989)

a. A person who has graduated from university, has engaged in research for more than 2 years at the university, research institute, etc., and is recognized by this Graduate School to have academic ability either equaling or surpassing a person with a Master's degree based on the achievements of the research, etc.

b. A person engaged in research for more than 2 years after completing a 16-year course of school education in another country or completing a 16-year course of school education in the country by taking a correspondence course of education in Japan offered by a school in another country and is recognized by this Graduate School to have academic ability either equaling or surpassing a person with a Master's degree based on the achievements of the research, etc.

(8) A person who was recognized by the Graduate School of Innovative Life Science to have the ability equal to or surpassing the person with a Master's or professional degree through the individual examination for admission qualification, and will be at least 24 years old by the time of admission, may apply.

(Note) As for certification of the eligibilities (7) and (8) for application, please see "(5) Filing for certification of eligibility for application" of "1. Application procedures" in the "Common matters."

3. Selection Methods

Enrolled students are selected comprehensively based on the results of written examination, oral examination, and certificate of grade report.

(1) Written examination

Foreign language (English)

(2) Oral examination

The oral examination is about subjects related to the student's Master's thesis, its related research paper, research plan after admission, and other subjects related to his or her preferred education area.

(3) Date and location of examination

Date (day of the week)	Time	Subject for examination, etc.	Site for examination
August 21 (Monday), 2023	9:30~11:00	Foreign language (English)	School of Engineering, University of Toyama 3190 Gofuku, Toyama City
	13:00~ (scheduled)	Oral examination	

* The start time of an oral examination may change depending on the number of applicants. If it is changed, we will inform you when issuing an admission ticket for examination.

Special Admission for Adult Students（For admission in October 2023）

1. Number of students for recruitment

Major	No. of students for recruitment
Biological Information Systems	A few
Advanced Nanosciences and Biosciences	A few

(Note) - **Applicants must consult a tutor of the preferred education field in advance about the direction, etc. for education and research, etc.**

- In this Graduate School, the "Special Provisions for Education Methods" specified in Article 14 of the "Standards for Establishment of Graduate Schools" are applied for paying special consideration to learning opportunities for adult students. If it is judged that there is a special educational need, education is provided using appropriate methods by offering classes or research instruction at night or another specific time or period to adult students so that they do not have to leave work.

2. Qualification for application

A person who is working at various types of research institution educational institution, company, etc. as a researcher, etc. or a person who is expected to start working at such an institution or company from October 2023 and corresponds to any of the following items

(1) A person who has a Master's degree or professional degree and a person who is expected to receive the degree by September 2023

(2) A person who has received a degree equivalent to a Master's degree or professional degree in other countries and a person who is expected to receive the degree by September 2023

(3) A person who has taken courses of correspondence education offered by a school in other countries or in Japan and received a degree equivalent to a Master's degree or professional degree and a person who is expected to receive the degree by September 2023

(4) A person who has completed the courses of an educational institution that is positioned in Japan as a school that offers courses for a foreign graduate school in the school education system of that country and designated separately by the Minister of Education, Culture, Sports, Science and Technology and received a degree equivalent to a Master's degree or professional degree and a person who is expected to receive the degree by September 2023

(5) Hold or are expecting to obtain a Master degree or equivalent by the end of September 2023, through course completion at the United Nations University (hereinafter referred to as UNU) as prescribe in Article 1 paragraph 2 of the Act on Special Measures Incidental to Enforcement of the Agreement between the United Nations and Japan regarding the Headquarters of the United Nations University (Act No.72 of 1976), which was established under the December 11,1972 resolution of the General Assembly of the United Nations.

(6) Persons who have been recognized by the Graduate School of Medicine and Pharmaceutical Sciences for Education as having academic ability equal to or higher than that of a person holding a master's degree after having completed required course at the United Nations University or an educational institution in a foreign country described in (4) and passed the examination or the equivalent of examination that was prescribed in Article 16 paragraph 2 of the Rules on Graduate Schools.

(7) A person who is designated by the Minister of Education, Culture, Sports, Science and Technology (Notification No. 118 of the Ministry of Education in 1989)

a. A person who has graduated from university, has engaged in research for more than 2 years at the university, research institute, etc., and is recognized by this Graduate School to have academic ability either equaling or surpassing a person with a Master's degree based on the achievements of the research, etc.

b. A person engaged in research for more than 2 years after completing a 16-year course of school education in another country or completing a 16-year course of school education in the country by taking a correspondence course of education in Japan offered by a school in another country and is recognized by this Graduate School to have academic ability either equaling or surpassing a person with a Master's degree based on the achievements of the research, etc.

(8) A person who was recognized by the Graduate School of Innovative Life Science to have the ability equal to or surpassing the person with a Master's or professional degree through the individual examination for admission qualification, and will be at least 24 years old by the time of admission, may apply.

(Note) As for certification of the eligibilities (7) and (8) for application, please see "(5) Filing for certification of eligibility for application" of "1. Application procedures" in the "Common matters."

3. Selection Methods

Enrolled students are selected comprehensively based on the results of oral exam and certificate of grade report. A written examination is waived.

(1) Oral examination

The oral examination is about subjects related to the student's Master's thesis, its related research paper and/or work experience, research plan after admission, and other subjects related to his or her preferred education area.

(2) Date and location of examination

Date (day of the week)	Time	Subject for examination, etc.	Site for examination
August 21 (Monday), 2023	13:00~ (scheduled)	Oral examination	School of Engineering, University of Toyama 3190 Gofuku, Toyama City

* The start time of an oral examination may change depending on the number of applicants. If it is changed, we will inform you when issuing an admission ticket for examination.

Special Admission for International Students（For admission in October 2023）

1. Number of students for recruitment

Major	No. of students for recruitment
Biological Information Systems	A few
Advanced Nanosciences and Biosciences	A few

(Note) - **Applicants must consult a tutor of the preferred education field in advance about the direction, etc. for education and research, etc.**

2. Qualification for application

A person who is a foreign national and corresponds to any of the following items

(1) A person who has received a degree equivalent to a Master's degree or professional degree in other countries and a person who is expected to receive the degree by September 2023

(2) A person who was recognized by the Graduate School of Innovative Life Science to have the ability equal to or surpassing the person with a Master's or professional degree through the individual examination for admission qualification, and will be at least 24 years old by the time of admission, may apply.

(Note) As for certification of the eligibilities (2) for application, please see "(5) Filing for certification of eligibility for application" of "1. Application procedures" in the "Common matters."

3. Selection Methods

Enrolled students are selected comprehensively based on the results of oral exam and certificate of grade report. A written examination is waived.

(1) Oral examination

The oral examination is about subjects related to the student's Master's thesis, its related research paper, research plan after admission, and other subjects related to his or her preferred education area.

(2) Date and location of examination

Date (day of the week)	Time	Subject for examination, etc.	Site for examination
August 21 (Monday), 2023	13:00~ (scheduled)	Oral examination	School of Engineering, University of Toyama 3190 Gofuku, Toyama City

* The start time of an oral examination may change depending on the number of applicants. If it is changed, we will inform you when issuing an admission ticket for examination.

Special Admission for Persons with Disability（For admission in October 2023）

1. Purpose

This University's Graduate School of Innovative Life Science shall improve the educational and research environment that allows a person with physical disability to participate in research on health and welfare devices, medical devices, or universal design on their own initiative and carry out advanced scientific education and research that can provide human resources and technologies that respond to the super-aging society of this country. In accordance with this purpose, this Graduate School shall implement special admission for persons with disability as follows aside from general admission.

2. Number of students for recruitment

Major	No. of students for recruitment	Remarks
Biological Information Systems	A few	To be included in the number of students recruited for general admission (The number of students with disabilities recruited for special admission shall be about 2 persons in the Graduate School of Innovative Life Science.)
Advanced Nanosciences and Biosciences	A few	

(Note) - Applicants must consult a tutor of the preferred major/education field in advance about the direction, etc. for education and research, etc.
- A person with physical disability who requires support or a person who has any questions about a responsible teacher, etc. must contact Admission Office (Educational Affairs Division) of the Faculty of Engineering (in charge of Graduate School of Innovative Life Science) (TEL:076-445-6399,FAX:076-445-6705) 10 days before the deadline for application.

3. Qualification for application

A person with physical disability (who is issued with a physical disability certificate) or a person with developmental disability (who is issued with a doctor's certificate) and corresponds to any of the following items shall be eligible. However, the person is required to be able to study and conduct research using a support device, etc.

(1) A person who has a Master's degree or professional degree and a person who is expected to receive the degree by September 2023

(2) A person who was recognized by the Graduate School of Innovative Life Science to have the ability equal to or surpassing the person with a Master's or professional degree through the individual examination for admission qualification, and will be at least 24 years old by the time of admission, may apply.

(Note) As for certification of the eligibilities (2) for application, please see "(5) Filing for certification of eligibility for application" of "1. Application procedures" in the "Common matters."

4. Selection Methods

Enrolled students are selected comprehensively based on the results of a short essay, oral examination, and certificate of grade report.

(1) Short essay

The applicant is asked to write a short essay on a research theme after admission.

(2) Oral examination

The oral examination is about subjects related to the student's Master's thesis, its related research paper, research plan after admission, and other subjects related to his or her preferred education area.

(3) Date and location of examination

Date (day of the week)	Time	Subject for examination, etc.	Site for examination
August 21 (Monday), 2023	9:30~11:00	Short essay	School of Engineering, University of Toyama 3190 Gofuku, Toyama City
	13:00~ (scheduled)	Oral examination	

* The start time of an oral examination may change depending on the number of applicants. If it is changed, we will inform you when issuing an admission ticket for examination.

Common matters

1. Application procedures

Applications must be submitted online only. The application procedure is completed by sending the required documents by registered express mail within the application period after the registration and payment of the application fee on the Internet application site.Please read the following "Online Application Procedure" carefully and follow the instructions.

Online Application Procedure

Prepare → Access the online application website → STEP 1 Create an account on My Page → STEP 2 Register the contents of your application → STEP 3 Pay the entrance examination fee → STEP 4 Printing required documents → STEP 5 Mailing application documents → Application completed → STEP 6 Print your admission ticket

Prepare see page 11

Prepare a PC with an Internet connection and a printer, etc.
It may take time for the required documents* to be issued. Please start preparing them early and ensure that you have them with you before applying.

*Required Documents : An official transcript, data of your photo, etc.

Access the Online Application Website

Access from the Online Application website ▶ **https://e-apply.jp/ds/toyama-gs/**

or

the University website ▶ **https://www.u-toyama.ac.jp/**

After completing registration on the Internet application site (STEP 2), the application is completed by paying the examination fee (STEP 3), printing and mailing the required documents (STEP 4, STEP 5).
Please note that your application is not complete just by registering.
Online applications are available 24 hours a day.
However, application documents must arrive by 17:00 on the last day of the application period.
Please make sure to give yourself plenty of time when applying.

STEP 1

Create an Account on My Page

Enter the required information according to the instructions on the screen to create an account on My Page.
If you have already registered on My Page, proceed to STEP 4.

① If you are registering for the first time, click My Page Registration

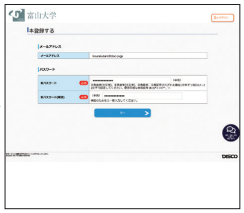
② Register your e-mail address and click on Send an e-mail for temporary registration >

③ Click on the To the log-in page from the user registration screen.

④ A default password and a registration URL will be sent to your registered e-mail address.

*Configure your e-mail settings to receive e-mails from the @e-apply.jp domain.

⑤ From the log-in screen, use your registered e-mail address and the default password you received in step 4 and click log-in



⑥ Change your default password.

⑦ Enter your personal information and click Next

⑧ Confirm your personal information and click Register this information

⑨ Registration is complete. Click **To My Page**

⑩ When the above page appears, My Page registration is complete.

*You can proceed to the application procedures by clicking on the **Apply** button only while applications are being accepted.
You cannot proceed from here onward during times outside the period.
Click on the Log-out button.

STEP 2

Register the Contents of Your Application

Make sure to check the procedures and important notices on the screen, and then enter the required fields according to the instructions on the screen.

① After logging in to My Page, click on the **Apply** button, and the registration page will appear.

② Select an entrance exam and confirm the important notices.

③ Select the desired department, etc.

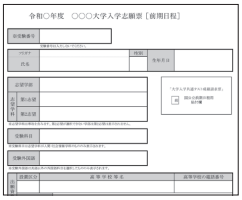
④ Upload a photo.
Click on the Select Photo button to select a photo.

⑤ Enter your information entrance (name, address, etc.).

⑥ Confirm the contents of your application.
Click on the Application Form (sample) button to check your application form.

⑦ Your application is registered.
Click on the **Pay** button to proceed to the page where you can pay your entrance examination fee.

⑧ Payment methods for examination fees.
- Convenience stores
- ATMs with Pay-easy
- Online banking
- Credit cards



⑨ Document required for the application in PDF format (Sample)
***This document can be printed out after the entrance examination fee is paid.**

If you have selected "Convenience Stores" or "ATMS with Pay-easy" as your payment method, write down the payment number, which will appear after the selection of a payment method, in the memo space below, and make the payment at a convenience store or an ATM with Pay-easy within the designated payment deadline.

For 7-ELEVEN

Payment slip number Memo (13 digits)	

For Daily YAMAZAKI, Seicomart

Online payment number by Memo (11 digits)	

For LAWSON, MINISTOP, FamilyMart, ATMS with Pay-easy

Customer number memo (11 digits)	
Confirmation number memo (6 digits)	
Receiving agency number (5 digits)	5 8 0 2 1

*A receiving agency number is required for payment Pay-easy.

A confirmation e-mail will be sent to you after the application registration is completed. If you have restricted the reception of e-mails, please allow e-mails from the sender (@e-apply.jp) to be received. *Please note that confirmation e-mails may be sorted into your junk e-mail folder, etc.

Please be careful not to enter incorrect information, as the registered information cannot be changed or modified after the application registration is completed. However, if you have not yet paid the entrance examination fee, you can substantially modify the information by re-registering using the correct information.

*Please note that if you have selected a credit card for the "Payment Method for the Entrance Examination Fee," the payment will be completed simultaneously with the registration for application.

STEP 3

Pay the Entrance Examination Fee

1 Credit Card Payment

You can select this method and make a payment when registering your application.

【Accepted Credit Cards】
VISA, Master, JCB, AMERICAN EXPRESS, MUFG Card, DC Card, UFJ Card, NICOS Card

Payment is completed upon registration.

2 Online Banking Payment

After registering your application, you will be redirected to the page of each financial institution from the current page. Please follow the instructions on the screen to make the payment.

*For online payment, your bank account must be signed up for internet banking.

The procedures are completed online.

3 Convenience Store Payment

Payment at a convenience store can be made using the payment number that will appear after you have registered the application information.

- **Payment can be made at a cash register.**
  - セブン-イレブン
  - Daily YAMAZAKI / YAMAZAKI DAILY STORE
  - Seicomart
- **Payment can be made using a store terminal.**
  - Loppi
  - LAWSON / MINISTOP
  - Multi-functional copy machine
  - FamilyMart

4 Bank ATMs with Pay-easy

Payment can be made using the payment number that will appear after you have registered the application information at bank ATMs with Pay-easy by following the instructions on the ATM screen.

*Please check the "Payment Method Selection" screen to see the banks that offer this payment method.

Enter the required information following the instructions on the screen of each convenience store terminal or ATM and confirm the details before paying the entrance examination fee.

3 Convenience Stores

7-ELEVEN

Store cash register

Tell the cashier that you want to make an "Internet Payment"

Tell the cashier the "payment slip number" (13 digits).

Pay the entrance examination fee at the cash register.

Be sure to receive the receipt (receipt slip form).

Daily YAMAZAKI / YAMAZAKI DAILY STORE

Store cash register

Tell the cashier that you want to make an "Online Payment".

Tell the cashier the "online payment number" (11 digits).

Pay the entrance examination fee at the cash register.

Be sure to receive the receipt (receipt slip form).

LAWSON / MINISTOP

Loppi

Select "Those who have a number".

Enter the "customer number (11 digits)".

Select the "multi-payment service".

Enter the "confirmation number (6 digits)".

Confirm the payment information.

Bring the printed application ticket (acceptance slip) to the cash register to pay the examination fee in cash. Please pay at the cash register within 30 minutes after the application ticket (acceptance slip) is printed.

Be sure to receive the statement and receipt.

FamilyMart

Multi-functional copy machine

Select "Payment/Charge (Convenience Store Payment/Charge)".

Enter the "customer number (11 digits)".

Enter the "confirmation number (6 digits)".

Confirm the payment information.

Bring the printed application ticket (acceptance slip) to the cash register to pay the examination fee in cash. Please pay at the cash register within 30 minutes after the application ticket (acceptance slip) is printed.

Be sure to receive the statement and receipt.

Seicomart

Store cash register

Tell the cashier that you want to make an "Internet Payment"

Tell the cashier the "online payment number" (11 digits).

Pay the entrance examination fee at the cash register.

Be sure to receive the statement and receipt.

4 Bank ATMs

ATMs with Pay-easy

ATMS with Pay-easy

Select "Tax and Fee Payment,". etc.

Enter the receiving agency number "58021".

Enter the "customer number (11 digits)".

Enter the "confirmation number (6 digits)".

Confirm the payment information.

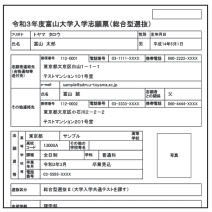
Select "Cash" and "Cash Card" and pay the entrance examination fee.

Be sure to receive the statement.

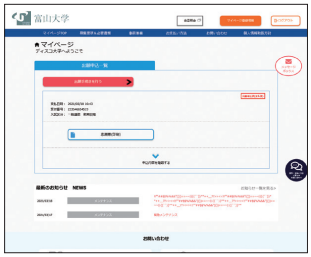
STEP 4

Printing required documents

Please log in from the "Confirm Application/Print Application Form" button and print the application form and other required documents in color on A4 paper.



Application form PDF (image)



STEP 5

Mailing application documents

Please note that your application is not complete just by registering.

Please send the documents required for the application by "**Registered express mail**" from the post office window during the application period.

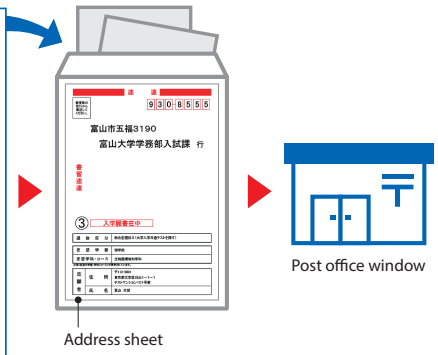
■ Application Documents

One copy is required for each application registration.

Please refer to pages 12 to 13 of the university's application guidelines to prepare the documents required for application.

<Deadline for submission of application documents>

Must arrive no later than 5:00 p.m.
July 13（Thursday）, 2023
※postmarked by July 12 (Wednesday)



Address sheet　　Post office window

The mailing address for the application documents is automatically printed on the address sheet.

Paste the address sheet on a commercially available square No. 2 envelope (240mm x 332mm)please.

Once received, the application fee and application documents will not be returned except for reasons specified in the application guidelines.

< Application completed >

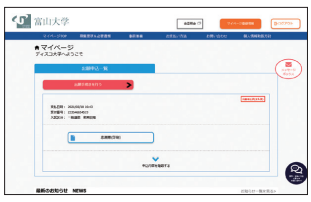
We will not respond to any inquiries regarding acceptance by telephone or other means.

STEP 6

Print your admission ticket

see page 14

You will be able to print your admission ticket from the online application site after the date of issuance of your admission ticket. Please log in from the "Print Examination Ticket" button and print it. Be sure to print the admission ticket in color on A4 paper and bring it with you on the day of the examination.



(1) Advance preparation

Documents, etc.	summary
Recommended System Environmentst	Use the following Web browser for Internet filing: ・Microsoft Edge Latest edition ・Google Chrome Latest edition ・Mozilla Firefox Latest edition ・Apple Safari 8 or later * If you would use a tab function of a browser to simultaneously carry out an application operation using more than one tab, there may be the case of malfunction, such as, selected contents are taken over to other tabs. Please refrain from simultaneously carrying out the application operation using more than one tab. If you want to go back to the previous screen, please use the "Return" button displayed on the screen instead of the "Back" button of your browser. * Mobile devices such as smartphones and tablets can be viewed, but since it is not a recommended environment, it may not be displayed properly from some terminal screens. In addition, a printing function is required, so please use a computer. https://www.adobe.com/jp/
Software needed for downloading or printing PDF files	Adobe Reader is necessary to view or print the application form that is in a PDF format. Please download the Adobe Reader software from the following website (free download).
E-mail address	A valid email address is required for your application. Please be ready to provide your email address when you start your online registration for application. We recommend that you use an email address that can be used with a computer in order to print out the application form. Also, please check your email settings to ensure that you receive emails from the following domain: @e-apply.jp
Persoal photo	Face photo data by the applicant in the application (jpeg, png, bitmap, or gif) is required. In the upper body, no hat, front-facing, Please prepare a clear photograph taken within 3 months prior to submission. File will be up to 10MB. It should be noted that, if it is determined that it is not suitable as application photos, there is a case to be re-submitted..
printer	In order to output the application form and examination admission ticket (PDF), print on A4 plain paper. You need a color printer that can be used with printing paper (plain paper, PPC paper, OA common paper, copy paper, etc.) Please to mind.
Square 2 envelope	Use a commercially available No. 2 square envelope (240 mm x 332 mm). Please use the "address sheet" that is output when you print the admission application form and paste it on the envelope.

(2) Period of application

July 7 (Friday), 2023 to July 13 (Thursday), 2023 at 5:00 p.m.Registration for online application and payment of the application fee will be available at 9:00 a.m. on July 4 (Tuesday), 2023

All documents required for application must be sent by registered express mail so that they arrive no later than the application period. Applications submitted in person will not be accepted. Please mail in plenty of time considering the postal situation.

Please note that applications arriving after the application period will not be accepted.

However, only registered express mail postmarked by July 12 (Wednesday) will be accepted even if it arrives after the application period.

Please note that we will not respond to inquiries as to whether or not the application envelopes sent by registered express mail have been received (delivered) to the University. The applicant must confirm the application in person using the "Mail Tracking Service" on the Japan Post website.

(3) examination fee

30,000 yen.

Payment of the application fee will be made after completion of the registration of application details in STEP 2 on page 8. Please apply through the university's "Internet Application Site (https://e-apply.jp/ds/toyama-gs/)" and pay the application fee after completing the applicant registration. Please confirm the method of payment of the examination fee by referring to STEP 3, Payment of the Examination Fee, on page 9. After paying the application fee, you will be able to print out the application form.

A separate handling fee is required for payment of the examination fee. The fee is to be paid by the payer.

In addition, there is a system of exemption from the examination fee for those affected by disasters. For more information, please refer to the University's website.

Once the examination fee has been received, it will not be refunded for any reason, except in the following cases.

[1] Cases in which a refund of the examination fee may be requested and the amount of refund.

(i) If you paid the application fee but did not apply to the University of Toyama (did not submit the application documents, etc. or your application was not accepted) [Refund amount] 30,000 yen

(ii) In case of double payment of the examination fee [Refund amount] 30,000 yen

(iii)If you have paid a large amount of the examination fee [Returned amount] The amount you have paid in excess of the examination fee

However, the recipient is responsible for the bank transfer fee when returning the loan.

[2] Method of claiming refund

Please fill out the attached "Written Claim for Return of Entrance Examination fee" and mail it to the University.
Send to: Accounting Division of Financial Department, University of Toyama 3190
Gofuku, Toyama City, Toyama 930-8555
Tel: 076-445-6053

(4) Application documents

Applicants must send the required documents in an envelope with an "address sheet" attached by registered express mail.The required documents will be sent after the payment of the examination fee in STEP 3 on page 9 is completed.

Documents to be printed from the Internet application site

Documents, etc.		Notes
[1]	Application for admission	Please print out the application form in **A4 size in color** from the Internet application site. Printing is available after payment of the application fee.
[2]	Address sheet	Please print out the application form in **A4 size in color** from the Internet application site. Attach it to a commercially available kakugata 2 envelope (240mm x 332mm) without peeling off.
[3]	Pledge	Please print out the application in **A4 size** from the Internet application site. See "7 Security Export Control" on page 15.

Be sure to check the printed information for errors.

Documents to be prepared by applicants

Documents, etc.		Notes
1	Certificate of (expected) completion of Master's degree	It is prepared by the head of the university (graduate course) from which the applicant graduated.
2	Certificate of grade report of graduate school	It is prepared and strictly sealed by the head of the university (graduate course) from which the applicant graduated. The certificate using forgery copy prevention paper is not required to be enclosed in a sealed envelope.
3	Certificate of grade report of undergraduate school	It is prepared and strictly sealed by the head (dean) of the university from which the applicant graduated. The certificate using forgery copy prevention paper is not required to be enclosed in a sealed envelope.
4	Copy and abstract of dissertation for Master's degree	1 copy However, for a person who has not yet graduated, please describe the progress of the dissertation. (Please use the form designated by the University.) (Instead of this, a person filing for certification of qualification for admission and a special admission adult applicant can submit a "list of research papers (including those presented at scientific meetings)" (a form designated by the University) and a "outline of research and job description" (within 2,000 words on A4-size paper).)
5	Research plan	Please use the form designated by the University.
6	Certificate of approval for taking examination	For a person who is enrolled in the Ph.D. program of another university or a person working in a public office or company, please attach a certificate of approval for taking an examination issued by the head of the education school (graduate course) of that university or head of division to which the applicant belongs. (Please choose a form.)
7	Copy of the certifcate of residence (Only Foreigner)	For a foreigner who now lives in Japan, please attach a copy of the certifcate of residence issued by the head of municipal government or a copy of both sides of the residence card.
8	Physical disability certificate (copy), etc.	For special admission for those with disabilities, a person with physical disability must attach a copy of a physical disability certificate, and a person with developmental disability must attach a doctor's certificate.

※Documents written in a foreign language other than English must be accompanied by documents translated into Japanese or English.

(5) Filing for certification of eligibility for application

A person who applies based on the "Qualification for Application (7) and (8)" ("Qualification for Application (2)" in the case of special admission for international students and special admission for those with disabilities) is subject to preliminary review for qualification. Please gather the following documents and submit them to Admission office (Educational Affairs Division) of the School of Engineering **by June 16 (Friday), 2023.**

- Certification Record of Eligibility for Admission Exam Application (a form designed by the University)
- Certificate of grade report of graduate school and a file diploma of the latest school
- Record of research and business achievement
- List of research paper (including conference presentation) (a form designed by the University)

Result of the review of the certification of eligibility for application will be informed to the student by June 30 (Friday), 2023.

(6) Preliminary consultation for a physically-handicapped applicant (Excluding special admission applicants with disabilities)

Because a physically-handicapped applicant may need special consideration when taking an examination or attending the university, please consult Admission office (Educational Affairs Division) of the School of Engineering of the university prior to the application.

During the consultation, we may ask the submission of a document describing the following matters and a doctor's certificate.

- Type and severity of disability
- Matters for which the applicant requests special consideration when taking an exam
- Matters for which the applicant requests special consideration when attending the university
- Situation of daily living and other matters that can be referred to

[1] Deadline for consultation: **June 16 (Friday), 2023**

[2] Contact to: Admission office (Educational Affairs Division) of the School of Engineering
University of Toyama
3190 Gofuku, Toyama City, Toyama 930-8555
Tel: 076-445-6399

2. Print out the Examination Voucher and Examination Instructions

(1) The examination voucher will be available for printing on the Internet application site after the date of issuance of the voucher after the University receives the application documents sent by the applicant. When the examination voucher is ready to be printed, we will notify the applicant's e-mail address registered at the time of Internet application.

Date of Issue of Examination Voucher, etc. (Note) August 4, 2023 (Friday) 3:00 p.m. (tentative)

(Note) The date of issuance of examination vouchers is tentative and may be subject to change.

(2) Log in to My Page from "Login" on the Internet application site. In order to log in, you will need [your email address and the password you set yourself].

(3) After log in, please download the examination voucher. Please print out the examination voucher in color on A4 paper and bring it with you on the day of the examination. Please be sure to read the "Precautions for the Examination" printed with the examination voucher. Please be sure to read them carefully before taking the examination.

Precautions

(1) After printing the examination voucher, be sure to check the information on it. If the information is different from what you registered for the application, please contact Admission Office (Educational Affairs Division) of the School of Engineering as soon as possible.

Also, be sure to check that the examination number on the computer screen and the number on the printed examination voucher match.

(2) Even if you do not receive an e-mail, please log in to the Internet application site and print out the examination voucher and instructions for the examination.

(3) The number you receive when you register your application online is not your examination number. Please be sure to bring your examination voucher with you on the day of the examination, as you will not be allowed to take the examination using your reception number.

(4) On the day of the examination, it is not acceptable to present the examination voucher by displaying it on the screen of a smartphone or other such device. Be sure to bring the printed examination voucher and keep it in a safe place after the examination.

3. Announcement of successful applicants

The identification numbers of successful applicants shall be posted in front of the gate of the School of Engineering (Gofuku Campus) and in front of the research buildings of the School of Medicine and the School of Pharmacy and Pharmaceutical Sciences (Sugitani Campus), University of Toyama, **at 3:00 p.m. on Septemder 4 (Monday), 2023,** and successful applicants shall be notified separately.

The University will not respond to any inquiry about the passing status by phone, fax, etc.

4. Admission procedures

The admission procedures shall be taken as follows, but the details will be notified separately to successful applicants.

(1) Day of admission procedures: **September 15 (Friday), 2023 (scheduled)**

(2) Expenses required for admission procedures

a. Admission fee: **282,000 Japanese yen (scheduled amount)**

(Note) [1] The above admission fee is the scheduled amount. If the admission fee is revised at the time of admission, a new admission fee will be applicable from the time of revision.

[2] The paid admission fee shall not be returned for any reason.

b. Others

[1] If the payment of the admission fee and tuition is acknowledged to be difficult, the successful applicant may be exempted or payment postponed upon selection.

[2] The tuition shall be **paid after admission**. The amount of payment and method of payment shall be explained at the time of the admission procedures

<Reference> Tuition of FY2023: Annual tuition of 535,800 Japanese yen

[3] A scholarship program of the Japan Student Services Organization is available.

[4] The payment for Disaster and Accident Insurance for Students Engaged in Education and Research, etc. is required separately.

(3) Cautions

A person who does not complete the admission procedures on the day of the admission procedures, he or she shall be handled as a person who wishes to withdraw from admission.

5. Protection of personal information of an applicant for admission

The personal information possessed by the University shall be handled based on the “Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc.” and “University of Toyama Rules for Protection of Personal Information.”

(1) The names, addresses and other personal information of applicants learned at the time of application shall be used for [1] selection of students to be enrolled (application processing, implementation of selection), [2] announcement of successful applicants, [3] admission procedures, [4] survey/study in the selection method of enrolled students, and [5] operations associated with these purposes.

(2) Among the personal information learned at the time of application, only the information of those who completed the procedures for admission to our university shall be used for preparatory education and post-admission operations related to [1] educational instruction (school registry, attending instruction, etc.), [2] student support (health management, application for tuition waiver/scholarship, career support, etc.), [3] collection of tuition, and [4] statistical survey and data analysis.

(3) Only the applicant ID numbers, names and addresses of successful applicants may be used for contact from the student activity groups, organizations associated with the university, alumni association, support group and co-op.
(Note) If a successful applicant does not wish to receive any contact from the above organizations, please inform Admission Office (Educational Affairs Division) of the School of Engineering to that effect.

(4) In the use of personal information for various types of operations, some of the operations may be conducted by a vendor contracted with the relevant operations from our university (hereinafter referred to as “contractor”). When contracting the operations, all or part of the personal information learned shall be provided to the contractor within the limit necessary to perform the contracted operations. We supervise the use of information to ensure compliance with confidentiality.

6. Cautions

(1) If there is any defect in the application documents, the application may not be accepted.

(2) If there is a shortage in the entrance examination fee payment, the application shall not be accepted.

(3) The application documents, etc. once accepted shall not be returned for any reason.

(4) If any fact that is different from the description in the submitted documents is found even after acceptance of admission, the admission of a successful applicant may be cancelled.

(5) Please forward any inquiry about the application or other matters to the following address.
Admission Office (Educational Affairs Division) of the School of Engineering
University of Toyama
3190 Gofuku, Toyama City, Toyama 930-8555
Tel: 076-445-6399

7. Security Export Control

The University of Toyama has established the "University of Toyama Security Export Control Regulations" based on the "Foreign Exchange and Foreign Trade Act", and conducts strict screening for security export control in the perspective of providing technology and export of research equipment and materials. If applicants who fall under any of the regulated items, you may not be able to get the permission to enroll, and receive the desired education at the university. There may be restrictions on your desired research activities.

For more information, please visit the University website.

[Reference] "University of Toyama Security Export Control egulations"
URL http://www3.u-toyama.ac.jp/soumu/kisoku/pdf/0110401.pdf

Outline of the Ph.D. program of the University of Toyama Graduate School of Innovative Life Science

1. Purpose

Currently, the development of technologies and equipment in important areas such as medical care, drug discovery, and welfare centering on medicine and pharmaceutical sciences, which are closely related to human life itself, is fast evolving everyday. In fact, such development in medical and pharmaceutical areas alone is limited to the expansion of biotechnology essential for medical care, development of advanced biotechnology-based medical devices such as new drugs, protein chips and cellular chips, computational chemistry and synthetic technology necessary for drug discovery, and progress of manufacturing technology of drugs. There is a growing need for scientific education in cognitive information science, biotechnology, electronic information, and device engineering, new technology such as nano technology in the areas of science and technology, and explanation of life phenomena.

We have established the "**Graduate School of Innovative Life Science**" that combines the field of developing electronic measuring systems and precision instruments, which are necessary for medical care, the area of simulating information transmission and processing methods in the brain and nervous system and applying the advantages, the field of analyzing structures and actions of chemical compounds for drug discovery, computerizing/predicting, and synthesizing them, and the area of developing new functional materials necessary for assisting biological functions by making full use of nano technology with the medical and pharmaceutical areas based on the latest life sciences. We are aiming to develop human resources who can respond to various social needs by providing cutting-edge interdisciplinary education and research on basic studies of human life system, maintenance of health, and support through the coordination of related teachers in the faculty activities of medical science, pharmaceutical science, basic science, and engineering.

2. Structure and Credit Standard

(1) Majors and course terms

[1] There are three majors in this Graduate School of Innovative Life Science (Ph.D. program): Cognitive and Emotional Neuroscience, Biological Information Systems, and Advanced Nanosciences and Biosciences.

[2] The course term for Cognitive and Emotional Neuroscience is 4 years as a standard and the course terms for Biological Information Systems and Advanced Nanosciences and Biosciences are 3 years as a standard.

(2) Credit standard

The following table shows the credit standard of this Graduate School of Innovative Life Science (Ph.D. program).

<table>
<tr><td rowspan="3">Class subject
Major</td><td colspan="3">Optional subject</td><td colspan="2" rowspan="2">Mandatory subject</td><td rowspan="3">Total</td></tr>
<tr><td colspan="3">Lecture</td></tr>
<tr><td>Open subject of own major</td><td>Common subject (selective/ mandatory)</td><td>Open subject of other schools of education*</td><td>Exercise</td><td>Special research</td></tr>
<tr><td>Biological Information Systems</td><td rowspan="2">2 credits or more</td><td rowspan="2">2 credits or more</td><td rowspan="2">2 credits or more</td><td rowspan="2">4 credits</td><td rowspan="2">10 credits</td><td rowspan="2">20 credits or more</td></tr>
<tr><td>Advanced Nanosciences and Biosciences</td></tr>
</table>

*Graduate School of Medicine and Pharmaceutical Sciences, Graduate School of Science and Engineering.

3. Outlines of Majors

Major	Contents of major	Educational area
Major of Biological Information Systems	To clarify the mechanisms of biological systems in the "post-genome age," the need for multilateral observation and understanding of concurrently ongoing phenomena in living organisms has been increasing. In addition, the development of a methodology to obtain, analyze, and understand an enormous amount of information efficiently is required even in future standard medical care system represented by gene diagnosis and personalized medicine. Moreover, in accordance with the rapid development of life science, development is sought of a new biological system science, intellectual information engineering, and medical engineering, which will enable a rapid response to aging welfare societies and health enhancement societies. Under these circumstances, this department is to cultivate leading life scientists who will research and reveal the processes and mechanisms of complicated life phenomena, which keep changing, and unresolved gene information and its expression/regulation mechanisms mainly at the level from molecules and cells to tissues. Furthermore, based on the latest findings on microbiological information-processing mechanisms, leading researchers and advanced engineers who can design and develop devices for body function measurement, medical measurement, and environmental measurement, as well as advanced engineers and pharmacists who can understand and use advanced medical devices and leading-edge information engineering are to be cultivated. We also aim to develop human resources who acquire recent findings and cross-sectoral analysis methods on the brain nerve network as a biological information system in collaboration with departments of cognitive and emotional neuroscience and who contribute to the design and development of next-generation intellectual information engineering, brain-type computers, and human interfaces. In this department, we resolve the biological information system at such micro levels in collaboration with staff in medical (concurrent) departments, pharmacological departments, biological departments, bioengineering departments, and information engineering departments.	• Structural Biology • Morecular Genetics • Consilienceology for Wakan-yaku • Biological Information Engineering • Chronobiology • Bioelectronics • Biosensing Engineering • Brain and Neural Systems Engineering • Brain・Nerve Information Engineering • Tissue and Organ Engineering • Comparative Neuroendocrinology • Pharmacology • Protein Science
Major of Advanced Nanosciences and Biosciences	With a background of advances in genome and post-genome researches and the boom in nanoscience, the achievements of researches in the life science area based on genome and post-genome information and the advances in drug discovery science in collaboration with molecular design technologies have been important social requests propelling the creation of new innovative drugs and bioactive substances. In response to the global trend of sophistication in the medical field, it is essential to integrate leading researches including nanotechnology and biotechnology in an interdisciplinary manner and to develop human resources who can collaborate among industry, academia, and government more than ever before. Moreover, it is also an urgent mission for universities of the new era to develop human resources who can play a leadership role in the new integrated area with extremely high sociality. In addition, expression of homeostatic processes, diseases, and pharmacological activities in living organisms is caused by the complicated association of structures, physical properties, and reaction mechanisms of molecular assemblies and polymers in the body at the nano scale. Therefore, molecular researches are essential in the nano-scale area to resolve physiological actions and to develop drugs with effective pharmacological effects. Thus, in this department, we provide education and research guidance with the aim of cultivating leading researchers who can play a major role in the nanobiotechnology science area, which is connected with the medical/pharmacological fields and life science/material science fields mainly for the following subjects that will certainly be needed in the future: establishment of a highly functional nano-bio interface and the development of its new functions, development of new functions of nano-scale molecular assemblies and polymers, which make up tissues of living organisms, reasonable synthesis of natural and artificial bioactive substances, resolution of physiological activity, the action mechanism of enzymes/catalysts in which trace metal ions are involved, the development of new activities, and chemical biology.	• Synthetic Medicine Chemistry • Nano-size Functional Molecule Design Chemistry • Nano-Biomolecular Design Chemistry

4. List of courses

As attached in Appendix I

5. List of responsible teachers and research contents

As attached in Appendix II

6. Special exceptions of educational method

A person who receives special-exception education can not only take courses during the day but can also take courses and research guidance at night if he or she submits a course plan after consulting with his or her responsible teacher. The time slot for night courses and research guidance is scheduled from 18:10 to 21:20 from Mondays through Fridays in principle. However, a person eligible for special exception can take courses on Saturdays or during the summer vacation, etc. depending on the class subject.

The time slots for classes are scheduled as follows.

First period:	08:45 – 10:15	Second period:	10:30 – 12:00	Third period:	13:00-14:30
Fourth period:	14:45 – 16:15	Fifth period:	16:30 – 18:00		
Sixth period:	18:10 – 19:40	Seventh period:	19:50 – 21:20		

7. Conferral of academic degree

○Major of Biological Information Systems, Major of Advanced Nanosciences and Biosciences

(1) Depending on the contents of the courses and dissertation, a Doctor's degree of pharmaceutical sciences, science, or engineering shall be given.

(2) An academic degree shall be given to a person who has been enrolled in the Graduate School for more than 3 years, acquired 20 credits or more according to "(2) Credit standard" of "2. Structure and Credit Standard," and passed the review for a doctoral dissertation and the final examination after receiving necessary research guidance. However, an academic degree may be given even if his or her enrollment period is less than 3 years, if a student who has been enrolled in the Graduate School for more than 2 years has shown outstanding research achievements and met the designated requirements.

If a student presents his or her plan to take and complete the program systematically over a certain period beyond the standard course term (3 years) due to special circumstances such as working outside the campus, the systematic course curriculum may be accepted.

8. Structure of responsible teachers, etc.

(1) One responsible teacher and two assistant teachers shall be assigned.

(2) Each student shall decide on a special research theme after consulting with a responsible teacher and/or an assistant teacher at the time of admission and shall carry out the research in parallel with special exercise courses until completion of the program.

(3) One of the assistant teachers shall be selected from among teachers who belong to different faculty activities from the faculty activity (medical science, pharmaceutical science, basic science, and engineering) of the student and shall give advice beyond the conventional boundaries of the research departments of medical science, pharmaceutical science, basic science, or engineering.

Appendix I

List of Class Subjects

Major of Biological Information Systems

	Name of class subject	No. of credits		
		Mandatory	Optional	Free
Common subject	Bioethics		2	
	Advanced Life Science		2	
	Medical Design and Entrepreneurship		2	
	Internship		2	
Specialized subject	Structural Biology		2	
	Chronobiology		2	
	Protein Engineering		2	
	Advanced Biometabolical Engineering		2	
	Design of Bio-information Devices		2	
	Neural Systems Engineering		2	
	Advanced Biosensing Chip Technologies		2	
	Information Engineering in Nervous System		2	
	Tissue and Organ Engineering		2	
	Advanced Biochemistry for Organic Molecules		2	
	Wakan-yaku Theory-Based Functional Neo-Pharmacology		2	
	Pharmacology and Genetic Engineering		2	
	Cell Stress Biology		2	
	Protein Metabolism		2	
	The Scientific Writing and Presentation in English			2
	Japanese Language & Culture			2
	Special Practice of Biological Information System Science	4		
	Special Research for Biological Information System Science	10		

Major of Advanced Nanosciences and Biosciences

	Name of class subject	No. of credits		
		Mandatory	Optional	Free
Common subject	Bioethics		2	
	Advanced Life Science		2	
	Medical Design and Entrepreneurship		2	
	Internship		2	
Specialized subject	Synthetic Methods for Advanced Organic Molecules		2	
	Advanced Synthetic Chemistry for Functional Molecules		2	
	Chemistry of Functional Metal Complexes		2	
	Bio-environmental Analytical Chemistry		2	
	Design of Biocatalyst and Bioprocess		2	
	Biointerface Science		2	
	Molecular System Science of Nucleic Acids		2	
	Evolutionary Molecular Engineering		2	
	Biomolecular Simulation		2	
	Biofunctional Engineering		2	
	Nano-Biomaterial Design		2	
	The Scientific Writing and Presentation in English			2
	Japanese Language & Culture			2
	Special Practice of Advanced Nanosciences and Biosciences	4		
	Special Research for Advanced Nanosciences and Biosciences	10		

Appendix II

List of Responsible Teachers and Research Contents

Major of Biologicl Information Systems

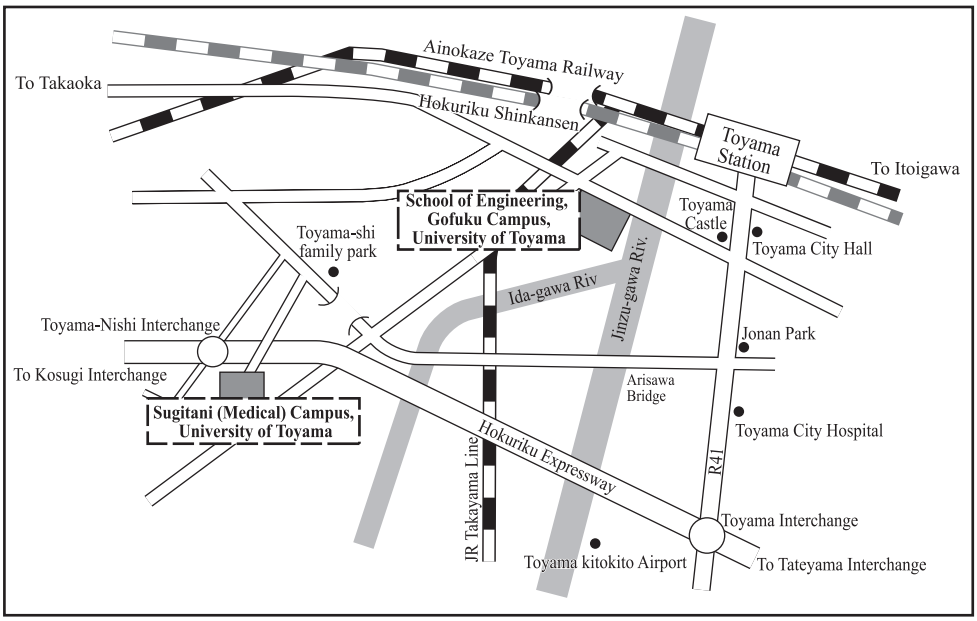
Educational area	Responsible teacher	Research contents
Structural Biology	Professor MIZUGUCHI Mineyuki	We determine protein conformation by NMR and X-ray crystallography to analyze functions and conduct researches on the relation between changes in protein structures and diseases by examination of abnormal structures such as amyloid fibril.
Molecular Genetics	Professor TABUCHI Yoshiaki	・Mechanical control of cell differentiation ・Elucidation of molecular mechanism of cellular stress response
Consilienceology for Wakan-yaku	Associate Professor TOHDA Michihisa	The following studies based on the classical scientific theory systems for Wakan-yaku and Kampo medicine; [Targetted diseases] functional mental diseases (depression, schizophrenia, developmental disability), heart failure; [Academic bases for studies] Jin Gui Yao Lue, the traditional Japanese medicine, the traditional medicine originated in China, physiology, biochemistry and pharmacology; [Strategy and purpose] 1) Diagnosis for functional mental diseases based on the Wakan-yaku response (=Sho), clarification of the molecular mechanisms for diseases, and development of novel Wakan-yaku prescriptions. 2) development of novel Wakan-yaku prescriptions to prevent lethal recurrence of heart failure
Biological Information Engineering	Professor KUROSAWA Nobuyuki	We will conduct research on molecules involved in human diseases and also try to develop monoclonal antibodies for diagnostic and therapeutic purpose.
Chronobiology	Professor IKEDA Masayuki	We aim to explore unknown life phenomena and establish a new method for life measurement. In particular, we conduct research on gene introduction technology of a visualization probe of intracellular signal messengers represented by calcium ions, cell culture technology, and measurement technology for long-term stability of physiological activities by using the above technologies.
Biosensing Engineering	Professor SUZUKI Masayasu ＊1	We focus on miniaturization and integration of biosensors. We are developing immunosensors and enzyme sensors for clinical diagnosis, bioscience and environmental science. Especially, the biosensing technology for single cell analysis is our recent major target.
Brain and Neural Systems Engineering	Professor KAWAHARA Shigenori	By using a relatively simple associative learning task, eyeblink conditioning, we conduct researches on cross-domain interaction in the brain and the hierarchical regulation mechanism from the viewpoint of system theory.
Pharmacology	Associate Professor TAKASAKI Ichiro	Our subjects of research are "pain" and "itch," especially chronic pain and itch such as neuropathic pain and atopic dermatitis. Our aims are to clarify the mechanisms in which the pain or itch becomes chronic and to develop a new drug for the pain and itch.

Major of Advanced Nanosciences and Biosciences

Educational area	Responsible teacher	Research contents
Synthetic Medical Chemistry	Professor TOYOOKA Naoki ＊2	· Drug discovery researches oriented to the development of therapeutic medicines for central neurological diseases · Drug discovery researches oriented to the development of new therapeutic medicines for diabetes mellitus and its complications · Drug discovery researches oriented to the development of new therapeutic medicines for Alzheimer's disease · Drug discovery researches oriented to the development of anticancer drugs
	Professor ABE Hitoshi	Conduct educational research on creation of functional molecules such as biologically active compounds, based on organic synthesis of natural molecules which possess complex structure.
Nano-size Functional Molecule Design Chemistry	Professor AIZAWA Sen-ichi ＊2	We design new metal complexes, estimating their functions such as physiological/pharmacological and catalytic activities. In the next stage, we make a plan for the synthesis and put it into practice. The structure and reactivity of the synthesized metal complexes will be determined using various analysis methods. The new functions of the obtained metal complexes will be validated by elucidating their reaction mechanisms.
	Professor TOHDA Koji ＊2	Conduct the educational research on the design and synthesis of highly functional optical sensor molecules for the sensing of metabolites such as glucose or lactate and ions such as potassium or sodium in the human body, and their application in novel optical sensing system for minimally invasive monitoring of vital ions and metabolites as a tool of biochemical and clinical analyses.
Nano-size Functional Molecule Design Chemistry	Professor IKAWA Yoshiya	Elucidation of the molecular bases of naturally occurring RNAs acting as enzymes and receptors. Generation of novel structures and functions of artificial RNA molecules and their applications.
Nano-Biomolecular Design Chemistry	Associate Professor ISHIYAMA Tatsuya	Biomolecular structure and its dynamics are analyzed by computer simulation technique based on interaction models among biomolecules according to the principles of quantum chemistry. Static and dynamic variables of biomolecules are calculated from molecular trajectories obtained by molecular simulations based on theory of statistical mechanics, and thereby biomolecular phenomena are solved in a microscopic point of view.
	Associate Professor NAKAJI Tadashi	We carry out the design and synthesis of base chemicals for biomedical materials and the construction of novel biomaterials using synthetic polymers or biopolymers. In addition, we aim for the establishment of concept for biomaterial designing. And then we demonstrate the effectiveness of novel materials with the in vitro and in vivo experiments using cells, tissues and animals.
	Associate Professor SAKONO Masafumi	Our aim is to enhance the functionality of biomaterials and to clarify biochemical events in living organism. This involves the development and improvement of biotechnological techniques. Based on the gained knowledge, the goal is to expand into the creation of materials such as nanomaterials.

＊1 Teachers with asterisk mark (＊1) are scheduled to retire in March 2025
＊2 Teachers with asterisk mark (＊2) are scheduled to retire in March 2026

University of Toyama Campus Locations



Locations for receipt of application/examination

School of Engineering, Gofuku Campus, University of Toyama

Transportation to the School of Engineering, Gofuku Campus, University of Toyama

◎By Toyama Chiho Railway Tram Lines
- About 20 minutes from Toyama Station

◎By Bus
- About a 20-minute ride on Toyama Chitetsu Bus “Via the University of Toyama” departing in front of Toyama Station and a few minutes from the bus stop “University of Toyama Mae”

◎Others
- About 20 minutes by car from “Toyama kitokito Airport”
- About 10 minutes from “Toyama Nishi IC” or about 20 minutes from “Toyama IC” on Hokuriku Expressway

Inquiries about the Guidelines for Recruitment of Students, admission exam, and preliminary consultation for applicants with physical disabilities

＊The applicant should make inquiries on his or her own unless absolutely necessary.

Admission Office (Educational Affairs Division) of the School of Engineering, University of Toyama
3190 Gofuku, Toyama City, Japan 930-8555
TEL: 076-445-6399