

Application Guidelines for 2016

INTEGRATED GRADUATE SCHOOL OF
MEDICINE, ENGINEERING, AND AGRICULTURAL SCIENCES

MASTER'S COURSE

(DEPARTMENT OF ENGINEERING)

New education system to be launched in April 2016

(If you are Japanese or can read Japanese, see the Japanese version.)



University of Yamanashi

(<http://www2.yamanashi.ac.jp>)

<<ADMISSIONS POLICY>>

The Principles, Aims, and Admissions Policy of the Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences

[Principles and Aims]

The aims of our education and research programs are as follows: to cultivate superior scholars who can apply their academic studies to solution of the problems faced by today's society, and who, from a global perspective, can creatively improve upon these applied solutions; and to cultivate competent business specialists equipped with high-grade academic knowledge.

[Educational Objectives]

We nurture those who, as professional engineers and researchers, will contribute to society using their expertise, development capability, ability to identify and solve problems, and international communication skills.

[Admissions Policy]

We invite to join our programs students with a basic academic foundation in their field of specialization, who are motivated to seek further knowledge and pursue advanced research and applications, and who have a desire to give back to society.

Department of Engineering

We seek individuals who are motivated to acquire expertise in their major field, clear insight into engineering, and international sense and communication skills, and who intend to use their skills and pioneering spirit to make creative contributions to social and industrial development.

• Mechanical Engineering Course

We receive students who wish to satisfy society's diversifying needs by acquiring the most advanced technological know-how in the automobile, aerospace, medical engineering, power and energy systems fields, in addition to broadening their knowledge and skills in mechanical engineering fields such as machinery physics, production technology engineering, and systems design engineering. We also seek students who want to take an active part in the international community by acquiring communication skills from a global perspective.

• Electrical and Electronic Engineering Course

We seek those who want to develop their ability to solving technical problems and become active forces in the engineering industry by mastering fundamental knowledge and acquiring specialized expertise in electronics, photoelectronic devices, circuit design, power control, communication, and other cutting-edge technologies.

• Computer Science and Engineering Course

Prospective students should aspire to become professionals with a broad perspective of the field of information technology. Students should strive to acquire advanced knowledge and skills in the field, to become adept at analytical thinking, and to improve their capacity to solve engineering problems under constraints.

- Mechatronics Course

We seek applicants who aspire to lead the “Manufacturing industry” (*Monodzukuri* in Japanese) and to solve problems by integrating their skills in problem identification, communication, and knowledge application. Applicants should be motivated to develop all these skills based on hybrid knowledge of mechanical, electrical, and computer technologies, which are offered by our department.

- Civil and Environmental Engineering Course

This program is designed for students who intend to acquire expertise and research skill in civil and environmental engineering, and who want to work toward establishment of new-era infrastructure that supports a safe and sustainable society in harmony with the environment.

- Applied Chemistry Course

We seek individuals who wish to contribute to innovative developments for future society through creative research and studies founded on broad and international perspectives, utilizing high-level knowledge and technological proficiency in basic applied chemistry fields such as organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry, and polymer chemistry.

- Advanced Material Science Course

We seek students who are highly motivated and qualified to create our future world by processing advanced materials and pursuing their complex functions through physical and chemical manipulation of atoms and molecules.

- Special Educational Program for Green Energy Conversion Science and Technology

We seek individuals eager to become international scientists and engineers who can contribute to realization of a low-carbon society, utilizing their knowledge and technologies of green energy conversion and storage, including fuel cells, solar cells, and thermoelectric conversion.

This program has been selected as one of **the Leading Programs in Doctoral Education**, supported by Japan’s Ministry of Education, Culture, Sports, Science and Technology.

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Attached forms (enclosed)

Special Selection for Preferred Applicants

- Attached Form 1: Entrance Application Form, Examination Admission Slip, and Examination Fee Receipt Affixation Sheet
- Attached Form 2: Letter of Recommendation
- Attached Form 3: Statement of Purpose
- Attached Form 4: Research Project Plan

General Selection

- Attached Form 1: Entrance Application Form, Examination Admission Slip, and Examination Fee Receipt Affixation Sheet
- Attached Form 2: Statement of Purpose
- Attached Form 3: Research Project Plan

- Payment Form
- Application Slip and Address Slip
- Return Envelope

<<References>>

Department of Academic Affairs Support
Office of Admissions, University of Yamanashi
4-4-37 Takeda, Kofu
Yamanashi-ken 400-8510 Japan
Tel: 055-220-8046

<<Office hours>>

Between 8:30 and 17:00, weekdays
(Except for public holidays, December 29 through January 3)

1 . Overview

Overview

Number of Students to be Admitted

Application Classification of Courses or Programs	Capacity	Number of Students to be Admitted						
		First Call for Applications			Second Call for Applications			Total Number of Students to be Admitted
		Special Selection for Preferred Applicants	General Selection	Special Selection for Working Members of Society	Special Selection for Preferred Applicants	General Selection	Special Selection for Working Members of Society	
Mechanical Engineering Course	23	18	5	A few		A few	A few	23
Electrical and Electronic Engineering Course	23		23	A few		A few	A few	23
Computer Science and Engineering Course	23	16	7	A few		A few	A few	23
Mechatronics Course	23	15	8	A few		A few	A few	23
Civil and Environmental Engineering Course	25		25	A few		A few	A few	25
Applied Chemistry Course	41	18	8	A few		A few	A few	26 ※
Advanced Material Science Course	23	8	15	A few	A few	A few	A few	23
Special Educational Program for Green Energy Conversion Science and Technology	(15)		15			A few		15 ※
Total	181	67	106					181

※ For the Special Education Program for Green Energy Conversion Science and Technology, a capacity of 15 is transferred from the Applied Chemistry Course.

Examination Dates

[First Call for Applications]

Application Period	September 24 (Thursday) – September 30 (Wednesday), 2015 (Must arrive within the application period)	
Examination of Application Requirements	An examination of application requirements will be conducted in advance for applicants who apply under certain conditions. Refer to note regarding application requirements.	
Examination Date	October 10 (Saturday), 2015	
Announcement of Successful Applicants	October 16 (Friday), 2015	
Entrance Procedures	Enrollment in April 2016	March 9 (Wednesday) — March 15 (Tuesday), 2016

[Second Call for Applications]

Application Period	December 16(Wednesday) – December 22(Tuesday),2015 (Must arrive in the application period)	
Examination of Application Requirements	An examination of application requirements will be conducted in advance for applicants who apply under some conditions. Refer to note regarding application requirements.	
Examination Date	January 9(Saturday),2016	
Announcement of Successful Applicants	January 22(Friday),2016	
Entrance Procedures	Enrollment in April 2016	March 9(Wednesday) – March 15(Tuesday),2016
	Enrollment in October 2016	September 16(Friday), 2016

2. First Call for Applications

Special Selection Application Guideline for Preferred Applicants

The development and growth of science technology are significant these days, and social demand calls for creation of new interdisciplinary research fields transcending the existing academic framework.

From this perspective, in our Master's program (Department of Engineering), we aim to offer distinctive education and research, and, by way of an oral examination and examination of application documents, we encourage special selection of those who actively undertake academic study and research in their specialized field or beyond.

1. Number of Students to be Admitted

Course	Number of students to be admitted
Mechanical Engineering Course	18
Computer Science and Engineering Course	16
Mechatronics Course	15
Applied Chemistry Course	18
Advanced Material Science Course	8
Total	67

2. Application Requirements

Applicants who meet at least one of the following requirements, have obtained commendable results in their university or college, have been recommended by their academic advisor, and can assure entrance after the announcement of successful applicants.

- (1) Persons who have graduated or are expected to graduate from a university or college as designated by Article 83 of the School Education Law of Japan (Law #26, 1947) by March 2016.
- (2) Persons who have been awarded a Bachelor's degree according to Article 104, Paragraph 4 of the School Education Law of Japan, or who are expected to complete an advanced course of junior or technical college by March 2016 and be awarded a Bachelor's degree according to the law by March 2016.
- (3) Persons who have completed a 16-year school education program abroad or are expected to do so by March 2016.
- (4) Persons who have completed a course or are expected to do so by March 2016 at an educational institution abroad (a graduate of which must have completed a 16-year course in the school education system), which is assessed in Japan to have university courses in that education system, and is specifically designated by the Minister of Education.
- (5) Persons who are recognized by the Minister of Education as having academic ability equal to or higher than persons who are graduates of a university or college.
- (6) Persons who have completed specialized courses specifically designated by the Minister of Education at a vocational school, whose minimum period required for graduation is 4 years or longer and which also satisfies other conditions specified by the Minister of Education, on or after the date designated by the Minister of Education, or are expected to do so by March 2016.
- (7) Persons who have spent 3 years or more at a university, or who have completed a 15-year school education program abroad, and who are recognized by our graduate school as having obtained the designated credits with excellent results.

Note:

An examination of application requirements will be conducted in advance for applicants who apply under the conditions of item (7). Please contact the Office of Admissions by September 9 (Wednesday).

3. Application Procedure

(1) Application period: September 24 (Thursday) – September 30 (Wednesday), 2015.

- a. Use the “Special Application Envelope” attached to these guidelines.
- b. Applications by post must be delivered by registered express delivery. They must arrive within the application period.
- c. Applications will be received at the campus every day during the application period from 9:00 am to 4:30 pm.

Examination of application requirements for overseas students

An examination of application requirements will be conducted in advance for foreign applicants (overseas students). Please contact the Office of Admissions about application documents, and send them (without the examination fee) by September 9 (Wednesday).

Applicants who apply under the conditions outlined in item (1) of the application requirements listed above will be exempted from the examination of application requirements (no distinction made between government-financed, government-dispatched, and private students).

In some cases, research students (government-financed, government-dispatched, and private) and applicants who received an examination of application requirements until and including last year are exempted from the examination. Please contact the Office of Admissions in advance.

Applicants will be informed of the results of the examination by September 18 (Friday).

(2) Mailing address: Department of Academic Affairs Support

Office of Admissions, University of Yamanashi

4-4-37 Takeda, Kofu, Yamanashi-ken 400-8510 Japan

Tel: 055-220-8046

4. Application Documents and Necessary Information

Applicants must present the following documents:

Application document	Description
① Examination Fee Receipt Affixation Sheet (Entrance examination fee: ¥30,000)	Please use the [Designated Payment Form] attached to this guideline to make payment <u>at the cashier's window</u> of a financial institution (bank or post office). (Payment cannot be made by ATM.) <u>Please ensure you receive an [Examination Fee Receipt] showing the bank's or post office's stamp of receipt.</u> Please affix the [Examination Fee Receipt] (original) to the [Examination Fee Receipt Affixation Sheet] before submitting your application. International applicants must send fees from an international financial institution; see the [Notes regarding payment of the examination fee].
② Entrance Application Form, Examination Admission Slip	Fill in the required information on the Entrance Application Form, attached form 1 (reverse side also). Affix a front-facing, upper body photograph without a hat to the photograph box. The photograph should be no more than three months old at the time of application. (Original photographs only; copied photographs will not be accepted.)
③ Academic Transcript	Submit a certificate prepared by the President of the university from which you received your degree. *Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.

④ Certificate of (Prospective) Graduation	<p>Submit a certificate prepared by the President of the university from which you received your degree.</p> <p>This is not necessary if you are expected to graduate from our university.</p> <p>If you apply under the conditions specified in item (2) of the application requirements, present a certificate of the awarded degree, a certificate of acceptance of application for an awarded degree presented by the National Institution for Academic Degrees and University Evaluation, or a certificate of expected application for an awarded degree prepared by the President of your school.</p> <p>*Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.</p>
⑤ Letter of Recommendation	<p>Present the sealed Letter of Recommendation (attached form 2) written by your academic advisor at your university.</p> <p>In all courses, if you have graduated or are expected to graduate from our university, your academic advisor's seal, marked on the Entrance Application Form, may substitute for this letter.</p>
⑥ Statement of Purpose	Use attached form 3.
⑦ Research Project Plan	Use attached form 4.
⑧ Application Slip and Address Slip	Fill in the required information on the appropriate forms attached to this guideline.
⑨ Return Envelope	<p>Clearly write the addressee on the application form and affix a ¥362 stamp.</p> <p><u>This is unnecessary for applicants who submit their applications on site.</u></p>
⑩ Resident Record	<p>Applicants holding nationality in a foreign country, and who also register their residency in a municipality of Japan, are required to submit a Resident's card delivered by the local government office where they reside.</p> <p>Those who have not registered their residency in a municipality of Japan must submit a copy of their passport.</p>
⑪ TOEIC/TOEFL Test Score	<p>Submit either of the following documents.</p> <p>If you have not yet obtained those certificates when applying, be sure to bring either of them at the time of the examination.</p> <p>(1) If you have taken the TOEIC test, present a copy of the Official Score Certificate, or a copy of the Score Report of the TOEIC-IP test. The score of the test is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p> <p>(2) Applicants who have taken TOEFL-iBT or TOEFL-PBT can substitute this score for that of the TOEIC test. Present a copy of the Examinee Score Report. This score is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p>
⑫ Other	<p>If you have changed your surname and it appears differently from what is listed on other certificates and documents, please also submit an extract of your family registry.</p>

[Notes regarding payment of the examination fee]

Foreign applications: Sending money from outside of Japan

The applicant must bear all the costs of the remittance fee: (1) the money transfer fee at the remitting bank outside of Japan, and (2) the receiving charge at the receiving bank, Yamanashi Chuo Bank. Make sure JPY30,000 is transferred to the account of the University of Yamanashi. If the remitting bank cannot transfer the money directly to Yamanashi Chuo Bank, remittance fee must also be paid to an intermediary bank.

Amount to be paid by the applicant			
① Money transfer fee [Bank outside of Japan]	Remittance to Japan		
	Entrance examination fee, JPY30,000	② Receiving charge [Yamanashi Chuo Bank]	③ Remittance fee for intermediary bank

[Method of Money Transfer]

Transfer Type: Telegraphic transfer

Payment: Bank transfer

Amount: JPY30,000 + Remittance fees

※Please notify the cashier's window that you (the applicant) will bear all remittance fee costs.

※Transfer fees and remittance fees for intermediary banks vary by institution. Please confirm the required fees with the remitting bank.

[Back Account]

Name of Bank: The Yamanashi Chuo Bank, Ltd., Takedadori Branch

Address of Bank: 11-1 Takeda 2-chome, Kofu, Yamanashi, Japan

Swift Address: YCHBJPJT

Account Classification: Ordinary deposit

Account Number: 630186

Account Holder: NATIONAL UNIVERSITY CORPORATION UNIVERSITY OF YAMANASHI

Address: 4-37 Takeda 4-chome, Kofu, Yamanashi, Japan

※ After sending the money, do not fail to also submit a copy of the remittance application form with the application documents.

※ When sending money from outside of Japan, please complete all the procedures early, because it will take a long time to confirm receipt of the money.

※ If the amount received is smaller than that required, your application will not be accepted. Also, please note that refunds will not be made even if the amount received is too large.

Please be aware of the following when submitting application documents:

- (1) **Sufficient consultation with the academic supervisor of your preference should be carried out prior to applying.**
- (2) After application documents are received, neither the documents nor the examination fees may be returned.
- (3) For inquiries regarding application procedures, contact the Office of Admissions.
- (4) Once the application procedure is completed, no changes to the documents will be permitted.
- (5) Misrepresentation of any information submitted in relation to this application may result in immediate and unconditional rejection of the application.

5. Selection Method

Successful applicants will be chosen based on an overall assessment including the results of their oral examination and the examination of their application documents.

(1) Oral examination

An interview regarding the applicant's presentation, based on the statement of purpose and research project plan.

Prepare transparencies (for a projector) or an MS PowerPoint file for your oral presentation (if you use presentation software, bring your own PC).

Those applying for the Computer Science and Media Engineering Major must prepare an MS PowerPoint file for the oral presentation.

[Oral examination duration]

Course	Presentation	Interview
Mechanical Engineering Course	10 minutes	5 minutes
Computer Science and Engineering Course	10 minutes	5 minutes
Mechatronics Course	10 minutes	15 minutes
Applied Chemistry Course	5 minutes	7 minutes
Advanced Material Science Course	10 minutes	10 minutes

Notes:

- (1) For the Mechanical Engineering Course, the oral examination may be shortened depending on examination of application documents.
- (2) For the Mechatronics and Computer Science and Engineering Courses, applicants may be exempted from the oral examination depending on examination of application documents.

(2) Examination of application documents**[Allocation of Marks]**

Course	Oral Examination	Application Documents	Total
Mechanical Engineering Course	100	Accepted/Rejected	100
Computer Science and Engineering Course	Accepted/Rejected	Accepted/Rejected	
Mechatronics Course	Accepted/Rejected	Accepted/Rejected	
Advanced Material Science Course	200	Accepted/Rejected	200

Course	Oral Examination	Application Documents		Total
Applied Chemistry Course	50	<div>Academic Transcript</div> 50	<div>Foreign Language</div> Accepted/Rejected*	100

*Present a TOEIC or TOEFL transcript at the time of application. The Foreign Language score is judged as Accepted/Rejected.

6. Date, Time, and Location of the Examination**(1) Date and time**

Computer Science and Engineering, Mechatronics, Applied Chemistry, and Advanced Material Science Courses

Date	Type of examination	Time
October 10 (Saturday), 2015	Oral examination	Starting at 9:30 am

Mechanical Engineering Course

Date	Type of examination	Time
October 10 (Saturday), 2015	Oral examination	Starting at 1:30 pm

(2) Location

Gathering spots are as follows. Please arrive **20 minutes prior to the examination**.

Course	Location
Mechanical Engineering Course Computer Science and Engineering Course Mechatronics Course Advanced Material Science Course	Entrance of Building A-2 (Kofu East Campus)
Applied Chemistry Course	Entrance of General Research Building (Kofu West Campus)

General Selection Application Guideline

1. Number of Students to be Admitted

Course or Program	Number of students to be admitted
Mechanical Engineering Course	5
Electrical and Electronic Engineering Course	23
Computer Science and Engineering Course	7
Mechatronics Course	8
Civil and Environmental Engineering Course	25
Applied Chemistry Course	8
Advanced Material Science Course	15
Special Educational Program for Green Energy Conversion Science and Technology (Master's Course) <i>[Leading Program in Doctoral Education]</i> <i>(5-year consistent program)</i>	15
Total	106

2. Application Requirements

Applicants must meet at least one of the following requirements:

- (1) Persons who have graduated or are expected to graduate from a university or college as designated by Article 83 of the School Education Law of Japan (Law #26, 1947) by March 2016.
- (2) Persons who have been awarded a Bachelor's degree according to Article 104, Paragraph 4 of the School Education Law of Japan, or who are expected to complete an advanced course of junior or technical college by March 2016 and be awarded a Bachelor's degree according to the law by March 2016.
- (3) Persons who have completed a 16-year school education program abroad or are expected to do so by March 2016.
- (4) Persons who have taken a correspondence course from an overseas educational institution while in Japan, and completed a 16-year school education program.
- (5) Persons who have completed a course or are expected to do so by March 2016 at an educational institution abroad (a graduate of which must have completed a 16-year course in the school education system), which is assessed in Japan to have university courses in that education system, and is specifically designated by the Minister of Education.
- (6) Persons who are recognized by the Minister of Education as having academic ability equal to or higher than persons who are graduates of a university or college.
- (7) Persons who have completed specialized courses specifically designated by the Minister of Education at a vocational school, whose minimum period required for graduation is 4 years or longer and which also satisfies other conditions specified by the Minister of Education, on or after the date designated by the Minister of Education, or are expected to do so by March 2016.
- (8) Persons who have spent 3 years or more at a university, or who have completed a 15-year school education program abroad, and who are recognized by our graduate school as having obtained the designated credits with excellent results.
- (9) Persons who are recognized by individual examination of entrance requirements by our graduate school as having equal to or higher academic ability than persons who are graduates of a university or college and will be at least 22 years of age at the time of enrollment.

Note:

An examination of application requirements will be conducted in advance for applicants who apply under the conditions of item (8) or (9). Please contact the Office of Admissions by September 9 (Wednesday).

3. Application Procedure

- (1) Application period: September 24 (Thursday) – September 30 (Wednesday), 2015.
- Use the “Special Application Envelope” attached to these guidelines.
 - Applications by post must be delivered by registered express delivery. They must arrive within the application period.
 - Applications will be received at the campus every day during the application period from 9:00 am to 4:30 pm.

Examination of application requirements for overseas students

An examination of application requirements will be conducted in advance for foreign applicants (overseas students). Please contact the Office of Admissions about application documents, and send them (without the examination fee) by September 9 (Wednesday).

Applicants who apply under the conditions outlined in item (1) of the application requirements listed above will be exempted from the examination of application requirements (no distinction made between government-financed, government-dispatched, and private students).

In some cases, research students (government-financed, government-dispatched, and private) and applicants who received an examination of application requirements until and including last year are exempted from the examination. Please contact the Office of Admissions in advance.

Applicants will be informed of the results of the examination by September 18 (Friday).

- (2) Mailing address: Department of Academic Affairs Support

Office of Admissions, University of Yamanashi
4-4-37 Takeda, Kofu, Yamanashi-ken 400-8510 Japan
Tel: 055-220-8046

4. Application Documents and Necessary Information

Applicants must present the following documents:

Application document	Description
① Examination Fee Receipt Affixation Sheet <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 10px; display: inline-block;"> Entrance examination fee: ¥30,000 </div>	Please use the [Designated Payment Form] attached to this guideline to make payment <u>at the cashier's window</u> of a financial institution (bank or post office). (Payment cannot be made by ATM.) Please ensure you receive an [Examination Fee Receipt] showing the bank's or post office's stamp of receipt. Please affix the [Examination Fee Receipt] (original) to the [Examination Fee Receipt Affixation Sheet] before submitting your application. International applicants must send fees from an international financial institution; see the [Notes regarding payment of the examination fee].
② Entrance Application Form, Examination Admission Slip	Fill in the required information on the Entrance Application Form, attached form 1 (reverse side also). Affix a front-facing, upper body photograph without a hat to the photograph box. The photograph should be no more than three months old at the time of application. (Original photographs only; copied photographs will not be accepted.)
③ Academic Transcript	Submit a certificate prepared by the President of the university from which you received your degree. *Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.

④ Certificate of (Prospective) Graduation	<p>Submit a certificate prepared by the President of the university from which you received your degree.</p> <p>This is not necessary if you are expected to graduate from our university.</p> <p>If you apply under the conditions specified in item (2) of the application requirements, present a certificate of the awarded degree, a certificate of acceptance of application for an awarded degree presented by the National Institution for Academic Degrees and University Evaluation, or a certificate of expected application for an awarded degree prepared by the President of your school.</p> <p>*Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.</p>
⑤ Application Slip and Address Slip	Fill in the required information on the appropriate forms attached to this guideline.
⑥ Return Envelope	<p>Clearly write the addressee on the application form and affix a ¥362 stamp.</p> <p><u>This is unnecessary for applicants who submit their applications on site.</u></p>
⑦ Resident Record	<p>Applicants holding nationality in a foreign country, and who also register their residency in a municipality of Japan, are required to submit a Resident's card delivered by the local government office where they reside.</p> <p>Those who have not registered their residency in a municipality of Japan must submit a copy of their passport.</p>
⑧ TOEIC/TOEFL Test Score	<p>Submit either of the following documents.</p> <p>If you have not yet obtained those certificates when applying, be sure to bring either of them at the time of the examination.</p> <p>(1) If you have taken the TOEIC test, present a copy of the Official Score Certificate, or a copy of the Score Report of the TOEIC-IP test. The score of the test is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p> <p>(2) Applicants who have taken TOEFL-iBT or TOEFL-PBT can substitute this score for that of the TOEIC test. Present a copy of the Examinee Score Report. This score is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p>

Applicants must also present the following documents under the following circumstances:

Application Document	Description
⑨ Statement of Purpose	Those who apply for the Courses of Electrical and Electronic Engineering, Computer Science and Engineering, Mechatronics, Civil and Environmental Engineering, Applied Chemistry, Advanced Material Science, and Special Educational Program for Green Energy Conversion Science and Technology must submit a Statement of Purpose, attached form 2.
⑩ Research Project Plan	Those who apply for the Courses of Electrical and Electronic Engineering, Computer Science and Engineering, Mechatronics, Civil and Environmental Engineering, Applied Chemistry, Advanced Material Science, and Special Educational Program for Green Energy Conversion Science and Technology must submit a Research Project Plan, attached form 3.
⑪ Other	If you have changed your surname and it appears differently from what is listed on other certificates and documents, please also submit an extract of your family registry.

[Notes regarding payment of the examination fee]

Foreign applications: Sending money from outside of Japan

The applicant must bear all the costs of the remittance fee: (1) the money transfer fee at the remitting bank outside of Japan, and (2) the receiving charge at the receiving bank, Yamanashi Chuo Bank. Make sure JPY30,000 is transferred to the account of the University of Yamanashi. If the remitting bank cannot transfer the money directly to Yamanashi Chuo Bank, remittance fee must also be paid to an intermediary bank.

Amount to be paid by the applicant			
① Money transfer fee [Bank outside of Japan]	Remittance to Japan		
	Entrance examination fee, JPY30,000	② Receiving charge [Yamanashi Chuo Bank]	③ Remittance fee for intermediary bank

[Method of Money Transfer]

Transfer Type: Telegraphic transfer

Payment: Bank transfer

Amount: JPY30,000 + Remittance fees

※Please notify the cashier's window that you (the applicant) will bear all remittance fee costs.

※Transfer fees and remittance fees for intermediary banks vary by institution. Please confirm the required fees with the remitting bank.

[Back Account]

Name of Bank: The Yamanashi Chuo Bank, Ltd., Takedadori Branch

Address of Bank: 11-1 Takeda 2-chome, Kofu, Yamanashi, Japan

Swift Address: YCHBJPJT

Account Classification: Ordinary deposit

Account Number: 630186

Account Holder: NATIONAL UNIVERSITY CORPORATION UNIVERSITY OF YAMANASHI

Address: 4-37 Takeda 4-chome, Kofu, Yamanashi, Japan

※ After sending the money, do not fail to also submit a copy of the remittance application form with the application documents.

※ When sending money from outside of Japan, please complete all the procedures early, because it will take a long time to confirm receipt of the money.

※ If the amount received is smaller than that required, your application will not be accepted. Also, please note that refunds will not be made even if the amount received is too large.

Please be aware of the following when submitting application documents:

- (1) **Sufficient consultation with the academic supervisor of your preference should be carried out prior to applying.**
- (2) After application documents are received, neither the documents nor the examination fees may be returned.
- (3) For inquiries regarding application procedures, contact the Office of Admissions.
- (4) Once the application procedure is completed, no changes to the documents will be permitted.
- (5) Misrepresentation of any information submitted in relation to this application may result in immediate and unconditional rejection of the application.

5. Selection Method

- (1) After the application documents are received, no changes to the desired course or program or to the selection of subjects will be permitted.
- (2) Calculators are available during the written examinations for fundamental and specialized subjects.
- (3) Dictionaries or reference books are not permitted.
- (4) For information on allocation of marks, refer to page 22.

[Mechanical Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of written examinations, an oral examination, and examination of their undergraduate or equivalent university academic transcript.

- (1) Written examination (mathematics)

Linear Algebra, Calculus, Differential Equations.

- (2) Written examination (foreign language)

English in the field of mechanical engineering.

For foreign applicants (overseas students), Japanese or English will appear on the test.

- (3) Oral examination (10 minutes)

Interview regarding mechanical engineering, etc.

- (4) Examination of application documents

[Electrical and Electronic Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

- (1) Oral examination (presentation: 10 minutes; interview: 10 minutes)

10-minute presentation regarding the applicant's reason for applying and research project plan.

Interview regarding the presentation, and some relevant basic academic skills and specialized knowledge.

Applicants should prepare an MS PowerPoint file for the oral presentation and bring their own PC.

- (2) Examination of application documents

[Computer Science and Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of a written examination, an oral examination, and examination of their application documents. Applicants may be exempted from the oral examination, depending on examination of their application documents (exemption will be announced in advance).

- (1) Written examination (specialized subjects)

Compulsory subjects: Algorithms and Data Structures, Programming.

Elective subjects: Choose three from Discrete Mathematics, Computer Architecture and Operating Systems, Databases, Computer Networks, Software Engineering.

- (2) Oral examination (presentation: 10 minutes; interview: 15 minutes)

Interview regarding the application's presentation on their statement of purpose and research project plan, which should be described logically from an engineering viewpoint.

Applicants should prepare an MS PowerPoint file for their oral presentation and bring their own PC.

- (3) Examination of application documents

[Mechatronics Course]

Successful applicants will be chosen based on the total assessment of the results of a written examination, an oral examination, and the examination of their application documents. The applicants may be shortened from the oral examination, depending on the examination of application documents.

(1) Written examination (mathematics)

Linear Algebra, Calculus, Differential Equations.

(2) Written examination (specialized subjects)

Choose one from the following: Mechanics of Materials/Mechanical Dynamics, Programming, Digital Circuits, and Control Engineering.

(3) Oral examination (interview: 15 minutes)

Interview regarding the applicant's purpose and research plans, and some related matters.

(4) An examination of application documents

[Civil and Environmental Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

(1) Oral examination (presentation: 10 minutes; interview: 10 minutes)

Presentation on the applicant's statement of purpose and research project plan.

Interview regarding the presentation and specialized knowledge.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation. If using presentation software, the applicant should also bring a PC.

(2) Examination of application documents

[Applied Chemistry Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

(1) Oral examination (presentation: 5 minutes; interview: 10 minutes)

Presentation on the applicant's statement of purpose and research project plan.

Interview regarding the presentation and specialized knowledge.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation. If using presentation software, the applicant should also bring a PC.

(2) Examination of application documents

[Advanced Material Science Course]

Successful applicants will be chosen based on an overall assessment of the results of a written examination, an oral examination, and examination of their application documents. Applicants may be exempted from the oral examination depending on examination of their application documents.

(1) Written examination (mathematics)

Linear algebra, Differential & Integral Calculus, and related issues.

(2) Oral examination (presentation: 10 minutes; interview: 15 minutes)

Oral presentation on future research, and the physical and chemical knowledge needed to carry out research during the master's course.

(3) Examination of application documents

[Special Educational Program for Green Energy Conversion Science and Technology]

Successful applicants will be chosen based on an overall assessment of the results of written examinations (fundamental and specialized subjects and foreign language), an oral examination (interview regarding the research project plan, conducted in either English or Japanese), and examination of their undergraduate or equivalent university academic transcript.

(1) Written examination (fundamental and specialized subjects)

Choose one from subject groups I – III (indicate choice when applying).

Subject group I: Chemistry A, Chemistry B

Subject group II: Physics, Materials Science for Mechanics

Subject group III: Physics, Electromagnetics/Electronic Properties

Bring a scientific calculator.

Contents of examination:

1. Chemistry A: Thermodynamics, Phase Equilibria, Chemical Kinetics, Electronic Structure of Atoms and Molecules, etc.
2. Chemistry B: Spectroscopy and Diffraction, Crystal Structure, Electronic Structure and Properties of Inorganic Materials, etc.
3. Physics: Force and Motion (including Basic Differential Equations)
4. Materials Science for Mechanics: Crystal Structure and Defects, Phase Diagrams and Structure, Deformation and Processing of Materials, etc.
5. Electromagnetics/Electronic Properties: Static Electric and Magnetic Fields, Electromagnetic Induction, Energy Bands, Motion of Carriers, etc.

(2) Written examination (foreign language)

English in the specialized field.

For foreign applicants (overseas students), Japanese or English will appear on the test.

(3) Oral examination (presentation: 10 minutes; interview: 10 minutes)

Presentation based on the applicant's statement of purpose and research project plan.

Interview regarding the presentation.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation regarding the research project plan. If using presentation software, the applicant should bring a PC or electronic data file.

(4) Examination of application documents

[Allocation of Marks]

Course or Program	Written Examination		Oral Examination	Application Documents	Total
Mechanical Engineering Course	Mathematics 100	Foreign Language 100	Accepted/Rejected	Academic Transcript Accepted/Rejected	200
Mechatronics Course	Mathematics 100	Specialized Subjects 100	Accepted/Rejected	Academic Transcript Accepted/Rejected	200
Advanced Material Science Course	Mathematics 100		100	Academic Transcript Accepted/Rejected	200
Special Educational Program for Green Energy Conversion Science and Technology	Fundamental and Specialized Subjects 200	Foreign Language 100	100	Academic Transcript Accepted/Rejected	400

Course or Program	Oral Examination	Application Documents	Total
Electrical and Electronic Engineering Course	15	Accepted/Rejected	15
Civil and Environmental Engineering Course	60	40	100
Applied Chemistry Course	100	Accepted/Rejected	100

Course	Written Examination Specialized Subjects		Oral Examination	Application Documents		Total
Computer Science and Engineering Course	Compulsory Subjects 140	Elective Subjects 210	Accepted/Rejected	Academic Transcript Accepted/Rejected	Foreign Language 100*	450

*Present a TOEIC or TOEFL transcript at the time of application. The foreign language score is calculated based on the transcript using a major-approved method.

6. Date, Time, and Location of the Examination

(1) Date and time

Mechanical Engineering Course

Date	9:30 to 11:00 am	1:30 to 3:30pm
October 10 (Saturday), 2015	Written examination (mathematics and foreign language)	Oral examination

Electrical and Electronic Engineering Course

Date	Starting at 9:30 am
October 10 (Saturday), 2015	Oral examination

Computer Science and Engineering Course

Date	9:30 am to 12:00 pm	Starting at 1:30 pm
October 10 (Saturday), 2015	Written examination (specialized subjects)	Oral examination

Mechatronics Course

Date	9:30 to 11:30 am	Starting at 1:30 pm
October 10 (Saturday), 2015	Written examination (mathematics and specialized subjects)	Oral examination

Civil and Environmental Engineering Course

Date	Starting at 9:30 am
October 10 (Saturday), 2015	Oral examination

Applied Chemistry Course

Date	Starting at 9:30 am
October 10 (Saturday), 2015	Oral examination

Advanced Material Science Course

Date	9:30 to 11:30 am	Starting at 1:30 pm
October 10 (Saturday), 2015	Written examination (mathematics)	Oral examination

Special Educational Program for Green Energy Conversion Science and Technology

Date	9:30 to 11:30 am	11:40 am to 12:30 pm	Starting at 1:30 pm
October 10 (Saturday), 2015	Written examination (fundamental and specialized subjects)	Written examination (foreign language)	Oral examination

(2) Examination location

Gathering spots are as follows (details indicated separately by major or program). Please arrive **20 minutes prior to the examination**.

Course or Program	Location
Mechanical Engineering Course	Room A2-11, first floor of Building A-2 (Kofu East Campus)
Electrical and Electronic Engineering Course Civil and Environmental Engineering Course	Meeting rooms of each major *Come to the entrance of Building A-2 in Kofu East Campus
Computer Science and Engineering Course	Room A2-12, first floor of Building A-2 (Kofu East Campus)
Mechatronics Course	Room T1-11, first floor of Building T-1 (Kofu East Campus)
Applied Chemistry Course	General Research Building (Kofu West Campus) *Come to the entrance of the General Research Building
Advanced Material Science Course	Room T1-12, first floor of Building T-1 (Kofu East Campus)
Special Educational Program for Green Energy Conversion Science and Technology	Room B2-11, Building B-2 (Kofu-East Campus)

7. Other

Previous years' examination questions are published on our website's home page (<http://www.yamanashi.ac.jp>).

General Information

1. Announcement of Successful Applicants

Announcement of successful applicants will be made on the bulletin board at the front entrance of Building A-2 around 5:00 pm on October 16 (Friday), 2015. A letter of acceptance will also be sent to the successful applicants. **Information regarding results will not be given out over the telephone.**

The examinee numbers of successful applicants will additionally be published on our website's home page (<http://www2.yamanashi.ac.jp>).

2. Entrance Procedures

(1) Scheduled enrollment period: March 9 (Wednesday) — March 15 (Tuesday), 2016

Notes:

If you fail to complete entrance procedures by the designated date, you will be assumed to have decided against entering our university, and your enrollment will be cancelled.

Your examination admission slip must be presented at the time of entrance procedures. Please keep your examination admission slip after the examination.

(2) Payment for enrollment

The enrollment fee is ¥282,000 (tentative).

- ① When transferring your entrance fee to the bank account, documentation verifying the identity of the person making the payment (for example, a sponsor making the payment as proxy for the person named) must be presented to the bank clerk.
- ② The enrollment fee stated above may be revised at the time of enrollment. Received enrollment fees will not be returned under any circumstances.

(3) Applicants will be notified separately of the documents necessary for entrance procedures.

3. Tuition

Tuition for the First Semester period (students enrolling in April 2016) is ¥267,900 (annual total: ¥535,800).

- Tuition fees listed are tentative. If revisions to this fee are made at the time of enrollment or during classes, the new fee will be applicable after it is set.
- Tuition is typically withdrawn automatically from the student's account. Information will be made available later with regard to procedures.

4. Other Expenditures

Student Research Accident Insurance expenditures are required.

5. Extended Credit System

The Division of Engineering master's program offers an extended credit system.

This system enables students whose hours of study are restricted by employment to obtain credits for a planned educational program over a fixed period (maximum of 4 years), exceeding the standard training year limit (2 years) to complete the program. Because the units required for credit are the same as those required by the 2-year program, the yearly course load required is dramatically reduced.

For details on this system, contact the Office for the Faculty of Engineering Education Group (Graduate School): Tel: 055-220-8730.

Due dates for application to this system are last day of February.

6. Other

Applicants wishing to obtain a scholarship should contact the Academic Affairs Support Department, Office of Student Support (Tel: 055-220-8053), for information after announcement of successful applicants.

3 . Second Call for Applications

Special Selection Application Guideline for Preferred Applicants

The development and growth of science technology are significant these days, and social demand calls for creation of new interdisciplinary research fields transcending the existing academic framework.

From this perspective, in our Master's program (Department of Engineering), we aim to offer distinctive education and research, and, by way of an oral examination and examination of application documents, we encourage special selection of those who actively undertake academic study and research in their specialized field or beyond.

1. Number of Students to be Admitted

Course	Number of students to be admitted
Advanced Material Science Course	A few

2. Application Requirements

Applicants who meet at least one of the following requirements, have obtained commendable results in their university or college, have been recommended by their academic advisor, and can assure entrance after the announcement of successful applicants.

- (1) Persons who have graduated or are expected to graduate from a university or college as designated by Article 83 of the School Education Law of Japan (Law #26, 1947) by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (2) Persons who have been awarded a Bachelor's degree according to Article 104, Paragraph 4 of the School Education Law of Japan, or who are expected to complete an advanced course of junior or technical college by March 2016 (or September 2016 for persons desiring enrollment in October 2016) and be awarded a Bachelor's degree according to the law by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (3) Persons who have completed a 16-year school education program abroad or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (4) Persons who have completed a course or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016) at an educational institution abroad (a graduate of which must have completed a 16-year course in the school education system), which is assessed in Japan to have university courses in that education system, and is specifically designated by the Minister of Education.
- (5) Persons who are recognized by the Minister of Education as having academic ability equal to or higher than persons who are graduates of a university or college.
- (6) Persons who have completed specialized courses specifically designated by the Minister of Education at a vocational school, whose minimum period required for graduation is 4 years or longer and which also satisfies other conditions specified by the Minister of Education, on or after the date designated by the Minister of Education, or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (7) Persons who have spent 3 years or more at a university, or who have completed a 15-year school education program abroad, and who are recognized by our graduate school as having obtained the designated credits with excellent results.

Note:

An examination of application requirements will be conducted in advance for applicants who apply under the conditions of item (7). Please contact the Office of Admissions by December 2(Wednesday).

3. Application Procedure

- (1) Application period: December 16(Wednesday) – December 22(Tuesday), 2015 .
- Use the “Special Application Envelope” attached to these guidelines.
 - Applications by post must be delivered by registered express delivery. They must arrive within the application period.
 - Applications will be received at the campus every day during the application period from 9:00 am to 4:30 pm.

Examination of application requirements for overseas students

An examination of application requirements will be conducted in advance for foreign applicants (overseas students). Please contact the Office of Admissions about application documents, and send them (without the examination fee) by December 4(Friday).

Applicants who apply under the conditions outlined in item (1) of the application requirements listed above will be exempted from the examination of application requirements (no distinction made between government-financed, government-dispatched, and private students).

In some cases, research students (government-financed, government-dispatched, and private) and applicants who received an examination of application requirements until and including last year are exempted from the examination. Please contact the Office of Admissions in advance.

Applicants will be informed of results of the examination by December 11(Friday).

- (2) Mailing address: Department of Academic Affairs Support

Office of Admissions, University of Yamanashi
4-4-37 Takeda, Kofu, Yamanashi-ken 400-8510 Japan
Tel: 055-220-8046

4. Application Documents and Necessary Information

Applicants must present the following documents:

Application document	Description
① Examination Fee Receipt Affixation Sheet (Entrance examination fee: ¥30,000)	Please use the [Designated Payment Form] attached to this guideline to make payment <u>at the cashier's window</u> of a financial institution (bank or post office). (Payment cannot be made by ATM.) <u>Please ensure you receive an [Examination Fee Receipt] showing the bank's or post office's stamp of receipt.</u> Please affix the [Examination Fee Receipt] (original) to the [Examination Fee Receipt Affixation Sheet] before submitting your application. International applicants must send fees from an international financial institution; see the [Notes regarding payment of the examination fee].
② Entrance Application Form, Examination Admission Slip	Fill in the required information on the Entrance Application Form, attached form 1 (reverse side also). Affix a front-facing, upper body photograph without a hat to the photograph box. The photograph should be no more than three months old at the time of application. (Original photographs only; copied photographs will not be accepted.)
③ Academic Transcript	Submit a certificate prepared by the President of the university from which you received your degree. *Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.

④ Certificate of (Prospective) Graduation	<p>Submit a certificate prepared by the President of the university from which you received your degree.</p> <p>This is not necessary if you are expected to graduate from our university.</p> <p>If you apply under the conditions specified in item (2) of the application requirements, present a certificate of the awarded degree, a certificate of acceptance of application for an awarded degree presented by the National Institution for Academic Degrees and University Evaluation, or a certificate of expected application for an awarded degree prepared by the President of your school.</p> <p>*Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.</p>
⑤ Letter of Recommendation	<p>Present the sealed Letter of Recommendation (attached form 2) written by your academic advisor at your university.</p> <p>In all courses, if you have graduated or are expected to graduate from our university, your academic advisor's seal, marked on the Entrance Application Form, may substitute for this letter.</p>
⑥ Statement of Purpose	Use attached form 3.
⑦ Research Project Plan	Use attached form 4.
⑧ Application Slip and Address Slip	Fill in the required information on the appropriate forms attached to this guideline.
⑨ Return Envelope	<p>Clearly write the addressee on the application form and affix a ¥362 stamp.</p> <p><u>This is unnecessary for applicants who submit their applications on site.</u></p>
⑩ Resident Record	<p>Applicants holding nationality in a foreign country, and who also register their residency in a municipality of Japan, are required to submit a Resident's card delivered by the local government office where they reside.</p> <p>Those who have not registered their residency in a municipality of Japan must submit a copy of their passport.</p>
⑪ TOEIC/TOEFL Test Score	<p>Submit either of the following documents.</p> <p>If you have not yet obtained those certificates when applying, be sure to bring either of them at the time of the examination.</p> <p>(1) If you have taken the TOEIC test, present a copy of the Official Score Certificate, or a copy of the Score Report of the TOEIC-IP test. The score of the test is acceptable only if the test was taken after July 2012. Bring the original at the time of the examination.</p> <p>(2) Applicants who have taken TOEFL-iBT or TOEFL-PBT can substitute this score for that of the TOEIC test. Present a copy of the Examinee Score Report. This score is acceptable only if the test was taken after July 2012. Bring the original at the time of the examination.</p>
⑫ Other	If you have changed your surname and it appears differently from what is listed on other certificates and documents, please also submit an extract of your family registry.

[Notes regarding payment of the examination fee]

Foreign applications: Sending money from outside of Japan

The applicant must bear all the costs of the remittance fee: (1) the money transfer fee at the remitting bank outside of Japan, and (2) the receiving charge at the receiving bank, Yamanashi Chuo Bank. Make sure JPY30,000 is transferred to the account of the University of Yamanashi. If the remitting bank cannot transfer the money directly to Yamanashi Chuo Bank, remittance fee must also be paid to an intermediary bank.

Amount to be paid by the applicant			
① Money transfer fee [Bank outside of Japan]	Remittance to Japan		
	Entrance examination fee, JPY30,000	② Receiving charge [Yamanashi Chuo Bank]	③ Remittance fee for intermediary bank

[Method of Money Transfer]

Transfer Type: Telegraphic transfer

Payment: Bank transfer

Amount: JPY30,000 + Remittance fees

※Please notify the cashier's window that you (the applicant) will bear all remittance fee costs.

※Transfer fees and remittance fees for intermediary banks vary by institution. Please confirm the required fees with the remitting bank.

[Back Account]

Name of Bank: The Yamanashi Chuo Bank, Ltd., Takedadori Branch

Address of Bank: 11-1 Takeda 2-chome, Kofu, Yamanashi, Japan

Swift Address: YCHBJPJT

Account Classification: Ordinary deposit

Account Number: 630186

Account Holder: NATIONAL UNIVERSITY CORPORATION UNIVERSITY OF YAMANASHI

Address: 4-37 Takeda 4-chome, Kofu, Yamanashi, Japan

※ After sending the money, do not fail to also submit a copy of the remittance application form with the application documents.

※ When sending money from outside of Japan, please complete all the procedures early, because it will take a long time to confirm receipt of the money.

※ If the amount received is smaller than that required, your application will not be accepted. Also, please note that refunds will not be made even if the amount received is too large.

Please be aware of the following when submitting application documents:

- (1) **Sufficient consultation with the academic supervisor of your preference should be carried out prior to applying.**
- (2) After application documents are received, neither the documents nor the examination fees may be returned.
- (3) For inquiries regarding application procedures, contact the Office of Admissions.
- (4) Once the application procedure is completed, no changes to the documents will be permitted.
- (5) Misrepresentation of any information submitted in relation to this application may result in immediate and unconditional rejection of the application.

5. Selection Method

Successful applicants will be chosen based on an overall assessment including the results of their oral examination and the examination of their application documents.

(1) Oral examination

An interview regarding the applicant's presentation, based on the statement of purpose and research project plan.

Prepare transparencies (for a projector) or an MS PowerPoint file for your oral presentation (if you use presentation software, bring your own PC).

[Oral examination duration]

Course	Presentation	Interview
Advanced Material Science Course	10 minutes	10 minutes

(2) Examination of application documents

[Allocation of Marks]

Course	Oral Examination	Application Documents	Total
Advanced Material Science Course	200	Accepted/Rejected	200

6. Date, Time, and Location of the Examination

(1) Date and time

Advanced Material Science Course

Date	Type of examination	Time
January 9(Saturday),2016	Oral examination	Starting at 9:30 am

(2) Location

Course meeting rooms

Come to the entrance of Building A-2 in Kofu East Campus **20 minutes prior to the examination.**

General Selection Application Guideline

1. Number of Students to be Admitted

Course or Program	Number of students to be admitted
Mechanical Engineering Course	A few
Electrical and Electronic Engineering Course	A few
Computer Science and Engineering Course	A few
Mechatronics Course	A few
Civil and Environmental Engineering Course	A few
Applied Chemistry Course	A few
Advanced Material Science Course	A few
Special Educational Program for Green Energy Conversion Science and Technology (Master's Course) [Leading Program in Doctoral Education] (5-year consistent program)	A few

2. Application Requirements

Applicants must meet at least one of the following requirements:

- (1) Persons who have graduated or are expected to graduate from a university or college as designated by Article 83 of the School Education Law of Japan (Law #26, 1947) by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (2) Persons who have been awarded a Bachelor's degree according to Article 104, Paragraph 4 of the School Education Law of Japan, or who are expected to complete an advanced course of junior or technical college by March 2016 (or September 2016 for persons desiring enrollment in October 2016) and be awarded a Bachelor's degree according to the law by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (3) Persons who have completed a 16-year school education program abroad or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (4) Persons who have taken a correspondence course from an overseas educational institution while in Japan, and completed a 16-year school education program.
- (5) Persons who have completed a course or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016) at an educational institution abroad (a graduate of which must have completed a 16-year course in the school education system), which is assessed in Japan to have university courses in that education system, and is specifically designated by the Minister of Education.
- (6) Persons who are recognized by the Minister of Education as having academic ability equal to or higher than persons who are graduates of a university or college.
- (7) Persons who have completed specialized courses specifically designated by the Minister of Education at a vocational school, whose minimum period required for graduation is 4 years or longer and which also satisfies other conditions specified by the Minister of Education, on or after the date designated by the Minister of Education, or are expected to do so by March 2016 (or September 2016 for persons desiring enrollment in October 2016).
- (8) Persons who have spent 3 years or more at a university, or who have completed a 15-year school education program abroad, and who are recognized by our graduate school as having obtained the designated credits with excellent results.
- (9) Persons who are recognized by individual examination of entrance requirements by our graduate school as having equal to or higher academic ability than persons who are graduates of a university or college and will be at least 22 years of age at the time of enrollment.

Note:

An examination of application requirements will be conducted in advance for applicants who apply under the conditions of item (8) or (9). Please contact the Office of Admissions by December 2 (Wednesday).

3. Application Procedure

- (1) Application period: December 16(Wednesday) – December 22(Tuesday), 2015 .
- Use the “Special Application Envelope” attached to these guidelines.
 - Applications by post must be delivered by registered express delivery. They must arrive within the application period.
 - Applications will be received at the campus every day during the application period from 9:00 am to 4:30 pm.

Examination of application requirements for overseas students

An examination of application requirements will be conducted in advance for foreign applicants (overseas students). Please contact the Office of Admissions about application documents, and send them (without the examination fee) by December 4(Friday).

Applicants who apply under the conditions outlined in item (1) of the application requirements listed above will be exempted from the examination of application requirements (no distinction made between government-financed, government-dispatched, and private students).

In some cases, research students (government-financed, government-dispatched, and private) and applicants who received an examination of application requirements until and including last year are exempted from the examination. Please contact the Office of Admissions in advance.

Applicants will be informed of results of the examination by December 11(Friday).

- (2) Mailing address: Department of Academic Affairs Support

Office of Admissions, University of Yamanashi
4-4-37 Takeda, Kofu, Yamanashi-ken 400-8510 Japan
Tel: 055-220-8046

4. Application Documents and Necessary Information

Applicants must present the following documents:

Application document	Description
① Examination Fee Receipt Affixation Sheet (Entrance examination fee: ¥30,000)	Please use the [Designated Payment Form] attached to this guideline to make payment <u>at the cashier's window</u> of a financial institution (bank or post office). (Payment cannot be made by ATM.) <u>Please ensure you receive an [Examination Fee Receipt] showing the bank's or post office's stamp of receipt.</u> Please affix the [Examination Fee Receipt] (original) to the [Examination Fee Receipt Affixation Sheet] before submitting your application. International applicants must send fees from an international financial institution; see the [Notes regarding payment of the examination fee].
② Entrance Application Form, Examination Admission Slip	Fill in the required information on the Entrance Application Form, attached form 1 (reverse side also). Affix a front-facing, upper body photograph without a hat to the photograph box. The photograph should be no more than three months old at the time of application. (Original photographs only; copied photographs will not be accepted.)
③ Academic Transcript	Submit a certificate prepared by the President of the university from which you received your degree. *Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.

④ Certificate of (Prospective) Graduation	<p>Submit a certificate prepared by the President of the university from which you received your degree.</p> <p>This is not necessary if you are expected to graduate from our university.</p> <p>If you apply under the conditions specified in item (2) of the application requirements, present a certificate of the awarded degree, a certificate of acceptance of application for an awarded degree presented by the National Institution for Academic Degrees and University Evaluation, or a certificate of expected application for an awarded degree prepared by the President of your school.</p> <p>*Certificates and other documents written in a foreign language other than English must be accompanied by documents translated into Japanese.</p>
⑤ Application Slip and Address Slip	Fill in the required information on the appropriate forms attached to this guideline.
⑥ Return Envelope	<p>Clearly write the addressee on the application form and affix a ¥362 stamp.</p> <p><u>This is unnecessary for applicants who submit their applications on site.</u></p>
⑦ Resident Record	<p>Applicants holding nationality in a foreign country, and who also register their residency in a municipality of Japan, are required to submit a Resident's card delivered by the local government office where they reside.</p> <p>Those who have not registered their residency in a municipality of Japan must submit a copy of their passport.</p>
⑧ TOEIC/TOEFL Test Score	<p>Submit either of the following documents.</p> <p>If you have not yet obtained those certificates when applying, be sure to bring either of them at the time of the examination.</p> <p>(1) If you have taken the TOEIC test, present a copy of the Official Score Certificate, or a copy of the Score Report of the TOEIC-IP test. The score of the test is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p> <p>(2) Applicants who have taken TOEFL-iBT or TOEFL-PBT can substitute this score for that of the TOEIC test. Present a copy of the Examinee Score Report. This score is acceptable only if the test was taken after July 2012.</p> <p>Bring the original at the time of the examination.</p>

Applicants must also present the following documents under the following circumstances:

Application Document	Description
⑨ Statement of Purpose	Those who apply for the Courses of Electrical and Electronic Engineering, Computer Science and Engineering, Mechatronics, Civil and Environmental Engineering, Applied Chemistry, Advanced Material Science, and Special Educational Program for Green Energy Conversion Science and Technology must submit a Statement of Purpose, attached form 2.
⑩ Research Project Plan	Those who apply for the Courses of Electrical and Electronic Engineering, Computer Science and Engineering, Mechatronics, Civil and Environmental Engineering, Applied Chemistry, Advanced Material Science, and Special Educational Program for Green Energy Conversion Science and Technology must submit a Research Project Plan, attached form 3.
⑪ Other	If you have changed your surname and it appears differently from what is listed on other certificates and documents, please also submit an extract of your family registry.

[Notes regarding payment of the examination fee]

Foreign applications: Sending money from outside of Japan

The applicant must bear all the costs of the remittance fee: (1) the money transfer fee at the remitting bank outside of Japan, and (2) the receiving charge at the receiving bank, Yamanashi Chuo Bank. Make sure JPY30,000 is transferred to the account of the University of Yamanashi. If the remitting bank cannot transfer the money directly to Yamanashi Chuo Bank, remittance fee must also be paid to an intermediary bank.

Amount to be paid by the applicant			
① Money transfer fee [Bank outside of Japan]	Remittance to Japan		
	Entrance examination fee, JPY30,000	② Receiving charge [Yamanashi Chuo Bank]	③ Remittance fee for intermediary bank

[Method of Money Transfer]

Transfer Type: Telegraphic transfer

Payment: Bank transfer

Amount: JPY30,000 + Remittance fees

※Please notify the cashier's window that you (the applicant) will bear all remittance fee costs.

※Transfer fees and remittance fees for intermediary banks vary by institution. Please confirm the required fees with the remitting bank.

[Back Account]

Name of Bank: The Yamanashi Chuo Bank, Ltd., Takedadori Branch

Address of Bank: 11-1 Takeda 2-chome, Kofu, Yamanashi, Japan

Swift Address: YCHBJPJT

Account Classification: Ordinary deposit

Account Number: 630186

Account Holder: NATIONAL UNIVERSITY CORPORATION UNIVERSITY OF YAMANASHI

Address: 4-37 Takeda 4-chome, Kofu, Yamanashi, Japan

※ After sending the money, do not fail to also submit a copy of the remittance application form with the application documents.

※ When sending money from outside of Japan, please complete all the procedures early, because it will take a long time to confirm receipt of the money.

※ If the amount received is smaller than that required, your application will not be accepted. Also, please note that refunds will not be made even if the amount received is too large.

Please be aware of the following when submitting application documents:

- (1) **Sufficient consultation with the academic supervisor of your preference should be carried out prior to applying.**
- (2) After application documents are received, neither the documents nor the examination fees may be returned.
- (3) For inquiries regarding application procedures, contact the Office of Admissions.
- (4) Once the application procedure is completed, no changes to the documents will be permitted.
- (5) Misrepresentation of any information submitted in relation to this application may result in immediate and unconditional rejection of the application.

5. Selection Method

- (1) After the application documents are received, no changes to the desired course or program or to the selection of subjects will be permitted.
- (2) Calculators are available during the written examinations for fundamental and specialized subjects.
- (3) Dictionaries or reference books are not permitted.
- (4) For information on allocation of marks, refer to page 37-38.

[Mechanical Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of written examinations, an oral examination, and examination of their undergraduate or equivalent university academic transcript.

- (1) Written examination (mathematics)

Linear Algebra, Calculus, Differential Equations.

(2) Written examination (foreign language)

English in the field of mechanical engineering.

For foreign applicants (overseas students), Japanese or English will appear on the test.

(3) Oral examination (10 minutes)

Interview regarding mechanical engineering, etc.

(4) Examination of application documents

[Electrical and Electronic Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

(1) Oral examination (presentation: 10 minutes; interview: 10 minutes)

10-minute presentation regarding the applicant's reason for applying and research project plan.

Interview regarding the presentation, and some relevant basic academic skills and specialized knowledge.

Applicants should prepare an MS PowerPoint file for the oral presentation and bring their own PC.

(2) Examination of application documents

[Computer Science and Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of a written examination, an oral examination, and examination of their application documents. Applicants may be exempted from the oral examination, depending on examination of their application documents (exemption will be announced in advance).

(1) Written examination (specialized subjects)

Compulsory subjects: Algorithms and Data Structures, Programming.

Elective subjects: Choose three from Discrete Mathematics, Computer Architecture and Operating Systems, Databases, Computer Networks, Software Engineering.

(2) Oral examination (presentation: 10 minutes; interview: 15 minutes)

Interview regarding the application's presentation on their statement of purpose and research project plan, which should be described logically from an engineering viewpoint.

Applicants should prepare an MS PowerPoint file for their oral presentation and bring their own PC.

(3) Examination of application documents

[Mechatronics Course]

Successful applicants will be chosen based on the total assessment of the results of a written examination, an oral examination, and the examination of their application documents. The applicants may be shortened from the oral examination, depending on the examination of application documents.

(1) Written examination (mathematics)

Linear Algebra, Calculus, Differential Equations.

(2) Written examination (specialized subjects)

Choose one from the following: Mechanics of Materials/Mechanical Dynamics, Programming, Digital Circuits, and Control Engineering.

(3) Oral examination (interview: 15 minutes)

Interview regarding the applicant's purpose and research plans, and some related matters.

(4) An examination of application documents

[Civil and Environmental Engineering Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

(1) Oral examination (presentation: 10 minutes; interview: 10 minutes)

Presentation on the applicant's statement of purpose and research project plan.

Interview regarding the presentation and specialized knowledge.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation. If using presentation software, the applicant should also bring a PC.

(2) Examination of application documents

[Applied Chemistry Course]

Successful applicants will be chosen based on an overall assessment of the results of an oral examination and examination of their application documents.

(1) Oral examination (presentation: 5 minutes; interview: 10 minutes)

Presentation on the applicant's statement of purpose and research project plan.

Interview regarding the presentation and specialized knowledge.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation. If using presentation software, the applicant should also bring a PC.

(2) Examination of application documents

[Advanced Material Science Course]

Successful applicants will be chosen based on an overall assessment of the results of a written examination, an oral examination, and examination of their application documents. Applicants may be exempted from the oral examination depending on examination of their application documents.

(1) Written examination (mathematics)

Linear algebra, Differential & Integral Calculus, and related issues.

(2) Oral examination (presentation: 10 minutes; interview: 15 minutes)

Oral presentation on future research, and the physical and chemical knowledge needed to carry out research during the master's course.

(3) Examination of application documents

[Special Educational Program for Green Energy Conversion Science and Technology]

Successful applicants will be chosen based on an overall assessment of the results of written examinations (fundamental and specialized subjects and foreign language), an oral examination (interview regarding the research project plan, conducted in either English or Japanese), and examination of their undergraduate or equivalent university academic transcript.

(1) Written examination (fundamental and specialized subjects)

Choose one from subject groups I – III (indicate choice when applying).

Subject group I: Chemistry A, Chemistry B

Subject group II: Physics, Materials Science for Mechanics

Subject group III: Physics, Electromagnetics/Electronic Properties

Bring a scientific calculator.

Contents of examination:

1. Chemistry A: Thermodynamics, Phase Equilibria, Chemical Kinetics, Electronic Structure of Atoms and Molecules, etc.

2. Chemistry B: Spectroscopy and Diffraction, Crystal Structure, Electronic Structure and Properties of Inorganic Materials, etc.

3. Physics: Force and Motion (including Basic Differential Equations)

4. Materials Science for Mechanics: Crystal Structure and Defects, Phase Diagrams and Structure, Deformation and Processing of Materials, etc.

5. Electromagnetics/Electronic Properties: Static Electric and Magnetic Fields, Electromagnetic Induction, Energy Bands, Motion of Carriers, etc.

(2) Written examination (foreign language)

English in the specialized field.

For foreign applicants (overseas students), Japanese or English will appear on the test.

(3) Oral examination (presentation: 10 minutes; interview: 10 minutes)

Presentation based on the applicant's statement of purpose and research project plan.

Interview regarding the presentation.

The applicant should prepare transparencies (for a projector) or an MS PowerPoint file for the oral presentation regarding the research project plan. If using presentation software, the applicant should bring a PC or electronic data file.

(4) Examination of application documents

[Allocation of Marks]

Course or Program	Written Examination		Oral Examination	Application Documents	Total
Mechanical Engineering Course	Mathematics 100	Foreign Language 100	Accepted/Rejected	Academic Transcript Accepted/Rejected	200
Mechatronics Course	Mathematics 100	Specialized Subjects 100	Accepted/Rejected	Academic Transcript Accepted/Rejected	200
Advanced Material Science Course	Mathematics 100		100	Academic Transcript Accepted/Rejected	200
Special Educational Program for Green Energy Conversion Science and Technology	Fundamental and Specialized Subjects 200	Foreign Language 100	100	Academic Transcript Accepted/Rejected	400

Course or Program	Oral Examination	Application Documents	Total
Electrical and Electronic Engineering Course	15	Accepted/Rejected	15
Civil and Environmental Engineering Course	60	40	100
Applied Chemistry Course	100	Accepted/Rejected	100

Course	Written Examination [Specialized Subjects]		Oral Examination	Application Documents		Total
Computer Science and Engineering Course	[Compulsory Subjects] 140	[Elective Subjects] 210	Accepted/Rejected	[Academic Transcript] Accepted/Rejected	[Foreign Language] 100*	450

*Present a TOEIC or TOEFL transcript at the time of application. The foreign language score is calculated based on the transcript using a major-approved method.

6. Date, Time, and Location of the Examination

(1) Date and time

Mechanical Engineering Course

Date	9:30 to 11:00 am	1:30 to 3:30pm
January 9 (Saturday), 2016	Written examination (mathematics and foreign language)	Oral examination

Electrical and Electronic Engineering Course

Date	Starting at 9:30 am
January 9 (Saturday), 2016	Oral examination

Computer Science and Engineering Course

Date	9:30 am to 12:00 pm	Starting at 1:30 pm
January 9 (Saturday), 2016	Written examination (specialized subjects)	Oral examination

Mechatronics Course

Date	9:30 to 11:30 am	Starting at 1:30 pm
January 9 (Saturday), 2016	Written examination (mathematics and specialized subjects)	Oral examination

Civil and Environmental Engineering Course

Date	Starting at 9:30 am
January 9 (Saturday), 2016	Oral examination

Applied Chemistry Course

Date	Starting at 9:30 am
January 9 (Saturday), 2016	Oral examination

Advanced Material Science Course

Date	9:30 to 11:30 am	Starting at 1:30 pm
January 9 (Saturday), 2016	Written examination (mathematics)	Oral examination

Special Educational Program for Green Energy Conversion Science and Technology

Date	9:30 to 11:30 am	11:40 am to 12:30 pm	Starting at 1:30 pm
January 9 (Saturday), 2016	Written examination (fundamental and specialized subjects)	Written examination (foreign language)	Oral examination

(2) Examination location

Gathering spots are as follows (details indicated separately by major or program). Please arrive **20 minutes prior to the examination**.

Course or Program	Location
Mechanical Engineering Course	Room A2-11, first floor of Building A-2 (Kofu East Campus)
Electrical and Electronic Engineering Course Civil and Environmental Engineering Course	Meeting rooms of each major *Come to the entrance of Building A-2 in Kofu East Campus
Computer Science and Engineering Course	Room A2-12, first floor of Building A-2 (Kofu East Campus)
Mechatronics Course	Room T1-11, first floor of Building T-1 (Kofu East Campus)
Applied Chemistry Course	General Research Building (Kofu West Campus) *Come to the entrance of the General Research Building
Advanced Material Science Course	Room T1-12, first floor of Building T-1 (Kofu East Campus)
Special Educational Program for Green Energy Conversion Science and Technology	Room B2-11, Building B-2 (Kofu-East Campus)

7. Other

Previous years' examination questions are published on our website's home page (<http://www.yamanashi.ac.jp>).

General Information

1. Announcement of Successful Applicants

Announcement of successful applicants will be made on the bulletin board at the front entrance of Building A-2 around 5:00 pm on January 22 (Friday), 2016. A letter of acceptance will also be sent to the successful applicants. **Information regarding results will not be given out over the telephone.**

The examinee numbers of successful applicants will additionally be published on our website's home page (<http://www2.yamanashi.ac.jp>).

2. Enrollment Period

Applicants applying in the second semester of 2016 may select a period of enrollment. When applying, select either the April 2016 (First Semester) or October 2016 (Second Semester) enrollment period by circling your choice on the attached application form. Note that changes cannot be made to your selection once the application has been received by our office.

If you have any questions about enrollment in October 2016 (Second Semester), please contact the Office of Admissions.

3. Entrance Procedures

(1) Scheduled enrollment period

Enrollment Period	Enrollment Applications
April 2016	March 9 (Wednesday) — March 15 (Tuesday), 2016
October 2016	September 16 (Friday), 2016

Notes:

If you fail to complete entrance procedures by the designated date, you will be assumed to have decided against entering our university, and your enrollment will be cancelled.

Your examination admission slip must be presented at the time of entrance procedures. Please keep your examination admission slip after the examination.

(2) Payment for enrollment

The enrollment fee is ¥282,000 (tentative).

- ☐ When transferring your entrance fee to the bank account, documentation verifying the identity of the person making the payment (for example, a sponsor making the payment as proxy for the person named) must be presented to the bank clerk.
- ☐ The enrollment fee stated above may be revised at the time of enrollment. Received enrollment fees will not be returned under any circumstances.

(3) Applicants will be notified separately of the documents necessary for entrance procedures.

4. Tuition

Tuition for the First Semester period (students enrolling in April 2016) is ¥267,900 (annual total: ¥535,800).

Tuition for the Second Semester period students enrolling or continuing in October 2016) is ¥267,900.

- Tuition fees listed are tentative. If revisions to this fee are made at the time of enrollment or during classes, the new fee will be applicable after it is set.
- Tuition is typically withdrawn automatically from the student's account. Information will be made available later with regard to procedures.

5. Other Expenditures

Student Research Accident Insurance expenditures are required.

6. Extended Credit System

The Division of Engineering master's program offers an extended credit system.

This system enables students whose hours of study are restricted by employment to obtain credits for a planned educational program over a fixed period (maximum of 4 years), exceeding the standard training year limit (2 years) to complete the program. Because the units required for credit are the same as those required by the 2-year program, the yearly course load required is dramatically reduced.

For details on this system, contact the Office for the Faculty of Engineering Education Group (Graduate School): Tel: 055-220-8730.

Due dates for application to this system are as follows:

- (1) Enrollment in April (First Semester): Last day of February
- (2) Enrollment in October (Second Semester): Last day of August

7. Other

Applicants wishing to obtain a scholarship should contact the Academic Affairs Support Department, Office of Student Support (Tel: 055-220-8053), for information after announcement of successful applicants.

4 . Course Descriptions

Course Descriptions from the Master's Course (Department of Engineering) of the Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences

• Mechanical Engineering Course

Supervisors		Main topics of research	Leading subjects
Professor	HAGIWARA Shinsaku	Grinding processes based on grain fracture	Advanced material processing Advanced mechanical materials engineering Advanced mechanical dynamics and control Advanced thermal engineering Advanced mechanical systems engineering Advanced fluid mechanics Advanced strength of materials
Professor	SONOYA Keiji	Surface treatment and surface modification techniques	
Professor	FUJIMORI Atsushi	Modeling and control design of mechanical systems, navigation of mobile robots	
Professor	TAKEDA Tetsuaki	Heat and mass transport phenomena	
Professor	NAKAYAMA Yoshihiro	Mechanical properties and microstructure of metallic materials	
Professor	OKAZAWA Shigenobu	Computational mechanics and its application to automobile engineering	
Associate Professor	TSUNODA Hiroyuki	Experimental and numerical studies on diffusion of passive scalars in a turbulent flow	
Associate Professor	YOSHIHARA Shoichiro	Deformation process control of sheet and tube metal forming	
Associate Professor	ITO Yasumi	Medical and welfare engineering, forensic engineering	
Associate Professor	NODA Yoshiyuki	Analysis and control of dynamical systems	
Associate Professor	YAMAMOTO Yoshinobu	Computational fluid dynamics, multiphase flow engineering magnetohydrodynamics	
Associate Professor	TORIYAMA Koji	Effective use of thermal energy and accelerated methods of numerical simulation using GPU	
Associate Professor	AOYAGI Junichiro	Evaluation and improvement of space propulsion systems	
Associate Professor	HARAMIISHI Yasutake	Machining and profile measurement using image processing	

• Electrical and Electronic Engineering Course

Supervisors		Main topics of research	Leading subjects
Professor	AKITSU Tetsuya	Plasma jet and laser beam treatment of the surface of soft and hard tissue	Light wave engineering Advanced quantum engineering Advanced exercises for electronic devices Advanced crystal engineering Advanced signals & systems Advanced circuit engineering Advanced instrumentation engineering Advanced electric energy engineering
Professor	UCHIYAMA Chikako	Quantum statistical research on quantum transport and microscopic heat engines	
Professor	OHKI Makoto	Signal processing, especially theory and application of multidimensional and adaptive signal processing	
Professor	KAKIO Shoji	Surface acoustic wave devices, optical guided wave devices	
Professor	TOYOKI Hiroyasu	Non-equilibrium dynamics of social and physical systems	
Professor	HANAWA Masanori	Optical fiber/wireless communication systems, passive devices for linear optical signal processing, fiber sensing, UWB impulse radar, medical signal processing	
Professor	YANO Koji	Design and fabrication of power semiconductor devices	
Associate Professor	ONOJIMA Norio	Fabrication of high-performance organic transistors and organic solar cells	
Associate Professor	SATO Takahide	LSI design, technology for low consumption of electrical power, high frequency analog circuits	
Associate Professor	SHIRAKI Ichiro	Physical property measurements and structure analysis of nanomaterials by scanning probe microscopy	
Associate Professor	CHEN Lee Chuin	Development of new ionization methods for mass spectrometry	
Associate Professor	NABETANI Yoichi	Crystal growth and characterization of compound semiconductors	
Associate Professor	NINOMIYA Satoshi	Development of novel ion beams for surface analysis	
Associate Professor	HONMA Satoshi	Development and application of optical functional devices, optical switches and memory	
Associate Professor	MURANAKA Tsutomu	Design, growth, fabrication, and characterization of semiconductor nanostructures for applications in nanoelectronics	

Note: Some professors affiliated with this course are also in charge of the Special Educational Program for Green Energy Conversion Science and Technology

• Computer Science and Engineering Course

Supervisors		Main topics of research	Leading subjects
Professor	IWANUMA Koji	Data mining, automated theorem proving, artificial intelligence	Large-scale discrete structure processing Parallel computing Software engineering Internet engineering Machine learning Visual information processing Linguistic and speech information processing User-centered design methodology
Professor	OHBUCHI Ryutarou	Multimedia data retrieval, visual information processing	
Professor	OZAWA Kenji	Acoustic signal processing, auditory information processing, audio-visual perceptive computing	
Professor	GO Kentaro	Interactive systems design methodology	
Professor	TAKAHASHI Masakazu	Software engineering, reliable software	
Professor	FUKUMOTO Fumiyo	Natural language processing, computational linguistics	
Professor	Mao Xiaoyang	Computer graphics and data visualization	
Professor	MINO Hidetoshi	Parallel processing, information security, computer networks	
Associate Professor	ANDOH Hidetoshi	Distributed and collaborative systems, interactive multimedia technology	
Associate Professor	OMATA Masaki	Human-computer interaction	
Associate Professor	KINOSHITA Yuichiro	Affective information processing, human interfaces	
Associate Professor	SUZUKI Tomohiro	High-performance computing	
Associate Professor	NABESHIMA Hidetomo	Artificial intelligence, knowledge representation and reasoning, constraint satisfaction systems	
Associate Professor	HATTORI Motonobu	Neural networks	
Associate Professor	WATANABE Yoshimichi	Software development techniques	

• Mechatronics Course

Supervisors		Main topics of research	Leading subjects
Professor	ISHII Takaaki	Research on actuators using high power ultrasonics	Advanced mechatronics engineering Advanced robotics engineering Advanced human engineering Advanced embedded systems design Advanced materials engineering Advanced actuator engineering Advanced electromagnetic engineering Advanced communication-controlling networks Advanced medical and welfare instruments
Professor	KOTANI Shinji	Autonomous mobile robot navigation and environmental understanding by robot vision	
Professor	SUZUKI Yoshimi	Information retrieval, natural language processing, spoken language understanding	
Professor	TERADA Hidetsugu	Robotics and actuator engineering	
Professor	FURUYA Nobuyuki	Robotics and mechatronics	
Professor	MUNEHISA Tomoo	Quantum field theory, neural networks	
Professor	MORISAWA Masayuki	Intelligent sensors using plastic optical fiber	
Associate Professor	ISHIDA Kazuyoshi	Friction, wear, and lubrication	
Associate Professor	OKAMURA Miyoshi	Universal designs for public facilities	
Associate Professor	KITAMURA Toshiya	Study of sound emission from aeroflow and low-frequency noise	
Associate Professor	JIN Lianhua	Optical measurement, optoelectronics	
Associate Professor	SAKATA Osamu	Multidimensional biological signal processing for medical and food engineering	
Associate Professor	SHIMIZU Tsuyoshi	Profile measurement and application of image processing	
Associate Professor	TANZAWA Tsutomu	Environment recognition using stereo vision	
Associate Professor	HIRA Shinichiro	Micromachining for fabrication of micro fluidic chips	

• Civil and Environmental Engineering Course

Courses	Supervisors		Main topics of research	Leading subjects
Civil Management Engineering	Professor	HIRAYAMA Kimiaki	Application of statistical analysis to evaluating water quality improvement practice	Disaster management and engineering Continuum mechanics of solids for civil engineers Infrastructure maintenance engineering Environmental preservation engineering Practical urban planning
	Professor	SATO Masahisa	Application of mathematics to environmental preservation engineering	
	Professor	SUZUKI Takeyasu	Application of risk communication and ICT to regional disaster management	
	Professor	KANEKO Hidehiro	Bio-waste treatment, ecotoxicity evaluation of solid waste	
	Professor	SUETSUGI Tadashi	Prevention, mitigation, and risk avoidance of flood disasters	
	Professor	SASAKI Kuniaki	Transportation engineering and mobility design	
	Professor	KOBAYASHI Masaki	Fundamentals of control by high-dimensional signal processing	
	Associate Professor	GOTO Satoshi	Geotechnical engineering for disaster mitigation and rehabilitation	
	Associate Professor	ISHII Nobuyuki	Landscape design, aesthetical structure design, and urban planning and design	
	Associate Professor	MORI Kazuhiro	Bioenvironmental engineering for water treatment, remediation and resource use	
	Associate Professor	SAITO Shigehiko	Life cycle simulation of concrete structures	
	Associate Professor	MUTO Shinichi	Projects and public policy evaluation of urban planning	
	Associate Professor	HADA Yasunori	Measures and strategies for disaster risk reduction and a resilient society	
	Associate Professor	TAKAHASHI Ryosuke	Evaluation of structural performance of concrete structures in design and maintenance	
	Associate Professor	YOSHIDA Junji	Dynamics of structures, mechanics of solids and health monitoring of structures	
River Basin Environmental Sciences	Professor	SAKAMOTO Yasushi*	Movement of environmental pollutants accompanying the natural water cycle	International partnership for environment I Environmental data analysis I Remote sensing and GIS I River basin medicine and engineering Advanced river basin management Advanced hydraulics and hydrology Advanced water quality assessment Advanced environmental treatment technology
	Professor	MASUTANI Keiichi*	Physics of hydraulics and hydrology	
	Professor	KAZAMA Futaba*	Development of eco-friendly water treatment systems and their application to water quality management	
	Associate Professor	NISHIDA Kei*	Nutrient runoff and health impacts in river basins	
	Associate Professor	ISHIDAIRA Hiroshi*	Development of hydrological models, hydrology in the cryosphere	
	Associate Professor	HARAMOTO Eiji*	Fate of health-related water microorganisms in aquatic environments	
	Associate Professor	TOYAMA Tadashi*	Environmental purification and reproduction energy/material by bioengineering	
	Associate Professor	SOUMA Kazuyoshi*	Meteorological and hydrological modeling, including human activities/prediction of water disasters	

*Supervisors of the Special Master's Program on International River Basin Environmental Science until FY 2015 and of the Special Graduate Program on River Basin Environmental Sciences from FY 2016.

• Applied Chemistry Course

Supervisors		Main topics of research	Leading subjects
Professor	SUZUKI Akihiro	Development of nanofiber preparation methods, analysis of superstructures	Advanced organic chemistry Advanced inorganic chemistry I Advanced inorganic chemistry II Advanced analytical chemistry Advanced physical chemistry Advanced polymer chemistry Advanced quantum chemistry for energy conversion Advanced course in materials design for fuel cells
Professor	HARAMOTO Yuichiro	Synthesis of new functional liquid crystalline materials	
Professor	KAWAKUBO Susumu	Development and application of trace analytical methods	
Professor	WADA Satoshi	Development of environmentally friendly electroceramics with high performance by nanostructure control	
Professor	TANAKA Isao	Growth technique and new function discovery of functional oxide single crystals	
Professor	KUMADA Nobuhiro	Synthesis and crystal structure analysis of new inorganic compounds	
Professor	IRIE Hiroshi	Development of materials for energy and environmental preservation	
Professor	OKUZAKI Hidenori	Plastic electronics with conductive polymers	
Professor	UCHIDA Hiroyuki	Design and nanoscale analysis of electrocatalysts for fuel cells	
Professor	SHIBATA Masami	Control of surface and interface by wet processing	
Professor	MIYATAKE Kenji	Synthesis and characterization of polymer electrolyte membranes for fuel cells	
Professor	TAKEI Takahiro	Synthesis of functional inorganic porous materials	
Research Professor	INUKAI Junji	Analysis of solid surface structure, electronic state, and reactivity	
Research Professor	HIGASHIYAMA Kazutoshi	Catalysts for hydrogen production and purification	
Research Professor	MIYAO Toshihiro	Nanostructured catalysts for hydrogen production	
Research Professor	UCHIDA Makoto	Design of high-performance membrane electrode assemblies for fuel cells	
Research Professor	OMATA Tomio	Evaluation and analysis of various fuel cell systems	
Research Professor	TRYK, Donald A	Analysis of electrocatalysis in fuel cells	
Research Professor	KAKINUMA Katsuyoshi	Synthesis and analysis of nanomaterials for fuel cells	
Research Professor	TSUNEDA Takao	Theoretical studies on electrochemical reaction processes in fuel cells	
Associate Professor	TANI Kazue	Elucidation of retention mechanism in high-performance liquid chromatography	
Associate Professor	KUWABARA Tetsuo	Development of functional dyes and supramolecular materials	
Associate Professor	OBATA Makoto	Synthesis and application of functional polymers	
Associate Professor	YONEYAMA Naoki	Single crystal growth and physical properties of organic conductors	
Associate Professor	YONEZAKI Yoshinori	Synthesis and structure analysis of inorganic photofunctional material	
Associate Professor	SAKANE Hideto	Analysis of local structure and character of inorganic compounds	
Associate Professor	KOIZUMI Hitoshi	Development of sophisticated chromatography	
Associate Professor	NOHARA Shinji	Electrocatalysts for fuel cells	

Associate Professor	WATAUCHI Satoshi	Growth and characterization of single crystals of oxide superconductors	
Associate Professor	SATO Tetsuya	Fundamentals of the physicochemical process on surfaces and formation of thin film semiconductors	
Associate Professor	YANAGI Hiroshi	Exploration of new functional oxide semiconductors	
Associate Professor	MIYAJIMA Naoya	Surface modification and applications of materials	
Research Associate Professor	YANO Hiroshi	Synthesis and characterization of nanocatalysts for fuel cells	

Note: Some professors affiliated with this course are also in charge of the Advanced Materials Science Course or Special Educational Program for Green Energy Conversion Science and Technology

• Advanced Material Science Course

Supervisors		Main topics of research	Leading subjects
Professor	KUMADA Nobuhiro	Synthesis and crystal structure analysis of new inorganic compounds	Advanced condensed matter physics Advanced quantum devices Advanced photonics Lectures on advanced electronics Advanced functional materials Advanced quantum material science Structure and chemistry of crystalline solids
Professor	KOBAYASHI Kiyoshi	Quantum field theory with light-matter interaction in open nanosystems, fundamental research on spin-related nanophotonics with tripartite synaptic functions	
Professor	KONDOH Eiichi	Processing and evaluation of micro- and nanomaterials	
Professor	TAKEI Takahiro	Soft chemical synthesis of new functional inorganic material	
Professor	TANAKA Isao	Growth technique and new function discovery of functional oxide single crystals	
Professor	NAKAGAWA Kiyokazu	Formation of Si-related superstructures and their application to devices	
Professor	HARIMOTO Tetsuo	Nonlinear optical effects with ultrahigh intensity and ultrashort laser pulses	
Professor	FUJIMA Kazumi	Scattering theory of light and electrons by atoms and molecules	
Professor	HORI Hirokazu	Quantum electronics, nano-optoelectronics, near-field optics, electrodynamics, theory of functionality, medical applications	
Associate Professor	ARIMOTO Keisuke	Electronic properties of group IV semiconductor heterostructures	
Associate Professor	ISHIKAWA Akira	Theory of quantum optics in open nanosystems	
Associate Professor	IJIMA Kaoru	Surface science	
Associate Professor	OGAWA Kazuya	Optical functional organic materials	
Associate Professor	KATOH Hatsuhiro	Physics and technologies for designing electronic devices	
Associate Professor	SAKAI Masaru	Nanophotonics, optical properties of nanomaterials	
Associate Professor	SATO Tetsuya	Fundamentals of the physicochemical process on surfaces and formation of thin films	
Associate Professor	SYOUJI Atsushi	Optical properties of condensed matter and semiconductors	
Associate Professor	YAMANAKA Junji	Transmission electron microscopy of semiconductors, metallic alloys, and other inorganic materials	
Associate Professor	YONEZAKI Yoshinori	Synthesis and structure analysis of inorganic photofunctional materials	
Associate Professor	WATAUCHI Satoshi	Development of techniques for crystal growth using infrared convergent heating systems	
Associate Professor	WATANABE Katsuyoshi	Optical properties of quantum structures and nanoparticles	

Note: Some professors affiliated with this course are also in charge of the Applied Chemistry Course

• Special Educational Program for Green Energy Conversion Science and Technology

Courses	Supervisors		Main topics of research	Leading subjects
Fuel Cells	Professor	UCHIDA Hiroyuki	Design of electrocatalysts for polymer electrolyte and solid oxide fuel cells	Advanced course in materials design for fuel cells Advanced course in electrocatalyst design Advanced course in science and technology Advanced physical chemistry
	Professor	MIYATAKE Kenji	Synthesis and characterization of polymer electrolyte membranes for fuel cells	
	Associate Professor	NOHARA Shinji	Electrocatalysts for polymer electrolyte fuel cells	
	Research Professor	IYAMA Akihiro	Polymer electrolyte fuel cells for advanced vehicles	
	Research Professor	UCHIDA Makoto	Design of high-performance membrane electrode assemblies for fuel cells	
	Research Professor	KAKINUMA Katsuyoshi	Synthesis and analysis of nanomaterials for fuel cells	
	Research Professor	TSUNEDA Takao	Theoretical Studies on electrochemical reactions in fuel cells	
Solar Energy	Professor	IRIE Hiroshi	Creation and evaluation of solar energy conversion and environmental materials	Advanced course in engineering for solar energy conversion Advanced course in quantum science for semiconductors Advanced course in electromagnetics Advanced quantum science
	Professor	TORIKAI Eiko	Spin conduction and reactions on surfaces and at interfaces	
	Associate Professor	NABETANI Yoichi	Growth and control of properties of multifunctional semiconductor crystals	
	Associate Professor	YANAGI Hiroshi	Synthesis and characterization of oxide semiconductors for solar energy conversion	
Conversion Materials	Professor	WADA Satoshi	Creation and characterization of environmentally compatible piezoelectric ceramics	Advanced course in science for solid state materials Advanced course in design of inorganic materials Advanced course in polymer materials chemistry Advanced course in surface and interface science Advanced course in materials physics
	Professor	TANAKA Isao	Growth and creation of new functions of functional material single crystals	
	Professor	KUMADA Nobuhiro	Synthesis and characterization of new inorganic compounds	
	Professor	OKUZAKI Hidenori	Plastic electronics with conductive polymers	
	Research Professor	INUKAI Junji	Analysis of surface structure and electronic state of energy conversion materials	
	Research Professor	BRITO Manuel E.	Synthesis of functional ceramics and analysis of interfacial structures	
New Energy Technology	Professor	KONDOH Eiichi	Processing and evaluation of micro- and nanomaterials	Advanced engineering of micro- and nanomaterials Advanced course in science for renewable energies Advanced course in science for solid state materials Advanced course in catalyst science
	Professor	KOMIYAMA Masaharu	Energy conversion processes and biomass catalysts	
	Professor	TAKEI Takahiro	Preparation and characterization of functional organic-inorganic composites	
	Research Professor	MIYAO Toshihiro	Nanostructured catalysts for hydrogen production	
	Research Professor	HIGASHIYAMA Kazutoshi	Catalysts for hydrogen production and purification	
Common	Research Professor	TRYK Donald A.	Analysis of electrocatalysis in fuel cells	Advanced course in English for green energy science and technology, elementary level

Note: Some professors affiliated with this course are also in charge of other courses.