

2024 Requirements for Research Student Applicants Enrolling in a Master's Degree at the Graduate School of Applied Life Sciences at the Niigata University of Pharmacy and Medical and Life Sciences

(Applied Life Sciences Course, Pharmacy Course)

Aims of Education and Research Activities

The Graduate School of Applied Life Sciences strives to foster sophisticated research capabilities in the fields of food science, agricultural science, environmental science, pharmaceutical science, medicine, healthcare and other life sciences with the aim of cultivating human resources capable of contributing to society as trusted professionals.

Admissions Policy

<Applied Life Sciences Course, Pharmacy Course>

1. The type of student we are looking for:

The Graduate School is looking for students who possess the following disposition and motivation.

- Students looking to gain specialist knowledge and skills in the fields of life science, food science, environmental science, and pharmacy
- Students seeking to develop their logical thinking abilities and acquire a basis in research activities
- Students with a desire to use the expertise they have developed to give back to society
- Students with a willingness to take initiative and work with a diverse range of people

2. Required knowledge and skills for enrollment

- Basic academic abilities to learn specialized applied life sciences fields
- Basic specialist knowledge equivalent to that taught in the Faculty of Applied Life Sciences undergraduate course
- The linguistic and communicative abilities needed for learning expertise

Research Fields Accepting Applications

<Applied Life Sciences Course>

Analytical Food Sciences, Functional Food Sciences, Food Chemistry, Food Safety, Food and Fermentation Technologies, Environmental Microbiology, Applied Microbiology, Molecular Microbiology, Animal Cell Engineering, Plant Genomics, Green Chemistry, Biomolecular Chemistry, Environmental Engineering, Molecular Science

<Pharmacy Course>

Organic Pharmaceutical Chemistry, Biochemistry, Hygienic Chemistry, Microbiology, Analytical Pharmaceutical Chemistry, Physical Chemistry in Pharmaceutics, Pharmaceutics, Functional Morphology, Social Pharmacy, Pharmacology, Clinical Pharmacy

- ◎ Please select the first and second choice of research laboratory from those included in the research fields above for each course, and make note of this in your application form. (See "List of Research Topics"). If there is a concentration of successful applicants wishing to join a specific laboratory, the University may determine the research laboratory applicant is to join while taking the applicant's first and second choice of laboratory into account.

Entrance Examination Schedule

Type of entrance examination	Courses Accepting Applications	Submission deadline for documents certifying your eligibility as applicant (applicants only)	Application period	Examination date	Announcement date of examination results	Deadline for enrollment procedures
General entrance examination, 1st term	Faculty of Applied Life Sciences Faculty of Pharmacy	Friday, June 23, 2023 (At the latest)	Friday, July 28, 2023 to Friday, August 4, 2023 (At the latest)	Friday, September 1, 2023	Monday, September 11, 2023	Friday, September 29, 2023
General entrance examination, 2nd term	Faculty of Applied Life Sciences Faculty of Pharmacy	Friday, December 8, 2023 (At the latest)	Friday, January 26, 2024 to Friday, February 2, 2024 (At the latest)	Friday, March 1, 2024	Tuesday, March 12, 2024	Tuesday, March 19, 2024

[Inquiries on Entrance Examinations and Where to Submit Documents]

The Entrance Examination Section, Administration Department on the Niitsu Campus accepts application-related inquiries, application form and past entrance exam question requests.

265-1 Higashijima, Akiha-ku, Niigata 956-8603

Phone: +81 250-25-5395 (Available from 9AM to 5PM, except for Saturdays, Sundays, and public holidays)

E-mail:nyuushi@nupals.ac.jp

<Handling of Personal Information>

- The University follows all laws related to the protection of personal information, and assigns a personal information manager to handle all personal information submitted by applicants.
- Applicant personal information is shared within and used by the University for studies, investigations, research, analysis and so forth regarding entrance examination tasks, enrollment procedures and operations, screening methods, etc. Applicant personal information is also shared within and used by the University for academic affairs and student support activities.

<General entrance examination>

1 Available Student Slots 5

2 Applicant Requirements

Applicants must satisfy one of the following criteria to apply for admission:

- (1) Applicants who have graduated from a university specified in Article 83 of the Basic Act on Education (Act No. 26 of 1947), or applicants who expect to graduate from the same by March 2024.
- (2) Applicants who have received, or expect to receive a bachelor's degree by March 2024 as prescribed in Article 104 Paragraph 4 of the Basic Act on Education
- (3) Applicants who have completed 16 years of school education in an overseas country, or expect to complete said education by March 2024
- (4) Applicants specially designated by the Minister of Education, Culture, Sports, Science and Technology (1953 Notification of the Ministry of Education, Science, Sports and Culture, No.5), and applicants with other enrollment qualifications as prescribed in the Graduate School of Pharmacy at the Niigata University of Pharmacy and Medical and Life Sciences Rules and Regulations

◎ Notes for persons applying on the basis of applicant requirements (3) or (4)

Applicant requirements will be verified and screened beforehand. Contact the office described in [Inquiries on Entrance Examinations and Where to Submit Documents] on the cover by phone and follow the instructions provided. Applicants cannot submit an application without their applicant qualifications being verified and screened.

A summary on the verification and screening of applicant requirements is provided on page 8. Please read through this and follow the procedures described (note the submission deadline for verification and screening documents).

3 Application Period

[1st term] Friday, July 28, 2023 to Friday, August 4, 2023

[2nd term] Friday, January 26, 2024 to Friday, February 2, 2024 at the latest in both cases

4 Application Procedures

Applicants are requested to prepare the following application documents and either submit the documents directly within the abovementioned application period (9AM to 5PM, except for Saturdays, Sundays, and public holidays), or send the documents by post.

When sending the application documents and other materials by post, use the registered post service (kani-kakitome), and clearly indicate "Graduate school application form enclosed" on the front of the envelope in red.

- (1) Place to submit application documents and other materials: Entrance Examination Section, Administration Department, Niitsu Campus
- (2) Please pay the entrance examination fee (¥22,000) using either of the prescribed methods below.
 - 1) Direct submissions: Purchase a certificate stamp from the Administration Department on the 2nd floor of Building A on the Niitsu Campus, and submit it together with your application documents.
 - 2) Postal money orders: Exchange the fee amount for a regular money order at a Japan Post Bank or post office savings counter, and submit it together with your application documents.
 - 3) Bank transfers: Transfer the fee amount to the following bank account. The applicant shall bear the cost of bank transfer service fees.
Submit a copy of the bank transfer receipt or the ATM statement together with your application documents.
The original copy acts as a receipt, so make sure to store it safely.
Daishi Hokuetsu Bank Main Branch (ordinary savings account) No.2696604
Account Holder Name: Niigata Yakka Daigaku Ouyou Seimei Kagakubu

(3) Required Documents

- 1) Application form (University-prescribed format)
- 2) Photo form, examination admission slip, entrance examination fee payment form (University-prescribed format)
- 3) Academic transcript from alma mater university
- 4) Certificate of (expected) graduation from university or certificate of (expected) conferment of a degree by the National Institution for Academic Degrees and Quality Enhancement of Higher Education
- 5) Personal statement (A4 paper in a format of the applicant's choosing)
- 6) Two photos of applicant's face (4 cm x 3 cm in size, taken within three months prior to the application, with the applicant facing forward on a plain background, and without wearing a hat. Write your name on the reverse side of two copies of the same photo, and then affix it in the space provided on the application form and photo form.)
- 7) Certificate of proof of payment of entrance examination fee
- 8) [For applicants selecting an oral examination only] Research progress report (abstract from graduate research and research plan proposal) (around 1,200 characters on a single piece of A4 paper in a format of the applicant's choosing)
- 9) [For foreign applicants only] Copy of your residence card, alien registration card, or passport
- 10) [For Pharmacy Course applicants applying for foreign language (English/technical English) exemptions] Application for exemption from foreign language examination (English/technical English) (University-prescribed format), copy of external English proficiency exam certificates/results (external English proficiency exam certificates/results listed on the "Correspondence table for qualifications/proficiency exams and the CEFR" published by the Ministry of Education, Culture, Sports, Science and Technology in March 2018)

* Applicants will be notified of screening results when the examination admission slip is returned.

- 11) [Only for Pharmacy Course applicants who wish to take subject other than "Foreign Language (English/technical English)" in English] Application form for special consideration for entrance examinations (University-prescribed format)

* If your name at the time of application is different to the name provided on certification documents due to changing your surname, or for some other reason, please provide additional documents proving your identity (certificate of individual items entered in the family register, etc.).

5 Selection Process

Applicants are screened using examinations testing academic ability, interviews and application documents, and successful applicants are selected based on the results.

(1) Examination Date and Time

[1st term] From 9 AM Friday, September 1, 2023

[2nd term] From 9 AM Friday, March 1, 2024

(2) Venue: Niitsu Campus

(3) Exam Contents

<Applied Life Sciences Course>

[1st term]

Time	Exam Subjects
9:00 to 9:45 (45 minutes)	Chemistry or biology (selected at time of application)
10:00 AM to 10:45 AM (45 minutes)	Specialized Studies Answer questions posed by 1st or 2nd choice laboratory
11:00 AM to 12:00 PM (60 minutes)	Foreign language (English)
From 1 PM	Interview

[2nd term] Select from the following two exam formats when applying

Time	Exam Subjects
9:00 to 9:45 (45 minutes)	Chemistry or biology (selected at time of application)
10:00 AM to 10:45 AM (45 minutes)	Specialized Studies Answer questions posed by 1st or 2nd choice laboratory
11:00 AM to 12:00 PM (60 minutes)	Foreign language (technical English) Standard English-Japanese dictionaries only allowed (no electronic dictionaries).
From 1 PM	Interview

Time	Exam Subjects
From 9 AM	Oral exam Please give a presentation on your graduate research and the research plan proposal you plan to pursue after admission in either Japanese or English. Presentation 10 minutes, question and answer 10 minutes. Make sure to use PowerPoint slides.
11:00 AM to 12:00 PM (60 minutes)	Foreign language (technical English) Standard English-Japanese dictionaries only allowed (no electronic dictionaries).
From 1 PM	Interview

<Pharmacy Course>

[1st term]

Time	Exam Subjects
9:30 AM to 10:50 AM (80 minutes)	Specialized Studies Select one question to answer from your 1st or 2nd choice laboratory
11:00 AM to 12:00 PM (60 minutes)	Foreign language (English)
From 12:30 PM	Interview

[2nd term]

Time	Exam Subjects
9:30 AM to 10:50 AM (80 minutes)	Specialized Studies Select one question to answer from your 1st or 2nd choice laboratory
11:00 AM to 12:00 PM (60 minutes)	Foreign language (technical English) Standard English-Japanese dictionaries only allowed (no electronic dictionaries).
From 12:30 PM	Interview

6 Announcement Date of Examination Results

[1st term] Monday, September 11, 2023 at 1 PM

[2nd term] Tuesday, March 12, 2024 at 1 PM

- The examinee number of successful applicants will be posted on the message board in front of the main entrance to the Niitsu Campus.
- A pass notification will be sent to successful applicants at the same time as this announcement.
- The University does not respond to inquiries via phone regarding application results.

7 Enrollment Procedures

Successful applicants must complete the enrollment procedures within the designated enrollment period by transferring the following payment amounts to a University-specified bank account, and submitting the designated enrollment documents to the University in the manner described in the “Enrollment Guidelines” sent with the pass notification.

Applicants will be notified of the designated enrollment documents in the “Enrollment Guidelines” sent with the pass notification.

(1) Enrollment Period

[1st term] Monday, September 11, 2023 to Friday, September 29, 2023

[2nd term] Tuesday, March 12, 2024 to Tuesday, March 19, 2024

(2) Enrollment-related fees: ¥552,430 (enrollment fee ¥200,000, 1st term tuition ¥185,000, facilities fee ¥165,000, service fees ¥2,430)

(3) Withdrawing from enrollment

School fees and service fees, with the exception of the enrollment fee, will be refunded provided that notice of your intention to withdraw from enrollment is provided (**no later than**) Friday, March 29, 2024 at 4 PM. In all other circumstances, only the service fees will be refunded.

To withdraw your enrollment application, please send the Notice of Withdrawal from Enrollment (enclosed with the pass notification) by post (express delivery by registered post).

If it is uncertain whether a Notice of Withdrawal from Enrollment sent by the submission deadline described above has been submitted (received by the University), make sure to contact the Entrance Examination Section, Administration Department by 4 PM on the day of the abovementioned submission deadline at the latest. Such withdrawal applications will only be subject to refunds provided that said contact is made.

8 School Fees and Expenses

(1) School fees

1) Enrollment fee: ¥200,000 (Only required at time of enrollment. Graduates of the University are exempt.)

2) Tuition: ¥370,000 annually (1st term: ¥185,000, 2nd term: ¥185,000)

3) Facilities fee: ¥330,000 annually (1st term: ¥165,000, 2nd term: ¥165,000; graduates of the University 1st term: ¥82,500, 2nd term: ¥82,500)

(2) Service fees ¥2,430 yen (Personal Accident Insurance for Students Pursuing Education and Research and other insurance premiums (two years))

9 Extended Course System

Students wishing to systematically complete the curriculum over a period of time beyond the standard completion period (two years), for work or other reasons, may be permitted to do so, if approved, as extended course students upon submitting a request. Extended course students may extend the length of the course to three years. When doing so, the annual tuition fee will be the total regular two-year tuition fee of ¥740,000 divided by the length of the extended course in years (3). For details, please inquire with the Academic Affairs Office Section 1, Administration Department at the Niitsu Campus.

10 Preliminary Consultation Services for Applicants with Disabilities, etc.

Applicants with an illness or physical disability, or persons wishing to request special considerations for completing the course of study, including for examinations and in the course of practical learning are asked to contact the contact point for “Inquiries on Entrance Examinations and Where to Submit Documents” on page 2 of these Guidelines before submitting their application. While the University may not be able to satisfy every request, please notify the University as far in advance as possible, regardless of whether you decide to submit an application, due to the time required to modify school facilities and for the University to address other concerns based on the content of your inquiry.

11 Other Matters

(1) Submitted documents and paid entrance examination fees will not be returned.

(2) If the documents submitted are found to contain false statements, the applicant's admission approval may be revoked.

Verification and Screening of Applicant Qualifications

Applicants who fall under “2 Applicant Requirements (3) or (4)” must contact the University by phone to have their applicant qualifications verified and screen as described below. Note that applicants cannot submit an application without their applicant qualifications being verified and screened.

1 Documents for Submission

From the documents 1) to 7) below, submit those requested by the University based on your application qualifications.

- 1) Application qualification confirmation form (University-prescribed format)
- 2) Formal application qualification review form (University-prescribed format)
- 3) Graduation certificate from previous school attended
- 4) Academic transcript from previous school attended
- 5) Copy of your residence card, alien registration card, or passport (for foreign applicants only)
- 6) Return envelope (120 mm x 235 mm envelope including your name, address, and post code, and ¥404 in stamps.)
- 7) Any other documents deemed necessary by the University

* If your name at the time of application is different to the name provided on certification documents due to changing your surname, or for some other reason, please provide additional documents proving your identity (certificate of individual items entered in the family register, etc.).

2 Submission Method

The documents for submission are to be submitted directly, or sent by post to the Entrance Examination Section, Administration Department at the Niitsu Campus (9AM to 5PM, except for Saturdays, Sundays, and public holidays) within the following submission period.

When sending by post, use the registered post service (kani-kakitome), and clearly indicate “Graduate school application qualification documents enclosed” on the front of the envelope in red.

3 Submission deadline

[1st term] Friday, June 23, 2023

[2nd term] Friday, December 8, 2023 at the latest in both cases

4 Notification of Verification and Screening Results for Application Qualification

You will be notified of the results of the verification and screening process for your application qualifications by post before the start of the application period.

Applicants recognized as having satisfied the application qualification requirements are asked to complete the application process.

In addition, any documents submitted as part of the application qualification verification and screening process do not need to be resubmitted in duplicate during the application process.

5 Application Mailing Address and Contact Point for Inquiries

Entrance Examination Section, Administration Department, Niitsu Campus, Niigata University of Pharmacy and Medical and Life Sciences

265-1 Higashijima, Akiha-ku, Niigata 956-8603

Phone: +81 250-25-5395 (Available from 9AM to 5PM, except for Saturdays, Sundays, and public holidays)

E-mail: nyuushi@nupals.ac.jp

● List of Research Topics for a Master's Degree at the Graduate School of Applied Life Sciences at the Niigata University of Pharmacy and Medical and Life Sciences (Some details may be subject to change)

<Applied Life Sciences Course>

Research Fields (Name of Research Laboratory)	Supervising Professor		Research Overview
	Job Title/Degree	Name	
Analytical Food Sciences (Analytical Food Sciences)	Professor, Doctor of Pharmacy	Shinji Sato	We are involved in the development and functional assessment of functional foods used in the prevention of metabolic syndrome and other lifestyle diseases.
Functional Food Sciences (Functional Food Sciences)	Professor, Doctor (Agricultural Science)	Hitoshi Matsumoto	We conduct research into the efficacy of the raw materials in functional foods, and functional mechanisms of polyphenol, bifidus bacillus, oligosaccharide, and other functional foods.
Food Chemistry (Food Chemistry)	Associate Professor, Doctor (Science)	Yuri Nomi	We conduct applied research into identifying mechanisms of composition change from processing and storing food, and into resolving food-related social issues.
Food Safety (Food Safety)	Associate Professor, Doctor (Science)	Soichiro Nishiyama	We conduct research into preventing food poisoning. We study infection control and environmental responses to norovirus, botulism, and other food poisoning-related disease pathogens. We promote the adoption and uptake of HACCP in enterprises.
Food and Fermentation Technologies (Food and Fermentation Technologies)	Professor, Doctor (Agricultural Science)	Toru Shigematsu	We study the application of high pressure and microbial functions aimed at establishing environmentally-friendly food processing technologies and environmental conservation technologies that strike a balance between safety and economic feasibility.
Environmental Microbiology (Environmental Microbiology)	Associate Professor, Doctor (Engineering)	Akinori Iguchi	We investigate the functions of important microbial communities found in the natural environment, animal intestines, and waste water treatment processes. We study the effective use of environmental microorganisms that contribute to the realization of a sustainable society.
Applied Microbiology (Applied Microbiology, Genetic Engineering)	Professor, Doctor (Agricultural Science)	Hiroaki Takaku	We conduct research on the production of high performance produce at low cost with a low energy consumption by modifying the function of matter production in microorganisms (smart cells) through the use of information science in the hope of solving issues related to the depletion of resources and global warming.
Molecular Microbiology (Molecular Microbiology)	Associate Professor, Doctor (Agricultural Science)	Harutake Yamazaki	We study life span control mechanisms modeled on yeast. We look at ways to improve fermentation productivity for yeast by extending its life span. We conduct research on anticancer drugs that target the resistance to nutrient starvation in cancer cells.
Animal Cell Engineering (Animal Cell Engineering)	Professor, Doctor (Science)	Shinichi Ichikawa	We conduct research into cell death caused by oxidative stress and other forms of cell stress. We study the physiological function of sphingolipids. We investigate neurological function through genetic modification. We research fatty liver suppressing activity.
Plant Genomics (Plant Cell Engineering)	Associate Professor, Doctor (Agricultural Science)	Jotaro Aii	We investigate the mechanism behind plant reproduction, and the emergence of mutations and useful traits, and conduct research into the development of next-generation plants that use genome data to contribute to the development of healthy crops that are resilient in the face of climate change.
Green Chemistry (Environmental Organic Chemistry)	Professor, Doctor (Engineering) Associate Professor, Doctor (Science)	Yutaka Nakamura Masaru Kojima	We conduct research into the efficient synthesis of natural physiologically active products derived from sugars and other renewable resources.
Biomolecular Chemistry (Biomolecular Chemistry)	Associate Professor, Doctor (Science)	Tatsuo Miyazaki	We conduct research on the design and synthesis of new functional molecules with carbohydrates, steroids, and other biomolecules as the basic structure.
Environmental Engineering (Environmental Engineering)	Professor, Doctor (Engineering) Associate Professor, Doctor (Applied Life Sciences)	Tomohiro Kose Masaki Ohno	We study the development of methods for measuring chemical substances, and their application in the understanding of environmental dynamics. We research the development of cyclical use techniques and new treatment processes for waste materials to contribute to the development of a sustainable society.
Molecular Science (Chemistry)	Professor, Doctor (Science)	Yoshifusa Arai	We conduct research into novel environmentally-friendly solid state reactions that do not rely on organic solvents, and useful materials found in plants and animals.

<Pharmacy Course>

Course	Field	Supervising Professor		Research Overview	
		Job Title/Degree	Name		
Organic Drug Discovery	Organic Pharmaceutical Chemistry	Professor, Doctor of Pharmacy	Takumichi Sugihara	We conduct research into highly efficient molecular transformation reactions. We are involved in the development of novel gas-fixation reactions. We conduct synthetic studies into drugs based on new concepts.	
	Biochemistry	Professor, Doctor (Pharmacy) Associate Professor, Doctor (Pharmacy)	Akihiko Komuro Masahiko Miyamoto	We investigate the molecular mechanisms of action in natural antiviral immunity, and conduct research into the interaction between viruses and host factors.	
	Hygienic chemistry	Professor, Doctor (Pharmacy) Associate Professor, Doctor (Pharmacy), Doctor (Health Sciences) Associate Professor, Doctor (Medicine)	Toshiyuki Sakamaki Eriko Tomitsuka Koji Sato	We conduct basic research into drug development targeting energy metabolism. We study the pharmacokinetics of biological components and medicinal toxicants. We analyze gene functions in relation to the proliferation control of cancer cells.	
Biological Science	Microbiology	Associate Professor, Doctor (Pharmacy) Associate Professor, Doctor (Science)	Masahiro Fukuhara Toshio Yamaguchi	We study bacterial growth in various environmental conditions, and perform a genetic analysis of drug resistant clinical isolates.	
	Analytical pharmaceutical chemistry	Professor, Doctor (Pharmacy)	Kohichi Kawahara	We perform analytical chemical research on ligand-receptor interactions.	
	Physical chemistry in pharmaceutics	Professor, Doctor (Science)	Kennosuke Hoshina	We investigate the mechanisms of novel chemical reactions based on photophysical chemistry and quantum chemical calculations, evaluating the effect of physical stimuli in a broad sense on physical properties of pharmaceuticals and the reactions of a living body, in addition to applied research into analytical methods.	
Medical Science	Pharmaceutics	Professor, Doctor (Pharmacy)	Takahiro Kubota	We conduct exploratory research for mutant genes causing changes in drug sensitivity among individuals, and analyze the impact these genes have on the phenotype.	
	Functional Morphology	Associate Professor, Doctor (Science)	Takeo Iwata	We study the mechanism of pathogenesis in endocrine and metabolic diseases, and related complications.	
	Social Pharmacy	Professor, Doctor (Pharmaceutical Science)	Yoshiko Tominaga	We study the occupational ability of pharmacists and inter-occupational coordination. We investigate ways to encourage behavioral change in patients. We look at lifestyle disease prevention at pharmacies.	
	Pharmacology	Professor, Doctor (Pharmacy)	Takehiko Maeda	We study pharmacometric techniques and targeted molecules in pharmacotherapy.	
	Clinical Pharmacy		Professor, Doctor (Pharmacy) Professor, Doctor (Medicine) Professor, Doctor (Pharmacy) Associate Professor, Doctor (Pharmacy) Associate Professor, Doctor (Pharmacy)	Toshinari Asakura Shigeaki Sakazume Mikio Saito Manabu Abe Junkichi Kanda	We study the proper use of antidiabetic drugs and medical devices. We conduct research into drug use evaluations. We perform clinical analyses of drug hypersensitivity. We perform clinical analyses of drug hypersensitivity.