

2026

Enrollment in April 2026

Enrollment in October 2025

[General Admission Examination]

[Special Admission Examination for International Students]

Graduate School of Pharma-Medical Sciences (Master's Course)

Graduate Program of Pharmaceutical Science and Technology

Graduate Program of Applied Natural Medicine

Graduate Program of Cognitive and Emotional Neuroscience

Graduate Program of Medical Design

June 2025

University of Toyama

In the event of an unexpected situation, the contents of the student application guidelines, including the examination schedule, may be changed. If it is necessary to make such changes, we will inform you on our website, and please be sure to check the latest information.

<https://www.u-toyama.ac.jp>

Table of Contents

Overview of Selection for Admission to the Graduate School of Pharma-Medical Sciences (Master's Courses)	4
I. Admission Policy	6
II General Admission Examination	8
1. Summary of Admissions Selection Schedule	
2. Number of Students to be Admitted	
3. Eligibility for Application	
4. Use of External English Test	
5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology	
6. Selection Method for Admission to Graduate Program of Applied Natural Medicine	
7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience	
8. Selection Method for Admission to Graduate Program of Medical Design	
III. Special Admission Examination for International Students	13
1. Summary of Admissions Selection Schedule	
2. Number of Students to be Admitted	
3. Eligibility for Application	
4. Use of External English Test	
5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology	
6. Selection Method for Admission to Graduate Program of Applied Natural Medicine	
7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience	
8. Selection Method for Admission to Graduate Program of Medical Design	
IV General Procedure of Application and Admission	18
1. Application Procedures	
2. Printout of the Examination Voucher	
3. Examination of Eligibility for Application	
4. Announcement of Successful Applicants	
5. Admission Procedure	
6. Policy on Personal Information Protection	
7. Notes on Application	
8. Security Export Control	
9. Preliminary Consultation for Applicants with Disabilities	
10. Admissions Disclosure	

V Overview of the Graduate School of Pharma-Medical Sciences 30

1. Graduate Program of Pharmaceutical Science and Technology
 - (1) Purpose and Degree
 - (2) Special Measures for Educational Methods
 - (3) Requirements for Completion of Courses
 - (4) List of Research Projects Conducted by Academic Advisors
2. Graduate Program of Applied Natural Medicine
 - (1) Purpose and Degree
 - (2) Special Measures for Educational Methods
 - (3) Requirements for Completion of Courses
 - (4) List of Research Projects Conducted by Academic Advisors
3. Graduate Program of Cognitive and Emotional Neuroscience
 - (1) Purpose and Degree
 - (2) Special Measures for Educational Methods
 - (3) Requirements for Completion of Courses
 - (4) List of Research Projects Conducted by Academic Advisors
4. Graduate Program of Medical Design
 - (1) Purpose and Degree
 - (2) Special Measures for Educational Methods
 - (3) Requirements for Completion of Courses
 - (4) List of Research Projects Conducted by Academic Advisors

For the Graduate Programs of “Pharmaceutical Science and Technology”, “Applied Natural Medicine”, “Cognitive and Emotional Neuroscience”, and “Medical Design” (Master’s Courses) offered by The Graduate School of Pharma-Medical Sciences, the student recruitment (Enrollment in April 2026) will be implemented twice. If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.

The availability of the second recruitment will be announced on our website around November 2025.

The third session may be held depending on the number of applicants up to the second session.

-To All Working Adults-

The Graduate School of Pharma-Medical Sciences welcomes working adults to encourage recurrent education.

Although no special admission examination for working adults is prepared, the General Admission Examination is also suitable to working adults.

In addition, special measures can be taken to enable persons currently in employment to study without leaving their jobs, by applying the “Special Measures for Educational Methods based on Article 14 of the Standards for Establishment of Graduate Schools.”

Overview of Selection for Admission to the Graduate School of Pharma-Medical Sciences (Master's Courses)

Number of students to be admitted in April 2026

Program name	Number of students to be admitted	
	General Admission Examination	Special Admission Examination for International Students
Graduate Program of Pharmaceutical Science and Technology	10	A few
Graduate Program of Applied Natural Medicine	8	A few
Graduate Program of Cognitive and Emotional Neuroscience	9	A few
Graduate Program of Medical Design	10	A few
Total	37	

(Note) The number of students to be admitted to each program is an approximate number.

Number of students to be admitted in October 2025

Program name	Number of students to be admitted	
	General Admission Examination	Special Admission Examination for international students
Graduate Program of Pharmaceutical Science and Technology	A few	A few
Graduate Program of Applied Natural Medicine	A few	A few
Graduate Program of Cognitive and Emotional Neuroscience	A few	A few
Graduate Program of Medical Design	A few	A few

Schedules related to admission examination

Items	Graduate School of Pharma-Medical Sciences (Graduate Programs of Pharmaceutical Science and Technology, Applied Natural Medicine, Cognitive and Emotional Neuroscience, and Medical Design)	
	Enrollment in April 2026 [The first recruitment] and Enrollment in October 2025 General Admission Examination and Special Admission Examination for International Students	Enrollment in April 2026 [The second recruitment] General Admission Examination and Special Admission Examination for International Students
Deadline for inquiry about Examination of Eligibility for Application (Only for relevant applicants)	Thursday, July 3, 2025	Friday, January 9, 2026
Notification of the examination results of eligibility for application (Only for relevant applicants)	By Thursday, July 10, 2025	By Friday, January 16, 2026
Application Period	Friday, July 11 to Friday, July 18, 2025	Monday, January 19 to Monday, January 26, 2026
Issue of Examination Voucher	Wednesday, August 6, 2025 (provisional)	Thursday, February 12, 2026 (provisional)
Examination Date	<ul style="list-style-type: none"> Graduate Program of Pharmaceutical Science and Technology Graduate Program of Applied 	<ul style="list-style-type: none"> Graduate Program of Pharmaceutical Science and Technology Graduate Program of Applied

	Natural Medicine · Graduate Program of Cognitive and Emotional Neuroscience Tuesday, August 19, 2025	Natural Medicine · Graduate Program of Cognitive and Emotional Neuroscience Friday, February 20, 2026
	· Graduate Program of Medical Design Wednesday, August 20, 2025	· Graduate Program of Medical Design Thursday, February 19, 2026
Announcement of Successful Applicants	Tuesday, September 2, 2025	Friday, March 6, 2026
Admission Procedure (Deadline date)	(Enrollment in October 2025) Friday, September 12, 2025 (Enrollment in April 2026) Wednesday, January 21, 2026 (provisional)	Friday, March 13, 2026 (provisional)

(Note) If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented. The availability of the second recruitment will be announced on our website around November 2025.

I. Admission Policy

Admission Policy of the Graduate School of Pharma-Medical Sciences

Based on its purpose and policy on completion certification and degree conferment (diploma policy), the Graduate School of Pharma-Medical Sciences welcomes the persons who have strong interest and basic ability in the research field of Pharmaceutical Science and Technology, Applied Natural Medicine, Cognitive and Emotional Neuroscience or Medical Design, have logical thinking ability and creativity, and have the will to contribute to the development of human and environmental health culture.

Therefore, as a basic policy of our enrollment selection, we offer various kinds of admission examinations which provide multiple admission opportunities to diversified applicants.

Admission Policy of Graduate Program of Pharmaceutical Science and Technology

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), Graduate Program of Pharmaceutical Science and Technology welcomes the persons who aim to be researchers and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of medicine discovery and pharmaceutical preparation.

[Basic Policy on Selection (Admission Examination Types and Their Evaluation Methods)]

In order to accept not only prospective undergraduate students but also a diverse range of students including working adults, the university will conduct entrance examinations twice a year, in April and in October. In addition, special entrance examinations for international students will be conducted.

General Admission Examination

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Special Admission Examination for International Students

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Admission Policy of the Graduate Program of Applied Natural Medicine

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), Graduate Program of Applied Natural Medicine welcomes the persons who aim to be researchers, educators and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of applied natural medicine and Practice.

[Basic Policy on Selection (Admission Examination Types and Their Evaluation Methods)]

In order to accept not only prospective undergraduate students but also a diverse range of students including working adults, the university will conduct entrance examinations twice a year, in April and in October. In addition, special entrance examinations for international students will be conducted.

General Admission Examination

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Special Admission Examination for International Students

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to

or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Admission Policy of Graduate Program of Cognitive and Emotional Neuroscience

Based on its purpose of human resource development shown in the policy of completion certification and degree conferment (diploma policy), the Graduate Program of Cognitive and Emotional Neuroscience welcomes the persons who aim to be researchers and engineers rich in creativity with good comprehensive judgment and desire to learn the basis of Cognitive and Emotional Neuroscience.

[Basic Policy on Selection (Admission Examination Types and Their Evaluation Methods)]

In order to accept not only prospective undergraduate students but also a diverse range of students including working adults, the university will conduct entrance examinations twice a year, in April and in October. In addition, special entrance examinations for international students will be conducted.

General Admission Examination

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Special Admission Examination for International Students

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Admission Policy of Graduate Program of Medical Design

- The Program seeks those who are interested in medical and welfare engineering, and are motivated to acquire basic and advanced knowledge of: medicine; pharmacy; medical practice; welfare; and science and engineering.
- The Program seeks those who are willing to contribute to society in various fields such as medical practice, welfare, and healthcare as highly specialized professionals and researchers who have majored in medical engineering.
- The program seeks those who have the basic abilities necessary to carry out advanced research and development in the fields of medical practice, welfare, and healthcare.

[Basic Policy on Selection (Admission Examination Types and Their Evaluation Methods)]

In order to accept not only prospective undergraduate students but also a diverse range of students including working adults, the university will conduct entrance examinations twice a year, in April and in October. In addition, special entrance examinations for international students will be conducted.

General Admission Examination

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

Special Admission Examination for International Students

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination, oral examination and academic transcript.

II General Admission Examination

1. Summary of Admissions Selection Schedule

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Program	Application period	Examination date	Date of announcement of successful applicants	Admission procedures (deadline date)	
Graduate Program of Pharmaceutical Science and Technology	Friday, July 11 to Friday, July 18, 2025	Tuesday, August 19, 2025	Tuesday, September 2, 2025	(Enrollment in October 2025)	
Graduate Program of Applied Natural Medicine				Friday, September 12, 2025	
Graduate Program of Cognitive and Emotional Neuroscience		Wednesday, August 20, 2025		(Enrollment in April 2026)	
Graduate Program of Medical Design				Wednesday, January 21, 2026 (provisional)	

Enrollment in April 2026(The second recruitment)

Program	Application period	Examination date	Date of announcement of successful applicants	Admission procedures (deadline date)
Graduate Program of Pharmaceutical Science and Technology	Monday, January 19 to Monday, January 26, 2026	Friday, February 20, 2026	Friday, March 6, 2026	Friday, March 13, 2026(provisional)
Graduate Program of Applied Natural Medicine				
Graduate Program of Cognitive and Emotional Neuroscience		Thursday, February 19, 2026		
Graduate Program of Medical Design				

(Note)If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.The availability of the second recruitment will be announced on our website around November 2025.

2 Number of Students to be Admitted

Program name	Enrollment in April 2026 Number of students to be admitted	Enrollment in October 2025 Number of students to be admitted	Remarks
Graduate Program of Pharmaceutical Science and Technology	10	A few	The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students.
Graduate Program of Applied Natural Medicine	8	A few	The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students.
Graduate Program of Cognitive and Emotional Neuroscience	9	A few	The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students.
Graduate Program of Medical Design	10	A few	The number of applicants includes the admission quota (a few) for Special Admission Examination for International Students.

(Note) Applicants for admission must consult with the relevant academic advisors in the field of their choice in advance regarding the direction of education, research, etc. You

cannot apply if you have not decided whom you want to be your academic advisor.

The main purposes of the consultation are as follows.

- **Confirmation of research field after admission**
- **Confirmation of the direction of the applicant's education and research**

Please note that the content of the consultation will not directly affect the result of the entrance examination.

3. Eligibility for Application

Applicants must fulfill any of the following requirements:

- (1) A person who graduated (or is expected to graduate prior to admission to the graduate school) from a Japanese university.
 - (2) A person who was granted or is expected to be granted a bachelor's degree prior to admission to the graduate school by the National Institution for Academic Degrees and Quality Enhancement of Higher Education under the provisions of Article 104, paragraph 7 of the School Education Act.
 - (3) A person who has completed or is expected to complete prior to admission to the graduate school a 16-year school education course in a foreign country.
 - (4) A person who has completed a 16-year school education course of a foreign country by taking classes in Japan through distance education conducted by a foreign school or is expected to complete it prior to admission to the graduate school.
 - (5) A person who has completed a 16-year school education course of a foreign country and has completed a course designated by the Minister of Education, Culture, Sports, Science and Technology in Japan (herein after referred to as MEXT) and operated by an educational institution that offers courses of a foreign university under the school education system of the relevant foreign country, or is expected to complete it prior to admission to the graduate school.
 - (6) A person who was granted a degree equivalent to a bachelor's degree by completing a course, studying for three or more years at a foreign university or another foreign school (limited to schools that have been evaluated with regard to the overall status of their educational and research activities, etc. by a party certified by the government or a governmental organization of the foreign country, or schools designated as being equivalent thereto by the Minister of MEXT), or is expected to be granted such a degree prior to admission to the graduate school. In the above "completing a course" includes: the completion of the course by taking classes in Japan through distance education operated by a foreign school; or the completion of the course operated by an educational institution positioned under the school education system of the foreign country as well as designated in the preceding paragraph.
 - (7) A person who has completed (or is expected to complete prior to admission to the graduate school) a specialized course operated by an advanced vocational school (limited to courses that take four or more years to complete and satisfy other criteria specified by the Minister of MEXT) and designated by the Minister of MEXT on or after the day specified by the Minister of MEXT.
 - (8) A person designated by the Minister of MEXT (Public notice No. 5 of the Ministry of Education, 1953).
 - (9) A person who was admitted to another graduate school according to the provisions of Article 102, paragraph (2) of the School Education Act, and is admitted to our graduate school on the condition that the person is recognized by the Graduate School of Pharma-Medical Sciences as having academic ability suitable for receiving postgraduate education.
 - (10) A person who has been recognized by the Graduate School of Pharma-Medical Sciences as having academic ability equivalent to or higher than that of university graduates through an individual examination of eligibility for application for this graduate school, and will have turned 22 years old at the time of admission.
 - (11) A person who will have been enrolled in a university for three or more years as of the end of month prior to admission to the graduate school, and has been recognized by the Graduate School of Pharma-Medical Sciences as having acquired the designated credits with an excellent academic record.
- (Note) A person who intends to file an application in accordance with the Eligibility of Application (9) to (11) is required to undergo an individual Examination of Eligibility for Application in

advance. See “3. Examination of Eligibility for Application” on page 25, and follow the prescribed procedure.

4. Use of External English Test

For the General Admission Examination, no written foreign language (English) test is conducted, and the applicant's proficiency is judged based on the score of the submitted external English test, which will be converted on a 100-point scale basis.

If you have taken more than one test, submit the one with the highest converted score.

The types of external English tests are TOEFL-iBT, TOEFL-ITP, TOEIC L&R, TOEIC L&R-IP and IELTS.

Only the scores of the tests taken on and after September 1, 2023 are valid and acceptable.

Score conversion method

- TOEFL-iBT

70 or more = 100 points

If less than 70

Converted point = $100 \times (\text{TOEFL-iBT score}) / 70$

- TOEFL-ITP

525 or more = 100 points

If less than 525

Converted point = $100 \times \{(\text{TOEFL-ITP score}) - 310\} / 215$,

310 or less = 0 point

- TOEIC L&R, TOEIC L&R-IP

730 or more = 100 points

If less than 730

Converted point = $100 \times (\text{TOEIC score}) / 730$

- IELTS

6.0 or more = 100 points

If less than 6.0

Converted point = $100 \times \{(\text{IELTS score}) - 1\} / 5$

5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to “4. Use of External English Test” on page 10), oral examination and academic transcript.

(1) Short essay and aptitude test

- The questions will ask about your reasons for applying, basic knowledge and interests in your field of interest, and research plans.

(2) Oral examination

- Questions such as motivation for applying to the graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city,
	From 13:30	Oral examination*	

			Toyama Prefecture
Enrollment in April 2026(The second recruitment)			
Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

6. Selection Method for Admission to Graduate Program of Applied Natural Medicine

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 10), oral examination and academic transcript.

(1) Short essay and aptitude test

- The questions will ask about your reasons for applying, basic knowledge and interests in your field of interest, and research plans.

(2) Oral examination

- Questions such as motivation for applying to the graduate school and enthusiasm for research are asked.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

Enrollment in April 2026(The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 10), oral examination and

academic transcript.

(1) Short essay and aptitude test

- The questions will ask about your reasons for applying, basic knowledge and interests in your field of interest, and research plans.

(2) Oral examination

- Based on the answers from the short essay and aptitude test, the applicants will be asked in an interview about their reasons for application, their plans on how they will use what they have learned so far for the development of their research of cognitive and emotional neuroscience, future research plans, hopes after completion of the course, and the ideal researcher they aspire to become, etc.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

Enrollment in April 2026(The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

8. Selection Method for Admission to Graduate Program of Medical Design

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 10), oral examination and academic transcript.

(1) Short essay and aptitude test

- You will be asked about your motivation for applying to the program and how you want to contribute to society after completion of the program.

(2) Oral examination

- You will be asked about what you have studied so far, your research plan, etc.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Wednesday, August 20, 2025	From 11:00 to 12:00	Short essay and aptitude test	Gofuku Campus University of Toyama 3190 Gofuku, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

Enrollment in April 2026(The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Thursday, February 19, 2026	From 11:00 to 12:00	Short essay and aptitude test	Gofuku Campus University of Toyama 3190 Gofuku, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination*	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

III Special Admission Examination for International Students

1. Summary of Admissions Selection Schedule

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Program	Application period	Examination date	Date of announcement of successful applicants	Admission procedures (deadline date)
Graduate Program of Pharmaceutical Science and Technology	Friday, July 11 to Friday, July 18, 2025	Tuesday, August 19, 2025	Tuesday, September 2, 2025	(Enrollment in October 2025)
Graduate Program of Applied Natural Medicine				Friday, September 12, 2025
Graduate Program of Cognitive and Emotional Neuroscience		(Enrollment in April 2026)		
Graduate Program of Medical Design		Wednesday, January 21, 2026 (provisional)		

Enrollment in April 2026(The second recruitment)

Program	Application period	Examination date	Date of announcement of successful applicants	Admission procedures (deadline date)
Graduate Program of Pharmaceutical Science and Technology	Monday, January 19 to Monday, January 26, 2026	Friday, February 20, 2026	Friday, March 6, 2026	Friday, March 13, 2026(provisional)
Graduate Program of Applied Natural Medicine				
Graduate Program of Cognitive and Emotional Neuroscience		Thursday, February 19, 2026		
Graduate Program of Medical Design				

(Note)If the first recruitment reaches the maximum number of applicants, the second recruitment may not be implemented.

The availability of the second recruitment will be announced on our website around November 2025.

2. Number of Students to be Admitted

Program name	Number of students to be admitted	Remarks
Graduate Program of Pharmaceutical Science and Technology	A few	This admission quota is included in that for General Admission Examination.
Graduate Program of Applied Natural Medicine	A few	This admission quota is included in that for General Admission Examination.
Graduate Program of	A few	This admission quota is included in that for General

Cognitive and Emotional Neuroscience		Admission Examination.
Graduate Program of Medical Design	A few	This admission quota is included in that for General Admission Examination.

(Note) Applicants for admission should consult with the relevant academic advisors in the field of their choice in advance regarding the direction of education, research, etc. You cannot apply if you have not decided whom you want to be your academic advisor.

The main purposes of the consultation are as follows.

- Confirmation of research field after admission
- Confirmation of the direction of the applicant's education and research

Please note that the content of the consultation will not directly affect the result of the entrance examination.

3. Eligibility for Application

Those who have foreign nationality and satisfy any of the following requirements are eligible to apply.

- (1) A person who has completed or is expected to complete prior to admission to the graduate school a 16-year education course by school education in a foreign country.
- (2) A person who was granted a degree equivalent to a bachelor's degree by completing a course, studying for three or more years at a foreign university or another foreign school (limited to schools that have been evaluated with regard to the overall status of their educational and research activities, etc. by a party certified by the government or a governmental organization of the foreign country, or schools designated as being equivalent thereto by the Minister of MEXT), or is expected to be granted such a degree prior to admission to the graduate school. In the above "completing a course" includes: the completion of the course by taking classes in Japan through distance education operated by a foreign school; or completion of the course operated by an educational institution positioned under the school education system of the foreign country as well as designated in the preceding paragraph.
- (3) A person who has been recognized by the Graduate School of Pharma-Medical Sciences as having academic ability equivalent to or higher than that of university graduates through an individual examination of eligibility for application for this graduate school, and will have turned 22 years old at the time of admission.
- (4) A person who was admitted to another graduate school according to the provisions of Article 102, paragraph (2) of the School Education Act, and is admitted to our graduate school on the condition that the person is recognized by the Graduate School of Pharma-Medical Sciences as having academic ability suitable for receiving postgraduate education.

(Note) A person who intends to file an application in accordance with the Eligibility of Application (3) and (4) is required to undergo an individual Examination of Eligibility for Application in advance. See "3. Examination of Eligibility for Application" on page 25, and follow the prescribed procedure.

4 Use of External English Test

For the Graduate Program of Cognitive and Emotional Neuroscience, and Medical Design, no written foreign language (English) test is conducted, and the applicant's proficiency is judged based on the score of the submitted external English test, which is converted on a 100-point scale basis.

For the Graduate Programs of Pharmaceutical Science and Technology, and Applied Natural Medicine, no written foreign language (English) examination is conducted on a person who has submitted a score of the external English test, and the applicant's proficiency is judged based on the score of the submitted external English test, which is converted on a 100-point scale basis. For a person, who cannot submit the score of the external English tests, a written language (English) examination is conducted.

If you have taken more than one test, submit the one with the highest converted score.

The types of external English tests are TOEFL-iBT, TOEFL-ITP, TOEIC L&R, TOEIC L&R-IP and IELTS.

Only the scores of the tests taken on and after September 1, 2023 are valid and acceptable.

Score conversion method

- TOEFL-iBT

70 or more = 100 points

If less than 70

Converted point = $100 \times (\text{TOEFL-iBT score}) / 70$

- TOEFL-ITP

525 or more = 100 points

If less than 525

Converted point = $100 \times \{(\text{TOEFL-ITP score}) - 310\} / 215$

310 or less = 0 point

- TOEIC L&R, TOEIC L&R-IP

730 or more = 100 points

If less than 730

Converted point = $100 \times (\text{TOEIC score}) / 730$

- IELTS

6.0 or more = 100 points

If less than 6.0

Converted point = $100 \times \{(\text{IELTS score}) - 1\} / 5$

5. Selection Method for Admission to Graduate Program of Pharmaceutical Science and Technology

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 14), oral examination and academic transcript.

(1) Short essay and aptitude test

- The aptitude test requires basic knowledge of your desired field.

(2) Foreign language (English) examination

Language proficiency at the level of a four-year undergraduate education graduate is required.

If you use an external English test, you will not be required to take a written foreign language (English) examination.

(3) Oral examination

- Questions such as motivation for applying to this graduate school and enthusiasm for research are asked.

(4) Examination Date and Venue

Enrollment in April 2026 (The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 9:30 to 10:30	Foreign language (English)	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 11:00 to 12:00	Short essay and aptitude test	
	From 13:30	Oral examination *1	

Enrollment in April 2026 (The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 9:30 to 10:30	Foreign language (English) 1	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city,
	From 11:00 to 12:00	Short essay and aptitude test	

	From 13:30	Oral examination *1	Toyama Prefecture
--	------------	---------------------	-------------------

*1 The starting time of the oral examination may vary depending on the number of applicants.
We will inform you of any changes, if any, when we issue you the Examination Voucher.

6. Selection Method for Admission to Graduate Program of Applied Natural Medicine

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 14), oral examination and academic transcript.

(1) Short essay and aptitude test

- The aptitude test requires basic knowledge of your desired field.

(2) Foreign language (English) examination

Language proficiency at the level of a four-year undergraduate education graduate is required.
If you use an external English test, you will not be required to take a written foreign language (English) examination.

(3) Oral examination

- Questions such as motivation for applying to this graduate school and enthusiasm for research are asked.

(4) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 9:30 to 10:30	Foreign language (English)	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 11:00 to 12:00	Short essay and aptitude test	
	From 13:30	Oral examination *	

Enrollment in April 2026 (The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 9:30 to 10:30	Foreign language (English)	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 11:00 to 12:00	Short essay and aptitude test	
	From 13:30	Oral examination *	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

7. Selection Method for Admission to Graduate Program of Cognitive and Emotional Neuroscience

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 14), oral examination and academic transcript.

(1) Short essay and aptitude test

- The applicants will be asked about their motivation, research plan, interests in cognitive and emotional neuroscience, and ethics.

(2) Oral examination

- Based on the answers from the Short essay and aptitude test, the applicants will be asked in an interview about their reasons for application, their plans on how they will use what they

have learned so far for the development of their research of cognitive and emotional neuroscience, future research plans, hopes after completion of the course, and the ideal researcher they aspire to become, etc.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Tuesday, August 19, 2025	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination *	

Enrollment in April 2026 (The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Friday, February 20, 2026	From 11:00 to 12:00	Short essay and aptitude test	Sugitani Campus (Campus for Medicine and Pharmaceutical Sciences) University of Toyama 2630 Sugitani, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination *	

* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you Examination Voucher.

8. Selection Method for Admission to Graduate Program of Medical Design

For admission selection, the applicant's motivation, enthusiasm and academic ability equivalent to or higher than that of Japanese university graduates (graduating from a 4-year undergraduate school) are evaluated through a short essay and aptitude test, foreign language (English) examination (refer to "4. Use of External English Test" on page 14), oral examination and academic transcript.

(1) Short essay and aptitude test

- You will be asked about your motivation for applying to the program and how you want to contribute to society after completion of the program.

(2) Oral examination

- You will be asked about what you have studied so far, your research plan, etc.

(3) Examination Date and Venue

Enrollment in April 2026(The first recruitment) and Enrollment in October 2025

Examination date	Time	Examination subjects, etc.	Examination venue
Wednesday, August 20, 2025	From 11:00 to 12:00	Short essay and aptitude test	Gofuku Campus University of Toyama 3190 Gofuku, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination *	

Enrollment in April 2026 (The second recruitment)

Examination date	Time	Examination subjects, etc.	Examination venue
Thursday, February 19, 2026	From 11:00 to 12:00	Short essay and aptitude test	Gofuku Campus University of Toyama 3190 Gofuku, Toyama-city, Toyama Prefecture
	From 13:30	Oral examination *	

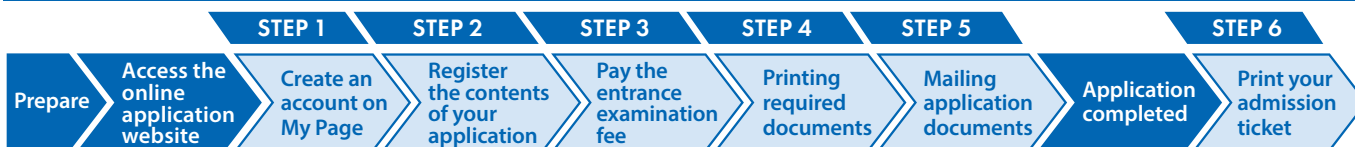
* The starting time of the oral examination may vary depending on the number of applicants. We will inform you of any changes, if any, when we issue you the Examination Voucher.

IV General Procedure of Application and Admission

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 online application website. Please read the following "Online Application Procedure" carefully and follow the instructions.

Online Application Procedure



Prepare

see page 22

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.
For details, refer to page 21 of the application guidelines.



Access the Online Application Website

Access from the
Online Application
website
or
the University
website

<https://e-apply.jp/ds/toyama-gs/>

<https://www.u-toyama.ac.jp/>



After completing registration on the online application website (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 2.



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 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.



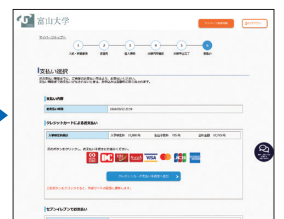
⑤ Enter your information entrance (name, address, etc.).



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 LAWSON, MINISTOP, FamilyMart, ATMS with Pay-easy

Customer number memo (11 digits)

Confirmation number memo (6 digits)

For Daily YAMAZAKI, Seicomart

Online payment number by Memo (11 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.

● Payment can be made using a store terminal.



Loppi



Multi-functional copy machine

あなたも、コンビニ。 FamilyMart



4 Bank ATMs with Pay-easy

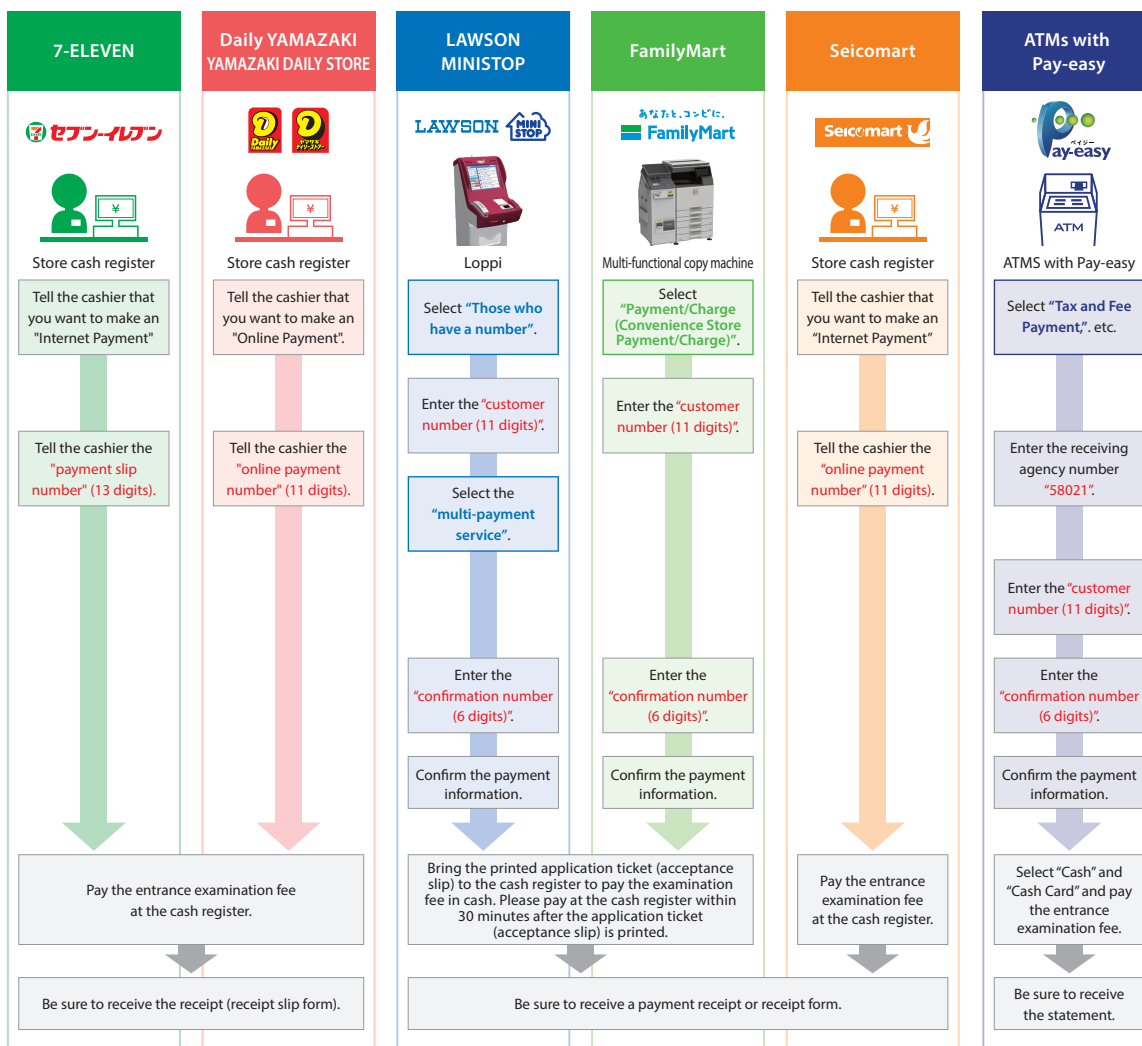
Payment can be made using the payment number that will appear after you have registered the application information at bank ATMs with Pay-easy by following the instructions on the ATM screen.



*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



4 Bank ATMs

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.

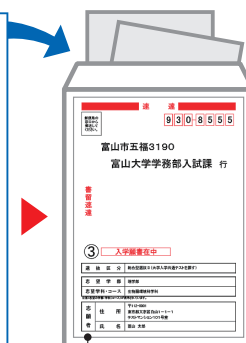
■ Application Documents

One copy is required for each application registration.

Please refer to pages 23 to 24 of the university's application guidelines to prepare the documents required for application.

<Deadline for submission of application documents>

See page 23



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 25

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	<p>Recommended browsers for PC</p> <ul style="list-style-type: none"> - Microsoft Edge (latest version) - Google Chrome (latest version) - Mozilla Firefox (latest version) - Apple Safari (latest version) <p>※If you use your browser's tab function to make multiple applications at the same time in several tabs, the selected content may be carried over to another tab, or other problems may occur. Please refrain from using multiple tabs at the same time. To return to the previous screen, please use the "Back" button on the screen instead of your browser's "Back" button.</p> <p>Recommended Smartphone and Tablet Browsers and OS</p> <p>The standard browser for each operating system is the recommended environment.</p> <ul style="list-style-type: none"> - iOS: 12 or later - Android OS: 8 or later - iPadOS: 13 or later <p>※If one browser does not display the page properly, please check with another browser.</p> <p>※You may not be able to view PDF files from the PC version of Chrome when operating from an Android smartphone, so please use the mobile version.</p>
Software needed for downloading or printing PDF files	Adobe Reader is necessary to view or print the application form in a PDF format. Please download the Adobe Reader software from the Adobe website (free download).
E-mail address	<p>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.</p> <p>We recommend that you use an email address that can be used with a computer in order to print out the application form.</p> <p>Also, please check your email settings to ensure that you receive emails from the following domain: @e-apply.jp</p>
Personal photo	<p>Face photo of the applicant in the application (jpeg, jpg, png, bmp) is required. File will be up to 10MB.</p> <p>A photo size ratio of 4:3 is recommended.</p> <p>The photo will be used for identification purposes.</p> <p>Please prepare a clear (front-facing, upper body, no hat, no background) photograph in color taken within 3 months prior to submission.</p> <p>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.</p>
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 square 2 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) Application Period

Category		Application Period
Enrollment in October 2025	General Admission Examination Special Admission Examination for International Students	Friday, July 11 to Friday, July 18, 2025 at 17:00
Enrollment in April 2026 (The first recruitment)	General Admission Examination Special Admission Examination for International Students	
Enrollment in April 2026 (The second recruitment)	General Admission Examination Special Admission Examination for International Students	Monday, January 19 to Monday, January 26, 2026 at 17:00

Registration for online application and payment of the application fee are available from 9:00 a.m. on the first day of each application period.

If you hand in the documents in person to the University, they are accepted between 9:00 and 17:00 on weekdays.

Applications by mail must arrive no later than 17:00 p.m. on the application deadline. However, only registered express mail postmarked on or before the day before the application deadline (postmarked by mail within Japan only) will be accepted even if it arrives after the application period.

(3) Examination Fee

30,000 yen.

Payment of the examination fee will be made after completion of the registration of application details in STEP 2 on page 19. Please apply through the university's " Online application website (<https://e-apply.jp/ds/toyama-gs/>)" and pay the application fee after completing the applicant registration. Please check the payment method in STEP 3 (Payment of the Examination Fee) on page 20. 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 [Refund Amount] The amount you have paid in excess of the examination fee

Please note that any bank transfer fees associated with the refund must be borne by the recipient.

[2] Method of claiming refund

Please fill out the attached " written claim for refund of examination fee " and mail it to the University.

Send to: Accounting Division I of Finance and Facilities Department

University of Toyama 3190 Gofuku, Toyama City, Toyama 930-8555

Phone: 076-445-6053

(4) Application Documents

Applicants must submit the required documents in an envelope with an "address sheet" attached. If mailed, please use by registered express mail (EMS or other traceable means if

mailing from abroad). Applicants must send the required documents after the payment of the examination fee in STEP 3 on page 20 is completed.

Documents to be printed from the Online application website

Documents, etc.		Notes
[1]	Application for admission	Please print out the application form in A4 size in color from the Online application website. 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 Online application website. Attach it to a commercially available Square 2 envelope (240mm x 332mm) without peeling off.
[3]	Pledge	Please print out the application in A4 size from the Online application website. See "8 . Security Export Control" on page 28.

Be sure to check the printed information for errors.

Documents to be prepared by applicants

Documents, etc.		Description
[1]	Certificate of graduation (Certificate of expected graduation)	The document shall be prepared by the president (dean) of the university the applicant graduated from. (Applicants who have graduated or are expected to graduate from University of Toyama do not need to submit it.)
[2]	Academic Transcript	The document shall be prepared and sealed by the president or dean of the university the applicant graduated from. However, no sealing is required when anti-counterfeiting and anti-copying paper is used.
[3]	Letter of approval for taking the examination	Applicants who are currently enrolled in other graduate schools, etc., or who are currently employed in government agencies, corporations, etc., are requested to attach an examination approval form from the dean or head of the relevant graduate school. (Any form acceptable)
[4]	Copy of Certificate of Residence, etc. (Persons with foreign nationality only)	Applicants who has a foreign nationality and currently lives in Japan is requested to submit a copy of their residence certificate or residence card (with both sides copied) issued by the mayor of the city, town or village or the head of the special ward.
[5]	TOEFL / TOEIC / IELTS Score Sheet (copy) (Only for relevant applicants)	Please submit a copy of the score sheet for one of the following exams If you are unable to submit your score sheet at the time of application, please submit a document indicating that you have taken or are planning to take the following examination (e.g. a copy of the examination admission card) and submit the score sheet (copy) before the day of the admission examination. [1] Score Report for the applicant of TOEFL-IBT [2] Score Report of TOEFL-ITP [3] Official Score Certificate of TOEIC Listening & Reading [4] Score Report of TOEIC L&R-IP [5] Test Report Form-TRF of IELTS Only the score sheets of the tests taken on and after September 1, 2023 are valid and acceptable. Please be sure to bring the original to the examination to be verified on the day of the examination.

(Note) For documents written in languages other than Japanese or English, attach Japanese or English translations to them.

Where to Submit Application Documents

Program name	Address
Graduate Program of Pharmaceutical Science and Technology	Educational Affairs Division, Sugitani Area Administration Department, University of Toyama, 2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Graduate Program of Applied	

Natural Medicine	
Graduate Program of Cognitive and Emotional Neuroscience	
Graduate Program of Medical Design	Admission Office (Educational Affairs Division) of the School of Engineering, University of Toyama, 3190 Gofuku, Toyama City, Toyama Prefecture, 930-8555, Japan

2. Printout of the Examination Voucher

- (1) The examination voucher will be available for printing on the Online application website 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 for printing, a notification will be sent to the email address registered at the time of the online application.

Date of Issue of Examination Voucher, etc.

Category	Deadline
Enrollment in October 2025	15:00 on Wednesday, August 6, 2025 (tentative)
Enrollment in April 2026 (The first recruitment)	
Enrollment in April 2026 (The second recruitment)	15:00 on Thursday, February 12, 2026 (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 Online application website. 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 note that a separate notification of examination instructions will be sent to you by e-mail, so please make sure you 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 the Examination Section of the Admissions Office for Educational Affairs Division of Sugitani Area Administration Department 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 Online application website and print out the examination voucher.
- (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. Examination of Eligibility for Application

Applicants who intend to file their applications for the General Admission Examination (9) through (11) and the Special Admission Examination for International Students (3) and (4) will be individually examined in advance. In such cases, make an inquiry to the following section in advance and submit the requested documents by the due date.

[Inquiry and Submission]

Examination Section of Admissions Office, Educational Affairs Division, Sugitani Area Administration Department, University of Toyama
2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
Phone: (076) 434-7658

- (1) Documents necessary for Examination of Eligibility for Application

[1] Application for Examination of Eligibility for Application (form designated by the University)

- [2] Academic Transcript
Applicants eligible to apply for the General Admission Examination (11) are also requested to submit an education curriculum of the faculty in which the applicants have enrolled.
- [3] Certificate of graduation (certificate of expected graduation)
- [4] Copy of Certificate of Residence (Only applicants who have a foreign nationality and currently live in Japan)
- [5] Curriculum Vitae (form designated by the University)
- [6] Envelope (Chokei 3: 23.5 cm × 12 cm) for sending documents to the applicants (clearly indicate your name, address, and postal code on the envelope with stamps worth 410 yen attached).
- [7] Other necessary documents
- * The originals of each certificate must be submitted. Copies will not be accepted.
Documents written in foreign languages must be submitted with Japanese translation.

(2) Deadline for the submission of documents

Category	Deadline
Enrollment in October 2025	16:00 on Thursday, July 3, 2025
Enrollment in April 2026 (The first recruitment)	
Enrollment in April 2026 (The second recruitment)	16:00 on Friday, January 9, 2026

As a rule, application documents shall be submitted by mail and must reach the University by the above-mentioned deadline.

If an applicant hands in the documents himself/herself to the university for some inevitable reason, we will accept them between 9:00 and 16:00 on weekdays. They will not be accepted after the deadline.

(3) Notification of the examination results

We will send the result of the preliminary examination to each applicant by the following date.

Category	Notification
Enrollment in October 2025	By Thursday, July 10, 2025
Enrollment in April 2026 (The first recruitment)	
Enrollment in April 2026 (The second recruitment)	By Friday, January 16, 2026

4. Announcement of Successful Applicants

The examinee's numbers of successful applicants will be posted on the website of the University of Toyama, and a Notification of Acceptance will be sent to the applicants by mail.

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

Category	Announcement
Enrollment in October 2025	15:00 on Tuesday, September 2, 2025
Enrollment in April 2026 (The first recruitment)	
Enrollment in April 2026 (The second recruitment)	15:00 on Friday, March 6, 2026

5. Admission Procedure

The admission procedure is as follows. More details will be separately notified to the successful applicants.

(1) Admission procedure deadline

Admission deadline	Deadline date
Enrollment in October 2025	Friday, September 12, 2025
Enrollment in April 2026 (The first recruitment)	Wednesday, January 21, 2026 (provisional)
Enrollment in April 2026 (The second recruitment)	Friday, March 13, 2026 (provisional)

- (2) Expenses required for the admission procedure
 - a. Enrollment fee: 282,000 yen (provisional)

(Note) [1] The enrollment fee shown above is still provisional. If it is revised at the time of enrollment, the new enrollment fee will apply.

[2] The paid enrollment fee will not be refunded.
 - b. Others

[1] Persons who find it difficult to pay the enrollment fee may be exempted or deferred from collection after deliberation.

[2] Tuition fees must be paid after enrollment. The exact amount of the tuition fee and detailed method of the payment will be announced at the time of the admission procedure.

<Reference> The tuition fee of academic year 2025: 535,800 yen.

[3] There is a scholarship system of Japan Student Services Organization.

[4] Other expenses include the fee for the Personal Accident Insurance for Students Pursuing Education and Research.
- (3) Remarks

Persons who have not completed the admission procedure by the Admission procedure deadline will be considered to have declined the admission.

6. Policy on Personal Information Protection

Personal information possessed by University of Toyama will be handled based on the Act on the Protection of Personal Information, and University of Toyama Personal Information Protection Policy.

- (1) Personal information (including name, address, etc.) of applicants that comes to the knowledge of the University through the application shall be used for [1] applicant selection procedure (application processing and selection), [2] announcement of successful applicants, [3] admission procedure, [4] survey/study of the selection method, and [5] operations associated with those purposes.
- (2) Personal information of those who completed the admission procedure that comes to the knowledge of the University through the application shall be used for post-admission operations related to [1] academic affairs (registration, study guidance, etc.), [2] student support (health care, application for tuition exemption or scholarship, career support, etc.), [3] tuition collection work, and [4] statistical survey and data analysis.
- (3) We may use only the successful applicants' numbers, names, and addresses for the purpose of contact from the University's relevant bodies, such as Alumni Association, Supporting Group and Cooperative Society.

(Note) Applicants who do not wish to be contacted by the above bodies are requested to inform the Educational Affairs Division of Sugitani Area Administration Department to that effect.
- (4) University of Toyama may have contractors do some kind of university operations. When conducting the operations, all or part of the personal information obtained shall be provided to the contractor to the extent necessary to perform the operations; however, University of Toyama supervises the use of information to ensure compliance with confidentiality.

7. Notes on Application

- (1) It is prohibited to use ChatGPT or other generated AI in documents prepared by the applicant him/herself.
- (2) If any submitted application document is incomplete, the application may not be accepted.
- (3) Accepted application documents will not be returned for any reason.
- (4) Even after admission has been granted, if any discrepancy is found with the information in the submitted documents, the admission may be cancelled.
- (5) For inquiries related to the application and other matters, contact the following section:
 Examination Section of Admissions Office, Educational Affairs Division of Sugitani Area Administration Department, University of Toyama,
 2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan
 Phone: 076-434-7658

8. 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.

[Reference] "University of Toyama Regulations Concerning Security Export Control"

URL <http://www3.u-toyama.ac.jp/soumu/kisoku/pdf/0110401.pdf>

9. Preliminary Consultation for Applicants with Disabilities

Applicants with disabilities (visual impairment, hearing impairment, physical disability, sickness, injury, developmental disability, etc.) who may require special arrangements in their admission examinations or in class should contact the Educational Affairs Division of Sugitani Area Administration Department prior to application.

If necessary, the University may hold interviews with the applicant or his/her previous school's staff members, who may represent him/her.

* Even if you apply for prior consultation, you are not obliged to apply to the University of Toyama.

(1) Consultation deadline

Category	Deadline
Enrollment in October 2025	16:00 on Thursday, June 26, 2025
Enrollment in April 2026 (The first recruitment)	
Enrollment in April 2026 (The second recruitment)	16:00 on Friday, December 26, 2025

(2) Consultation method

Please download a Preliminary Consultation application form from the University's website or create an application form containing the following information and submit it together with a doctor's medical certificate (its copy is also acceptable) to the Examination Section of Admissions Office, Educational Affairs Division of Sugitani Area Administration Department.

[1] Name, gender, date of birth, address, telephone number and e-mail address

[2] Program of choice and category of admission examination

[3] Type and degree of disability

[4] What special considerations the applicant desires during the admission examination

[5] What special considerations the applicant desires during study

[6] Measures taken at the previous university, etc. (Comments of the applicant's academic advisor)

[7] Situation of daily life

[8] Other matters for reference (Please also submit any reference materials to be used for consultation, e.g. a copy of Physical Disability Certificate, etc.)

(Reference) Preliminary Consultation Application Form page

(University's Home Page) → "Admission exam information" → "Preliminary consultation for applicants with disabilities"

(3) Contact for consultation

Educational Affairs Division of Sugitani Area Administration Department, University of Toyama, 2630 Sugitani, Toyama City, Toyama Prefecture, 930-0194, Japan

Phone: 076-434-7658

FAX: 076-434-4545

(Note) If you wish to use hearing aids, crutches, wheelchairs, etc., used in your daily life, during the examination, arrangements may be required in the examination venue settings, etc., so please contact us beforehand.

Preliminary consultation is intended to inform applicants with disabilities about the current situation of the University in advance and to find a better or ideal way when they take an admission examination and/or lessons; it is not intended to restrict their admission and study.

(Reference) Please refer to the Guidelines for staff to eliminate discrimination on the basis of disability at University of Toyama
(University's Home page) → "About the University of Toyama" → "Information"
→ "Information on University Administration".

10. Admissions Disclosure

The following are the criteria for determining the pass/fail status of Graduate School of Pharmaceutical Sciences (Master's Course), as well as the intent of the questions, sample answers, etc.

(1) Criteria for Acceptance/Failure

[1] General admission examination

The essay and aptitude test are worth 150 points, the foreign language (English) test is worth 100 points, and the oral examination and others are worth 50 points. A total score of 150 points or more out of 300 is required to pass.

[2] Special admission examination for international students

The essay and aptitude test are worth 150 points, the foreign language (English) test is worth 100 points, and the oral examination and others are worth 50 points. A total score of 150 points or more out of 300 is required to pass.

Applicants who score less than 50 points on the English examination will be disqualified.

(2) Intent of the questions, sample answers, etc.

[1] Essay and Aptitude Test: The purpose of the questions and sample answers will be published.

[2] Foreign Language (English): The purpose of the test and sample answers will be published.

[3] Oral Examination: The purpose of the questions will be published.

(3) Others

[1] Intentions of the questions, sample answers, etc. will be announced on the website of the Graduate School.

[2] Scores of the entrance examination will not be disclosed.

V. Overview of the Graduate School of Pharma-Medical Sciences

The Graduate School of Pharma-Medical Sciences offers the curriculums organized by the Graduate School of Medicine and Pharmaceutical Sciences and the Graduate School of Science and Engineering in collaboration.

The Graduate School of Pharma-Medical Sciences aims to contribute to the development of human and environmental health culture through collaboration and fusion among such different fields as medicine, pharmacy, science, and engineering. It teaches academic theories, research techniques, and applications in those fields to enable students to cultivate deep knowledge and superior skills for pursuing careers that require a high level of expertise.

Based on this objective, a degree will be granted to persons who have made academic achievements confirmed by this graduate school through acquisition of not only universal knowledge and skills in medicine, pharmacy, science, and engineering based on the fundamental abilities in a wide range of fields of education and research, but also the ability to think and act on their own to create something new based on the advanced specialized knowledge and ethics.

Please note that all graduate schools that will be reorganized in the 2022 academic year will adopt a four-term (quarter) system, and each course will be offered in principle on a single-term basis. Each term lasts for 8 weeks.

Comparison of two-term (semester) and four-term (quarter) systems

	Name of each term			
Two-term (semester) system	First semester		Second semester	
Four-term (quarter) system	First term	Second term	Third term	Fourth term

Overview of each program

1. Graduate Program of Pharmaceutical Science and Technology

(1) Purpose and Degree

The purpose of the Graduate Program of Pharmaceutical Science and Technology is to nurture people who can contribute to pharmaceutical development through specialized education focusing on medicine development process from discovery, synthesis, pharmacokinetics, safety tests, formulation to clinical trials. Also, the Program trains researchers and engineers who aim to play an active role in the field of pharmaceutical science based on the acquired knowledge and technology.

A master's degree (pharmaceutical sciences) will be awarded to persons who have completed this program.

(2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the "Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools."

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

1st Period 8:45 to 10:15	2nd Period 10:30 to 12:00	3rd Period 13:00 to 14:30
4th Period 14:45 to 16:15	5th Period 16:30 to 18:00	
6th Period 18:10 to 19:40	7th Period 19:50 to 21:20	

(3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master's degree will be awarded to the person on condition that he/she is enrolled in the Master's Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

(4) List of Research Projects Conducted by Academic Advisors

See the attached Table I-1.

2. Graduate Program of Applied Natural Medicine

(1) Purpose and Degree

Natural medicine has already played an important role in modern medical practice, and it is expected to be further utilized by clarifying new efficacy and scientific evidence. New medicine discovery research based on the natural medicines is a highly promising research area that can lead to therapeutic innovation in various diseases. In addition, research on natural medicine is directly linked to the advancement of preemptive preventive medicine and the elucidation of complex systems and pre-illness states of living organisms, and will greatly contribute to the realization of healthy life expectancy. In light of this potential for development, it is essential to form a virtuous cycle of expanding the base, developing and cultivating excellent people, and further increasing the social presence of this academic field.

This program is designed to provide students with a wide range of highly specialized knowledge and skills concerning natural pharmacology through an integrated education of medicine and science. The purpose is to foster people, such as researchers, educators, engineers, or reviewers (administrative officer) who can contribute to the development of medicines and human health, as well as to the advancement of academic research in the field of pharmaceutical science by developing innovative medicines from traditional ones such as natural pharmacology based on pre-illness research.

A master's degree (pharmaceutical sciences) will be awarded to persons who have completed this program.

(2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the "Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools."

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

1st Period 8:45 to 10:15	2nd Period 10:30 to 12:00	3rd Period 13:00 to 14:30
4th Period 14:45 to 16:15	5th Period 16:30 to 18:00	
6th Period 18:10 to 19:40	7th Period 19:50 to 21:20	

(3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master's degree will be awarded to the person on condition that he/she is enrolled in the Master's Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

(4) List of Research Projects Conducted by Academic Advisors

See the attached Table I-2.

3. Graduate Program of Cognitive and Emotional Neuroscience

(1) Purpose and Degree

The purpose of this graduate program is to nurture people, in the field of brain science research, who have fundamental ability to support research and can collect information, think logically, spread information, understand theses in English, discuss research topics with others, and can also do so at academic communities in specialized research fields. Also, it provides the students with bioethics and researcher ethics to cultivate an ethical views that enable them to take appropriate actions in accordance with social norms.

A master's degree (neuroscience) will be awarded to persons who have completed this program.

(2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the “Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools.”

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

1st Period 8:45 to 10:15	2nd Period 10:30 to 12:00	3rd Period 13:00 to 14:30
4th Period 14:45 to 16:15	5th Period 16:30 to 18:00	
6th Period 18:10 to 19:40	7th Period 19:50 to 21:20	

(3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master's degree will be awarded to the person on condition that he/she is enrolled in the Master's Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

(4) List of Research Projects Conducted by Academic Advisors

See the attached Table I-3.

4. Graduate Program of Medical Design

(1) Purpose and Degree

In Japan, the population aging is picking up the pace, and the need for healthcare is increasing. Especially in non-metropolitan cities such as those in Toyama Prefecture, elderly people make up a large proportion of the population, and it has become an important issue to provide them with appropriate healthcare and extend their healthy life expectancy. On the other hand, Toyama Prefecture is home to a large number of companies in the fields of precision machinery, metal and resin processing, and these companies are aiming to enter the medical and welfare equipment or related service fields that enable them to produce higher-value-added products. If the development of medical and welfare equipment and services that accurately meet domestic needs is promoted by the local businesses in Toyama Prefecture, it will contribute to not only the enhancement of the good health and welfare of the people, but also the revitalization of the economy of Japan including Toyama Prefecture. From this perspective, the Graduate Program of Medical Design is working to develop such people who can connect the medical and welfare workplaces with businesses.

- Persons who can discover the needs of the medical treatment and welfare workplaces by exchanging opinions with patients and medical welfare workers and observing the behaviors of those people.
 - Persons who can create the concept of development solutions to meet the needs.
 - Persons who can put concepts into prototypes of a company's product, etc.
 - Persons who can commercialize the prototype and introduce the product to society based on the approval by regulatory authorities such as the Pharmaceuticals and Medical Devices Agency, etc.
- A master's degree (medical engineering) will be awarded to persons who have completed this program.

(2) Special Measures for Educational Methods

In order to allow persons currently in employment to study without leaving their jobs, special measures can be taken in accordance with the "Special Provision on Educational Method Stipulated in Article 14 of the Standards for Establishment of Graduate Schools."

Persons eligible for the special educational measures can attend classes and research guidance not only in the daytime, but also at night if they submit a course plan in consultation with their academic advisors. As a rule, the night classes are scheduled between 18:10 and 21:20 from Monday through Friday. Apart from this schedule, eligible students can take the classes on Saturdays or during summer holidays depending on the class subject.

Class hours are scheduled as follows.

1st Period 8:45 to 10:15	2nd Period 10:30 to 12:00	3rd Period 13:00 to 14:30
4th Period 14:45 to 16:15	5th Period 16:30 to 18:00	
6th Period 18:10 to 19:40	7th Period 19:50 to 21:20	

(3) Requirements for Completion of Courses

As a rule, students must be enrolled for at least 2 years, take the designated classes (including special researches) to obtain 30 or more credits, receive the necessary research supervision, and pass the dissertation and final examination.

However, with regard to the period of enrollment, if a person has achieved excellent research results, a master's degree will be awarded to the person on condition that he/she is enrolled in the Master's Course of Graduate School for at least one year.

In addition, if a student, due to circumstances such as having an occupation, etc., puts forward a plan to take and complete a course in a planned manner for a certain period beyond the standard length of study (2 years), the plan may be approved.

(4) List of Research Projects Conducted by Academic Advisors

See the attached Table I-4.

Table I-1

List of Research projects Conducted by Academic Advisors (Pharmaceutical Science and Technology) (Master's Course)

Educational area Responsible teacher Contact address	Research contents
Biopharmaceutics Professor HOSOYA Ken-ichi (will be retired in March 2026) (Sugitani Campus) hosoyak@pha	<ul style="list-style-type: none"> • Blood-retinal barrier transport function analysis and drug delivery to the retina • Blood-retinal barrier cell reconstruction and analysis of interaction between cells • Elucidation of biological function and transport function in in vivo barrier tissue
Biorecognition Chemistry Professor TOMOHIRO Takenori (will be retired in March 2027) (Sugitani Campus) ttomo@pha	<ul style="list-style-type: none"> • Chemical biology for efficient drug discovery: target identification, visualization, utilization, and manipulation • Drug activity-based functional proteomics • Synthetic multicomponent integration strategy toward chemical biology and drug discovery
Cancer Cell Biology Professor SAKURAI Hiroaki (Sugitani Campus) hsakurai@pha	<ul style="list-style-type: none"> • Elucidation of the molecular mechanisms of tumor progression via inflammatory signaling pathways • Study on the activation mechanisms of molecular targets in cancer therapy • Study on the intracellular signals in malignant progression of melanoma
Chemical Biology Professor INOUE Masahiko (will be retired in March 2027) (Sugitani Campus) inouye@pha Associate Professor CHIBA Junya (Sugitani Campus) chiba@pha	<ul style="list-style-type: none"> • Chemical biology based on synthetic chemistry, particularly three projects in artificial DNA, protein control, and saccharide recognition
Synthetic and Medicinal Chemistry Professor MATSUYA Yuji (Sugitani Campus) matsuya@pha	<ul style="list-style-type: none"> • Development of new organic reactions for drug discovery • Search for novel seeds of new drugs and structure-activity relationship research • Synthesis and structural optimization of bioactive compounds
Molecular Cell Biology Professor SO Takanori (Sugitani Campus) tso@pha	<ul style="list-style-type: none"> • Elucidation of the molecular mechanism of cytokine signaling regulated by TRAF5 • Development of immunotherapeutic recombinant TNF family proteins • Elucidation of the molecular pathology of X-linked adrenoleukodystrophy

Educational area Responsible teacher Contact address	Research contents
Synthetic and Biomolecular Organic Chemistry Professor YAKURA Takayuki (will be retired in March 2027) (Sugitani Campus) yakura@pha	<ul style="list-style-type: none"> • Development of environmentally benign organic reactions • Synthesis of biologically active natural products • Pharmaceutical chemical research in bioactive substances
Biointerface Chemistry Professor NAKANO Minoru (Sugitani Campus) mnakano@pha	<ul style="list-style-type: none"> • Study of membrane lipid dynamics and elucidation of lipid transfer machinery • Elucidation of lipid flip-flop mechanisms • Biophysical research for interaction of amyloid beta with membranes • Structural and functional investigation and pharmaceutical application of lipid nanoparticles
Structural Biology Professor MIZUGUCHI Mineyuki (Sugitani Campus) mineyuki@pha	<ul style="list-style-type: none"> • Studies on the conformations of disease related proteins • Structural basis for intracellular membrane trafficking • Protein structure-based drug discovery
Pharmaceutical Physiology Associate Professor SHIMIZU Takahiro (Sugitani Campus) takshimi@pha	<ul style="list-style-type: none"> • Physiological, biochemical and pharmacological studies of ion transport proteins (pumps, transporters, ion channels) in normal and cancer cells • Elucidation of novel functional relation mechanisms of ion transport proteins • Elucidation of novel pathophysiological functions of ion transport proteins
Pharmaceutical Technology Specially Associate Professor OKADA Kotaro (Sugitani Campus) kokada@pha	<ul style="list-style-type: none"> • Development of methods for evaluating the physical properties of pharmaceutical products using nuclear magnetic resonance relaxation
Pharma-Medical Informatics and AI Specially Appointed Professor SUGANO Aki (Sugitani Campus) sugano@pha	<ul style="list-style-type: none"> • Prediction of drug efficacy of molecular target drugs or adverse drug reactions by molecular simulation or AI based analyses • Binding affinity analysis of key molecules to human receptors by bioinformatics and molecular simulation • Analysis of candidate compounds by <i>in silico</i> drug repurposing

Educational area Responsible teacher Contact address	Research contents
Behavioral Physiology Professor TAKAO Keizo (Sugitani Campus) takao@cts	<p>"Mind" is one of many brain functions. The brain receives and processes various types of information necessary for the emergence of mind. An individual's behavior is the final output of brain functions. Even with today's technology, it is difficult to directly study "mind," but analyses of brain and behavior contribute to elucidating the principles of "mind". Our laboratory aims to resolve the cellular and molecular mechanisms of "mind", including memory, learning, and emotion, using behavioral genetics, optogenetics, data science, and pharmacological and physiological techniques. With these techniques, we also aim to resolve the pathophysiology of neuropsychiatric disorders and to develop treatments for these diseases. In addition, we are working to develop mouse models of nervous system diseases, and new reproductive technologies.</p>
Computational Drug Design and Mathematical Medicine Professor TAKAOKA Yutaka (Sugitani Campus) ytakaoka@med	<p>In our divisions, we address acupuncture research which is based on molecular cell biology and bioinformatics, molecular simulation-based mathematical modeling of medicine and social medicine research as follows:</p> <ul style="list-style-type: none"> • Prediction of adverse drug reactions base on molecular simulation and mathematical models • Prediction of drug efficacy of molecularly target drugs for cancer based on molecular simulation and mathematical models • Design of nucleic acid drugs and evaluation of drug efficacy • Application of drug repurposing to computational drug design • Molecular simulation analysis of pathological conditions caused by amino acid substitutions • Application of AI technologies such as machine learning and natural language processing to improvement of hospital functions • Research on diagnostic support of medical images by neural network analysis • Research for medical treatment systems and elderly care service systems • Research for Elderly Health Care as a Public Service of community healthcare • Molecular mechanisms of therapeutic effects of acupuncture
Biofunctional Chemistry Professor IKAWA Yoshiya (Gofuku Campus) yikawa@sci	<p>RNAs play versatile roles in biological systems because they not only serve as a genetic material but also act as functional molecules. We study the molecular basis of naturally occurring RNAs with catalytic and receptor functions. Another interest of our group lies in the artificial generation of RNAs with desirable functions through rational and evolutionary approaches.</p>
Bio-functional Molecule Engineering Professor TOYOOKA Naoki (will be retired in March 2026) (Gofuku Campus) toyooka@eng	<p>The principal focus of this group is the development of the design and synthesis procedure of small molecules, as well as their biological evaluation as candidates in drug discovery</p>
Bioorganic Medicinal Chemistry Associate Professor OKADA Takuya (Gofuku Campus) tokada@eng	<p>Based on synthetic organic chemistry, we conduct research and education on the synthesis of natural organic compounds having unique structures, and on the design, synthesis, and structural optimization of small molecules with the aim of developing novel pharmaceuticals.</p>

Educational area Responsible teacher Contact address	Research contents
Engineering based on Genetic Information Professor KUROSAWA Nobuyuki (Gofuku Campus) kurosawa@eng	<ul style="list-style-type: none"> • Development of platform technology for the production of monoclonal antibodies against difficult antigens. • Development of monoclonal antibodies for next-generation treatment and diagnosis
Engineering based on Genetic Information Associate Professor OZAWA Tatsuhiko (Gofuku Campus) toza@eng	<ul style="list-style-type: none"> • Basic research and translational research using monoclonal antibodies that are involved in diseases. • Developing new antibody platforms that use antibody engineering technology.
Biomaterial Designing and Engineering Associate Professor NAKAJI Tadashi (Gofuku Campus) nakaji@eng	In our research field, the design of biomaterials and the construction of concept for the regenerative medicine are conducted in based on protein engineering, polymer science, cell biology, and molecular biology. Especially, we aim to construct functional biomaterials such as screening devices for various diseases and supporting materials for cell transplantation to cure otherwise intractable disorders.
Protein System Engineering Associate Professor INOBE Tomonao (Gofuku Campus) inobe@	Proteins are necessary for virtually every activity in the human body. Our goal is to understand how proteins are produced and degraded in the cell in terms of protein science and biophysics. Based on the above knowledge, we also aim to develop novel technologies that can regulate the lifespans of proteins for various practical applications
Computers and Applied Chemistry Professor ISHIYAMA Tatsuya (Gofuku Campus) ishiyama@eng	<p>The recent rapid development of computer technology has enabled us to analyze and predict various chemical reactions and molecular dynamics based on computational chemistry.</p> <p>This class summarizes the basic theory of ab initio electronic structure calculations, such as molecular orbital and density functional methods.</p>
Biomolecular Chemistry Associate Professor SAKONO Masafumi (Gofuku Campus) msakono@eng	Organic chemistry has been vigorously applied to molecular biology. Our objectives are to reveal the properties of biomolecules using various methods based on chemical biology. We also engage in the development of new techniques for the analysis of intermolecular interactions, such as protein-protein interactions.
Synthetic and Medicinal Chemistry Professor ABE Hitoshi (Gofuku Campus) abeh@eng	This field focuses on creation of novel “functional organic molecules” based on the advanced synthetic organic chemistry. The newly designed organic molecules possess some potential to contribute to various fields of science such as discovery of novel medicines and agrichemicals. Research in our group is primarily aimed toward the development of catalytic reactions and methods for organic synthesis for the functional organic molecules.

Educational area Responsible teacher Contact address	Research contents
Pharmacology Associate Professor TAKASAKI Ichiro (Gofuku Campus) takasaki@eng	<ul style="list-style-type: none"> • Elucidation of the mechanisms of chronic pain/pruritus, neuropsychiatric disorders, cancer, etc. • Drug discovery of novel small-molecule therapeutics • Pharmacological analysis of the new small-molecule compounds

Table I -2

List of Research projects Conducted by Academic Advisors (Applied Natural Medicine) (Master's Course)

Educational area Responsible teacher Contact address	Research contents
Clinical Pharmaceutics Professor KATO Atsushi (Sugitani Campus) kato@med	<ul style="list-style-type: none"> • Drug design and validation of chaperone compounds for rare lysosomal diseases utilising Protein-Ligand Docking • Research on the development of functional cosmetics based on scientific evidence • Research on the isolation and purification of the iminosugars from plants and their application as pharmaceuticals. • Reverse translational research on Japanese and Chinese, taking into account clinical experience.
Medicinal Resource Science Professor SHOJI Tsubasa (Sugitani Campus) tsubasa@inm	<ol style="list-style-type: none"> 1. Molecular regulation of alkaloid and terpenoid pathways in medicinal plants of the Solanaceae family. 2. Novel regulatory mechanisms of alkaloid pathways in tobacco plants. 3. Biosynthesis and accumulation of natural sweeteners. <p>Collaborate with industry partners to apply our research to the stable supply and production of herbal medicines.</p>
Natural Products & Drug Discovery Professor MORITA Hiroyuki (Sugitani Campus) hmorita@inm	<ul style="list-style-type: none"> • Studies on biosynthesis of naturally occurring bioactive compounds • Structural basis for secondary metabolite enzymes • Enzyme engineering for novel drug development • Isolation of bioactive compounds from plants, microorganisms, and marine organisms • Investigation of Asia's natural resources not fully utilized • Discovery of natural anticancer agents from medicinal plant resources by employing a novel antiausterity screening strategy • Chemical investigation of medicinal plants and search for novel bioactive secondary metabolites • Investigation of the structure-activity relationship of the active natural compounds and their mechanism of action against cancer cell survival pathways • Discovery of metabolomics biomarkers associated with cancer cells by utilizing FT-NMR and MS strategy
Neuromedical Science Professor TOHDA Chihiro (Sugitani Campus) chihiro@inm	<ul style="list-style-type: none"> • Elucidation of the molecular mechanism of restoring the neuronal network, and crosstalk between the central nervous system and peripheral organs to activate neural function. • Traditional medicine research for developing fundamental therapeutic drugs for Alzheimer's disease, spinal cord injury, degenerative cervical myelopathy, glaucoma, and disuse syndrome. • Clinical study aiming to develop new botanical drugs and new usage of Kampo formulas. • Clinical study to analyze factors affecting physical and mental health and to identify biomarkers of wellbeing.
Host Defences Professor HAYAKAWA Yoshihiro (Sugitani Campus) haya@inm	<ul style="list-style-type: none"> • Study of NK cell biology and its roles in immunity • Role of innate immune responses in cancer progression • Immunological study of inflammatory & allergic diseases • Modulation of immune responses and immunological diseases by Kampo medicines • Study to regulate cancer progression & metastasis

Educational area Responsible teacher Contact address	Research contents
Complex Biosystem Research Professor NAKAGAWA Yoshimi (Sugitani Campus) ynaka@inm	<ul style="list-style-type: none"> • Functional analysis of transcription factors that regulate glucose and lipid metabolism • Study for nutrient metabolism regulation by cell-cell and tissue-tissue interaction • Study for the molecular mechanism of improvement of lifestyle-related diseases by Wakan-yaku
Presymptomatic Disease Professor KOIZUMI Keiichi (Sugitani Campus) kkoizumi@inm	<ul style="list-style-type: none"> • Understanding of the fluctuation of biometric information and its medical applications. • Elucidation of the function of immunostimulatory nanoparticles and nucleotide degradant discovered by traditional Japanese medicine (Kampo formula) and their medical applications.
Kampo Diagnostics Professor SHIBAHARA Naotoshi (will be retired in March 2026) (Sugitani Campus) shiba1@inm	<ul style="list-style-type: none"> • Pharmacological effects of Kampo medicines and their herbal components, as well as their mechanisms of action • Search for indicators of clinical pathology of Kampo medicine and “sho”
Artificial Intelligence and Data Science Research Professor TAKAOKA Yutaka (Sugitani Campus) ytakaoka@med	<p>In our divisions, we address acupuncture research which is based on molecular cell biology and bioinformatics, molecular simulation-based mathematical modeling of medicine and social medicine research as follows:</p> <ul style="list-style-type: none"> • Prediction of adverse drug reactions base on molecular simulation and mathematical models • Prediction of drug efficacy of molecularly target drugs for cancer based on molecular simulation and mathematical models • Design of nucleic acid drugs and evaluation of drug efficacy • Application of drug repurposing to computational drug design • Molecular simulation analysis of pathological conditions caused by amino acid substitutions • Application of AI technologies such as machine learning and natural language processing to improvement of hospital functions • Research on diagnostic support of medical images by neural network analysis • Research for medical treatment systems and elderly care service systems • Research for Elderly Health Care as a Public Service of community healthcare • Molecular mechanisms of therapeutic effects of acupuncture
Biofunctional Chemistry Professor IKAWA Yoshiya (Gofuku Campus) yikawa@sci	<p>RNAs play versatile roles in biological systems because they not only serve as a genetic material but also act as functional molecules. We study the molecular basis of naturally occurring RNAs with catalytic and receptor functions. Another interest of our group lies in the artificial generation of RNAs with desirable functions through rational and evolutionary approaches.</p>

<p>Educational area Responsible teacher Contact address</p>	<p>Research contents</p>
<p>Cell Biology</p> <p>Professor KARAHARA Ichirou (Gofuku Campus) karahara@sci</p>	<p>Studies on the mechanisms of plants' responses to various terrestrial / cosmic environmental factors at organ / tissue level using various morphological techniques including three-dimensional macroscopic / ultrastructural analyses</p>
<p>Natural Products Chemistry</p> <p>Associate Professor MIYAZAWA Masahiro (will be retired in March 2026) (Gofuku Campus) miyazawa@sci</p>	<p>Numerous bioactive organic compounds occur in nature, many of which possess complex structures with large numbers of asymmetrical carbon atoms. We are developing useful reactions for the synthesis of such complex-structured organic compounds, and applying these compounds to the synthesis of bioactive natural products.</p>
<p>Bio-functional Molecule Engineering</p> <p>Professor TOYOOKA Naoki (will be retired in March 2026) (Gofuku Campus) toyooka@eng</p>	<p>The principal focus of this group is the development of the design and synthesis procedure of small molecules, as well as their biological evaluation as candidates in drug discovery</p>
<p>Bioorganic Medicinal Chemistry</p> <p>Associate Professor OKADA Takuya (Gofuku Campus) tokada@eng</p>	<p>Based on synthetic organic chemistry, we conduct research and education on the synthesis of natural organic compounds having unique structures, and on the design, synthesis, and structural optimization of small molecules with the aim of developing novel pharmaceuticals.</p>
<p>Engineering based on Genetic Information</p> <p>Professor KUROSAWA Nobuyuki (Gofuku Campus) kurosawa@eng</p>	<ul style="list-style-type: none"> • Development of platform technology for the production of monoclonal antibodies against difficult antigens. • Development of monoclonal antibodies for next-generation treatment and diagnosis
<p>Engineering based on Genetic Information</p> <p>Associate Professor OZAWA Tatsuhiko (Gofuku Campus) toza@eng</p>	<ul style="list-style-type: none"> • Basic research and translational research using monoclonal antibodies that are involved in diseases. • Developing new antibody platforms that use antibody engineering technology.

<p>Educational area Responsible teacher Contact address</p>	<p>Research contents</p>
<p>Synthetic and Medicinal Chemistry</p> <p>Professor ABE Hitoshi (Gofuku Campus) abeh@eng</p>	<p>This field focuses on creation of novel “functional organic molecules” based on the advanced synthetic organic chemistry. The newly designed organic molecules possess some potential to contribute to various fields of science such as discovery of novel medicines and agrichemicals. Research in our group is primarily aimed toward the development of catalytic reactions and methods for organic synthesis for the functional organic molecules.</p>
<p>Pharmacology</p> <p>Associate Professor TAKASAKI Ichiro (Gofuku Campus) takasaki@eng</p>	<ul style="list-style-type: none"> • Elucidation of the mechanisms of chronic pain/pruritus, neuropsychiatric disorders, cancer, etc. • Drug discovery of novel small-molecule therapeutics • Pharmacological analysis of the new small-molecule compounds
<p>Behavioral Neurochemistry</p> <p>Professor SHIMIZU Kimiko (Gofuku Campus) kshimizu@ctg</p>	<p>Many physiological functions are rhythmically regulated by the circadian clock and change in a circadian manner. Our laboratory aims to elucidate the “mechanism” of circadian regulation of higher brain functions such as memory formation and emotional regulation. We conduct research at the multiple levels, from the molecular to the behavioral. Examples are shown below.</p> <ul style="list-style-type: none"> • Behavioral analysis of circadian rhythms of memory and emotion • Molecular mechanisms of circadian changes in memory and emotion • Visualization of synaptic changes associated with brain function • Mechanisms of action of novel neurosteroids

Table I-3

List of Research projects Conducted by Academic Advisors (Cognitive and Emotional Neuroscience) (Master's Course)

<p>Educational area Responsible teacher Contact address</p>	Research contents
<p>Anatomy</p> <p>Professor ICHIJO Hiroyuki (Sugitani Campus) ichijo@med</p>	<p>Using the advantages and specificities of in vivo and in silico studies, we study the neural basis of experience-dependent modification of neural circuits that regulate emotion and behavioral change, and evolution of the neural mechanisms of innate attack and defense behaviors.</p>
<p>Physiology</p> <p>Professor TAMURA Ryoi (Sugitani Campus) rtamura@med (will be retired in March 2026)</p>	<p>This century will be the era of brain sciences. "The mind" has long been regarded as one of the most enigmatic psychological processes. Recent technological advances have enabled us to approach the neural basis of the mind. The purpose of our research is to elucidate brain mechanisms of "learning and memory", one of the key members of the mind. For this, we mainly use laboratory animals such as monkeys and rats, record neural activities in the brain of the animals while they perform a behavioral (learning and memory) task or they are asleep subsequent to the task performance, and analyze the pattern of brain activities.</p>
<p>Brain Science</p> <p>Professor INOKUCHI Kaoru (Sugitani Campus) inokuchi@med</p>	<p>Recently it has been clarified that neurons in the brain are active even when animals sleep or rest, denoted as "idling brain state". Idling activity of the brain appears to play important roles in information processing than previously thought. In our laboratory, we aim to clarify the role played by idling brain by making full use of molecular biology, biochemistry, cell biology, histochemistry, electrophysiology, behavioral pharmacology, optogenetics, and live-imaging.</p>
<p>Systems Function and Morphology</p> <p>Professor ITO Tetsufumi (Sugitani Campus) itot@med</p>	<p>We do not sense the world as it is, but do collect the information which is important for our survival and recognize the sensory objects which are further selected by both unconscious and conscious processes. For the selection, which is essential for survival, animals possess sensory organs and neuronal circuitry which are optimized for their circumstances. Our laboratory mainly focuses on the hearing system, and study the mechanisms which allow to detect and sense the meaningful information for survival from environmental sounds. Using various techniques, we would like to investigate functional and morphological basis of the brain which allows the coding of sensory information, especially sounds, and the sensory perception.</p>
<p>Molecular Neuroscience</p> <p>Professor MORI Hisashi (Sugitani Campus) hmori@med (will be retired in March 2026)</p>	<p>We focus on molecular basis of brain function and dysfunction. To develop the novel methods for diagnosis and cure of neurodegenerative and neurodevelopmental disorders, we have used molecular biological approaches to generate new mouse models of such disorders and new probes to detect functional change in the brain.</p>
<p>Neuropsychiatry</p> <p>Professor TAKAHASHI Tsutomu (Sugitani Campus) tsutomu@med</p>	<p>Recent advances in brain imaging techniques have enabled us to explore brain structure and function non-invasively in vivo. However pathophysiology and mechanisms of mental disorders are still remain elusive. In our department, clinical and basic researches are being performed to elucidate pathophysiology of severe mental illnesses such as schizophrenia and to develop innovative and optimized approaches for diagnosing and treating patients for the purpose of improving their long-term outcome.</p>

Educational area Responsible teacher Contact address	Research contents
Neurosurgery Professor KURODA Satoshi (Sugitani Campus) skuroda@med (will be retired in March 2027)	〔Research content〕 Neurosurgical aspects of basic and clinical research are included in this course. 〔Guidance content〕 (1) Stem cell research (2) Molecular and stem cell research of malignant glioma (3) Angiogenesis of cerebrovascular disorders (4) Cognitive function in neurosurgical disorders (5) Electrophysiological analysis (6) Epidemiological analysis of stroke
Clinical and Cognitive Neuroscience Professor HAKAMATA Yuko (Sugitani Campus) hakamata@med	We aim at understanding the neurobiological mechanisms underlying emotional dysregulation associated with distorted cognitions, and using this understanding to develop novel, effective psychological interventions for anxiety and depressive disorders. We address these questions from the integrative view including psychology, cognitive behavioral science, endocrinology, immunology, genetics, and neuroscience.
Gene Expression and Regulation Associate Professor KAIDA Daisuke kaida@med	The gene expression mechanism, which produces proteins based on DNA information, is an essential process, and its abnormalities can lead to various diseases such as cancer and neurological diseases. We focus on elucidating the mechanisms of mRNA splicing, a key process within gene expression, to uncover the causes of these diseases and develop new therapeutic strategies. Furthermore, by utilizing various small molecules, we aim to develop anti-cancer drugs based on splicing inhibitors, as well as therapeutic agents to suppress aging-related diseases, including Alzheimer's disease.
Behavioral Physiology Professor TAKAO Keizo (Sugitani Campus) takao@cts	"Mind" is one of many brain functions. The brain receives and processes various types of information necessary for the emergence of mind. An individual's behavior is the final output of brain functions. Even with today's technology, it is difficult to directly study "mind," but analyses of brain and behavior contribute to elucidating the principles of "mind". Our laboratory aims to resolve the cellular and molecular mechanisms of "mind", including memory, learning, and emotion, using behavioral genetics, optogenetics, data science, and pharmacological and physiological techniques. With these techniques, we also aim to resolve the pathophysiology of neuropsychiatric disorders and to develop treatments for these diseases. In addition, we are working to develop mouse models of nervous system diseases, and new reproductive technologies.
Physiology Professor NISHIMARU Hiroshi (Sugitani Campus) nishimar@med	The amount of information processed in our brain in our daily life is estimated to be about 10 billion bits per second. These processes are carried out by the neural networks in the brain which are thought to be a real-time massive parallel processing system. Unraveling the mechanisms and principles of these networks is crucial for understanding how our brain works and also provides us a hint to live through the modern highly information-oriented society. To this end, we utilize neurophysiological and neuropsychological experimental approaches to elucidate higher brain functions including cognition of sensory information (input system), and behavioral manifestation based on sensory perception, memory, decision-making and motor control (output system).

Educational area Responsible teacher Contact address	Research contents
Pathology Associate Professor YAMAMOTO Seiji (Sugitani Campus) seiyama@med	<ul style="list-style-type: none"> • We promote a research to elucidate the function of platelet-derived growth factor receptor (PDGFR) in mice, especially neural tissue, neural stem cells, and blood vessels. • We also conduct in vitro studies using cells isolated from such mice to elucidate that the PDGFR signal is involved in the regeneration and functional recovery of several organs and tissues. • We create novel genetically engineered animals, such as knockout mice, to study intractable human diseases, to explore and identify factors involved in disease progression, and promote research to develop novel treatment methods for patients.
Artificial Intelligence and Data Science Research Professor TAKAOKA Yutaka (Sugitani Campus) ytakaoka@med	<p>In our divisions, we address acupuncture research which is based on molecular cell biology and bioinformatics, molecular simulation-based mathematical modeling of medicine and social medicine research as follows:</p> <ul style="list-style-type: none"> • Prediction of adverse drug reactions base on molecular simulation and mathematical models • Prediction of drug efficacy of molecularly target drugs for cancer based on molecular simulation and mathematical models • Design of nucleic acid drugs and evaluation of drug efficacy • Application of drug repurposing to computational drug design • Molecular simulation analysis of pathological conditions caused by amino acid substitutions • Application of AI technologies such as machine learning and natural language processing to improvement of hospital functions • Research on diagnostic support of medical images by neural network analysis • Research for medical treatment systems and elderly care service systems • Research for Elderly Health Care as a Public Service of community healthcare • Molecular mechanisms of therapeutic effects of acupuncture
Applied Pharmacology Professor KUME Toshiaki (Sugitani Campus) tkume@pha	<ul style="list-style-type: none"> • Elucidation of pathogenesis mechanisms of neurodegenerative diseases, pruritus, pain and dysesthesia and search and development of preventive and therapeutic drugs for these disorders • Establishment of novel animal models that exhibit the brain diseases and the sensory symptoms, such as itch, pain and dysesthesia • Search for cytoprotective substances derived from foods and plants
Pharmaceutical Therapy and Neuropharmacology Professor NITTA Atsumi (Sugitani Campus) nitta@pha	<ul style="list-style-type: none"> • Behavioral pharmacological, molecular biological and cell biological studies to clarify the function of the novel molecules for clarification of mechanism of psychiatric diseases onset • Study for the clarification of the mechanisms of establishment of addiction of nicotine, THC and methamphetamine • Production of novel mice models with neuronal and/or mental diseases
Molecular Neurobiology Associate Professor TABUCHI Akiko (Sugitani Campus) atabuchi@pha	<ul style="list-style-type: none"> • Elucidation of the molecular mechanisms underlying regulation of neuronal function and plasticity by gene expression and cellular communication between synapses and a nucleus • Studies on neurological disorders caused by dysfunction of transcription factors and synaptic molecules • Basic studies on transcription factors and synaptic molecules toward drug development targeted for neurological disorders

<p>Educational area Responsible teacher Contact address</p>	<p>Research contents</p>
<p>Pharma-Medical Informatics and AI</p> <p>Specially Appointed Professor SUGANO Aki (Sugitani Campus) sugano@pha</p>	<ul style="list-style-type: none"> • Prediction of drug efficacy of molecular target drugs or adverse drug reactions by molecular simulation or AI based analyses • Binding affinity analysis of key molecules to human receptors by bioinformatics and molecular simulation • Analysis of candidate compounds by <i>in silico</i> drug repurposing
<p>Regulatory Biology</p> <p>Professor MATSUDA Kouhei (Gofuku Campus) kmatsuda@sci</p>	<p>Physiology and biochemistry on bioactive peptides and their receptor signaling system, and psychophysiology on instinct behavior in vertebrates</p>
<p>Biological Information Processing</p> <p>Professor TABATA Toshihide (Gofuku Campus) ttabata@eng</p>	<p>Neuroscience of learning and memory. We investigate cellular and molecular mechanisms regulating synaptic plasticity involved in cerebellar motor learning using advanced methods of electrophysiology, electrochemistry, fluorescence microscopy, and behavior measurement.</p>
<p>Artificial Intelligence</p> <p>Professor Shangce Gao (Gofuku Campus) gaosc@eng</p>	<p>We engage in education and research focused on the development, analysis, and evaluation of various machine learning techniques. This includes artificial neural networks inspired by human brain mechanisms, deep learning where artificial intelligence learns autonomously, swarm intelligence approaches like ant colony optimization, error backpropagation methods, genetic algorithms, and evolutionary strategies.</p>
<p>Brain and Neural Systems Engineering</p> <p>Professor KAWAHARA Shigenori (Gofuku Campus) kawahara@eng</p>	<p>By using relatively simple invertebrate neural networks, we conduct education and research on phase-dependent processing of sensory information in synchronous neural activities and dynamic interaction among the nonlinear oscillators in the brain as well as between the brain and rhythmic sensory inputs.</p>
<p>Behavioral Neurochemistry</p> <p>Professor SHIMIZU Kimiko (Gofuku Campus) kshimizu@ctg</p>	<p>Many physiological functions are rhythmically regulated by the circadian clock and change in a circadian manner. Our laboratory aims to elucidate the “mechanism” of circadian regulation of higher brain functions such as memory formation and emotional regulation. We conduct research at the multiple levels, from the molecular to the behavioral. Examples are shown below.</p> <ul style="list-style-type: none"> • Behavioral analysis of circadian rhythms of memory and emotion • Molecular mechanisms of circadian changes in memory and emotion • Visualization of synaptic changes associated with brain function • Mechanisms of action of novel neurosteroids

Table I-4

List of Research projects Conducted by Academic Advisors (Medical Design) (Master's Course)

Educational area Responsible teacher Contact address	Research contents
Design of visual environment Professor AKIZUKI Yuki (Gofuku Campus) akizuki@edu	We conduct education and research on visual environment design based on the characteristics of light sources, spatial factors, visual targets, as well as human vision mechanism. The topics include lighting planning of medical and nursing spaces, creation of skin samples for pathological conditions, and support for disaster relief medical activities at night.
Dynamical Systems and Robotics Associate Professor TODA Hideki (Gofuku Campus) toda@eng	Our education and research activities focus on dynamical systems, control and robotics. The topics include decentralized control, hybrid systems and networked control as well as autonomous mobile robots, bio-inspired robots, rehabilitation robots.
Computational Biophotonics Professor KATAGIRI Takashi (Gofuku Campus) katagiri@eng	We conduct research and education aimed at creating basic principles of next-generation medical measurement and diagnostic technology and building an academic system by combining photon science, laser spectroscopy, optical communication technology and information science.
Clinical Optical Information Engineering Specially Appointed Professor OSHIMA Yusuke (Gofuku Campus) oshima@eng	We conduct research on advanced optical devices such as novel lasers or microscopy techniques, diagnosis, photodynamic therapy, image information processing, and AI technology for practical use in the life science and medical fields focusing on the interaction of light and living bodies and its mechanisms and working with engineering researchers, technicians, biologists, and clinicians in a cross-disciplinary approach.
Medical Information Sensing Professor HASEGAWA Hideyuki (Gofuku Campus) hasegawa@eng Assistant Professor OMURA Masaaki (Gofuku Campus) momura@eng	We conduct education and research on the theory and applications of noninvasive ultrasonic imaging and sensing of morphological and functional information of biological bodies. In particular, we develop advanced signal- and image-processing techniques, such as ultrasonic beamforming, target motion estimation, and tissue viscoelasticity estimation, for ultrasonic measurements.
Biological Information Processing Professor TABATA Toshihide (Gofuku Campus) ttabata@eng	We focus on both basic and applied neuroscience of learning and memory. We investigate cellular and molecular mechanisms underlying learning and memory using advanced methods of electrophysiology, electrochemistry, fluorescence microscopy, and behavior measurement. Based on the results of these studies, we devise brain-tech gadgets such as a mobile device for episodic memory performance training.

<p>Educational area Responsible teacher Contact address</p>	<p>Research contents</p>
<p>Mechanical Information and Instrumentation</p> <p>Professor SASAKI Tohru (Gofuku Campus) tsasaki@eng</p>	<p>Our aim is image-position measuring of large-scale environments and force sensing for micro-handling. We conduct education and research on the development of new measuring methods, systems, and sensors. We also focus on robotic vision systems including 3D measurement and object recognition based on image processing.</p>
<p>Medical Image Analysis, Bioinformatics</p> <p>Associate Professor TERABAYASHI Kenji (Gofuku Campus) tera@eng</p>	<ul style="list-style-type: none"> • Image understanding of cells in blood for cancer patients • Analysis of CT data for fracture fixation • Understanding central nervous system disease based on proteomics
<p>Brain and Neural Systems Engineering</p> <p>Professor KAWAHARA Shigenori (Gofuku Campus) kawahara@eng</p>	<p>By using relatively simple invertebrate neural networks, we conduct education and research on phase-dependent processing of sensory information in synchronous neural activities and dynamic interaction among the nonlinear oscillators in the brain as well as between the brain and rhythmic sensory inputs.</p>
<p>Process Systems Engineering</p> <p>Associate Professor KUROOKA Taketoshi (Gofuku Campus) kurooka@eng</p>	<p>We conduct education and research on design methodologies, operational procedures, and monitoring and control technologies to ensure the safe and efficient operation of systems in which humans and machines interact in complex ways, such as pharmaceutical manufacturing facilities and chemical plants. In recent years, while automation and labor-saving measures have advanced in these production facilities, the increasing complexity of such systems has made human judgment and response during emergencies more important than ever. In particular, we are currently focusing on actively utilizing rapidly evolving digital transformation (DX) technologies to develop systems that support human operators.</p>
<p>Human-Computer Interaction</p> <p>Professor NOZAWA Takayuki (Gofuku Campus) nozawa@eng</p>	<p>We conduct education and research on the analysis and evaluation of human cognition and social interaction, and on the design of information technologies that support people's intellectual activities in real life. For this purpose, we use a combination of multimodal measurement of brain, psychological, physiological, and behavioral activities with data science and artificial intelligence techniques.</p>
<p>Materials Plasticity Engineering</p> <p>Professor AIDA Tetsuo (Gofuku Campus) aida@sus</p>	<p>For various industrial materials, we conduct education and research on molding methods, plastic working deformation behavior and applications of molding materials controlled by advanced processing technology</p>
<p>Digital Contents</p> <p>Professor TSUJIAI Hidekazu (Takaoka Campus) tsujiai@tad (will be retired in March 2026)</p>	<p>We conduct education and research on digital content including 3D, fulldome and projection mapping, AR and VR environment construction, and image processing.</p>

Educational area Responsible teacher Contact address	Research contents
Behavioral Physiology Professor TAKAO Keizo (Sugitani Campus) takao@cts	<p>"Mind" is one of many brain functions. The brain receives and processes various types of information necessary for the emergence of mind. An individual's behavior is the final output of brain functions. Even with today's technology, it is difficult to directly study "mind," but analyses of brain and behavior contribute to elucidating the principles of "mind". Our laboratory aims to resolve the cellular and molecular mechanisms of "mind", including memory, learning, and emotion, using behavioral genetics, optogenetics, data science, and pharmacological and physiological techniques. With these techniques, we also aim to resolve the pathophysiology of neuropsychiatric disorders and to develop treatments for these diseases. In addition, we are working to develop mouse models of nervous system diseases, and new reproductive technologies.</p>
Cardiology and Nephrology Professor KINUGAWA Koichiro (Sugitani Campus) kinugawa@med	<p>Cardiovascular diseases have been increasingly popular in Japan along with aging society. Ischemic heart disease due to atherosclerosis with uncontrolled multiple risk factors, valvular disease in aged population, heart failure as a terminal figure of all heart disorders, and a number of arrhythmias modifying their clinical course are common. It is crucial to find out the underlying mechanisms of them, and to explore the therapeutic and preventive strategies for them. Also, renal diseases are closely related with cardiovascular diseases, and the relationship has been called as cardio-renal syndrome. Not only primary kidney disease such as nephritis, but also secondary renal dysfunction caused by heart failure should be an important target for investigation</p>
Hematology Professor SATO Tsutomu (Sugitani Campus) tsutomus@med	<p>With the advancement of an aging society, patients who have hematological malignancies have been steadily increasing. Since hematological malignancies are highly sensitive to chemotherapy, progress of chemotherapy has been accompanied by that of hematology. Hematopoietic stem cell transplantation was an answer reached by an extreme line of thought that the more chemotherapeutic agent was administered, the more cancer cells were killed. However, there were limits to that therapy, that is, severe side effects and multidrug resistance in tumor cells. Molecularly-targeted therapy and preventing side effects of chemotherapy is modern trends today. To meet such social needs, bench-to-bed research has been conducted in our department.</p>
Cardiothoracic Surgery Professor TSUCHIYA Tomoshi (Sugitani Campus) ytakaoka@med	<p>Collaboration with the Department of Biosystems and Biomedical Engineering, Faculty of Engineering, aims to regenerate lung organs. An organ regeneration method to recellularize rat decellularized tissue skeleton will be used to create disease models. Research areas will encompass stem cells, cell adhesion, mechanical stress, and cancer research. (Ref ; https://www.organengineering.com/)</p>
Urology Professor KITAMURA Hiroshi (Sugitani Campus) hkitamur@med	<p>Our medical staffs in the department have dedicated themselves to better care for patients having urological diseases. We are conducting basic and translational research for providing various strategies for treatment of the diseases that patients are satisfied with. We are enthusiastic about studying basic science of urology that will lead to a future innovative treatment.</p>

Educational area Responsible teacher Contact address	Research contents
<p>Comprehensive Oral Sciences</p> <p>Professor YAMADA Shin-ichi (Sugitani Campus) shinshin@med</p>	<p>The oral cavity has many functions and plays an important role in human life. In addition, the relationship between oral bacteria and oral function and many diseases has become clear, and the importance of oral science is being recognized. However, there are aspects where scientific evidence is lacking, so we are conducting research that contributes to extending healthy life expectancy and working to establish scientific evidence.</p> <ul style="list-style-type: none"> • Research on pathological diagnosis and image diagnosis of oral diseases using artificial intelligence. • Basic research on anticancer drug sensitivity using human oral squamous cell carcinoma cell lines. • Basic research on cancer proliferation and invasion mechanisms using human oral squamous cell carcinoma cells. • Immunological analysis using mouse oral squamous cell carcinoma model. • Research on prevention of oral mucositis using human fibroblasts. • Research on the development of minimally invasive oral cancer treatment.
<p>Computational Drug Design and Mathematical Medicine</p> <p>Professor TAKAOKA Yutaka (Sugitani Campus) ytakaoka@med</p>	<p>In our divisions, we address acupuncture research which is based on molecular cell biology and bioinformatics, molecular simulation-based mathematical modeling of medicine and social medicine research as follows:</p> <ul style="list-style-type: none"> • Prediction of adverse drug reactions base on molecular simulation and mathematical models • Prediction of drug efficacy of molecularly target drugs for cancer based on molecular simulation and mathematical models • Design of nucleic acid drugs and evaluation of drug efficacy • Application of drug repurposing to computational drug design • Molecular simulation analysis of pathological conditions caused by amino acid substitutions • Application of AI technologies such as machine learning and natural language processing to improvement of hospital functions • Research on diagnostic support of medical images by neural network analysis • Research for medical treatment systems and elderly care service systems • Research for Elderly Health Care as a Public Service of community healthcare • Molecular mechanisms of therapeutic effects of acupuncture

- A portion of email address is listed in the contact address. Please use it for preliminary consultations with the relevant academic advisor in the field of your choice. Please add ".u-toyama.ac.jp" after the address.

Example) abc@def → abc@def.u-toyama.ac.jp