

Application Guidelines for Doctor's Course
October 2022

Graduate School of Natural Science and Technology
OKAYAMA UNIVERSITY

Policies for Graduate Education (Diploma Policy, Admission Policy, Curriculum Policy)

Please refer to the following website about the Policies for Graduate Education

https://www.gnst.okayama-u.ac.jp/en/about_us/admission_policy/

Table of Contents

I. Admission Quota

II. Application Guidelines for Entrance Examination 3

III. Guidance for Screening for Advancement 12

IV. Purpose of Human Resources Development by Each Division 17

V. Guide to Divisions 18

I. Admission Quota

| Division | Quota |
|-------------------------------------|-------|
| Mathematics and Physics | A few |
| Earth, Life, and Molecular Sciences | A few |
| Interdisciplinary Science | A few |
| Industrial Innovation Sciences | A few |
| Applied Chemistry | A few |
| Total | A few |

Note 1: Each division course of study will accept a small number of applications as new and advancing students for October 2022 enrollment.

Note 2: The admission quota of each division shows the number of applicants who will be selected through screening for advancement.

II. Application Guidelines for Entrance Examination

(Time of Enrollment: October 2022)

1. Eligibility for Application

Those to whom any of the following items is applicable, or is expected to be applicable by September 2022.

- (1) Have a master's or professional degree.
- (2) Have been awarded a degree equivalent to a master's degree or professional degree abroad.
- (3) Have taken a correspondence course of education provided by a foreign school in Japan and have been awarded a degree equivalent to a master's or professional degree.
- (4) Have completed a program in Japan provided by an educational institution that is positioned as having graduate programs under the relevant foreign education system and which is designated separately by the Japanese Minister of Education, Culture, Sports, Science and Technology, and who have been awarded a degree equivalent to a master's or professional degree.
- (5) Have completed the program at United Nations University and have been awarded a degree equivalent to a master's degree.
- (6) Have completed a curriculum at a foreign school, an educational institution that has received the designation under item (4), or the United Nations University, who have passed an examination or a screening equivalent to those stipulated in Article 16-2 of Standards for the Establishment of Graduate Schools, and who are deemed to have academic ability equivalent to or greater than that of a master's degree holder.
- (7) Are designated by the Minister of Education, Culture, Sports, Science and Technology.
- (8) Are deemed to have academic ability equal to or greater than that of a master's or professional degree holder by the Graduate School through an individual admission eligibility screening and who have reached the age of 24 years.

Note 1: Applicants who are expected to complete a master's program or master's course at Okayama University in September 2022 must apply following "**III Guidelines for Screening for Advancement**" (described on page 12).

Note 2: Those who "(A)re designated by the Minister of Education, Culture, Sports, Science and Technology" specified in item (7) above refers to applicants who meet any of the following conditions, and who have the experience of engaging in research in a university or research institution for more than 2 years after graduation or completion of university or other institution, with research achievements, such as published books, academic papers, academic lectures, academic reports, or patents, which are considered to be equivalent to or higher than a master's thesis. (It is necessary to apply Application Eligibility Screening. See "**2 Application Eligibility Screening**".)

1) Those who graduated from a university.

2) Those who have completed 16 years of school education in a foreign country or who have completed 16 years of school education in Japan by taking a correspondence course of education provided by a foreign school.

Note 3: Those who "(A)re deemed to have academic ability equal to or greater than that of a master's or professional degree holder by the Graduate School through an individual admission eligibility screening" specified in the item above refers to applicants who have passed an academic proficiency test (written and oral examinations) and an interview that the Graduate Schools provides as the screening of the eligibility for application after document screening. (It is necessary to apply Application Eligibility Screening. See "**2 Application Eligibility Screening**".) However, when an applicant's ability can be confirmed based on the documents submitted, the applicant will be exempted from the written examination.

The date, method, and other information related to the academic ability test and the interview will be assigned to cases individually.

2. Application Eligibility Screening

For those applicants who fall under **item (7) or (8)** specified in the previously described “**1 Eligibility for Application**”, we conduct application eligibility screenings before application. The applicants must submit the following documents to the Graduate School Section, Academic Affairs Division, Graduate School of Natural Science and Technology during each period.

For additional details related to the application eligibility screening, see Notes 2 and 3 in “1 Eligibility for Application.” Please obtain the forms for submission by requesting them by mail or distributing them over the counter at the section in charge (see page 10). Some of them can be downloaded from our website.

1) Acceptance Period of Documents for Application Eligibility Screening

| |
|-------------------------------|
| June 30, 2022 to July 1, 2022 |
|-------------------------------|

If you submit documents directly to the counter, the acceptance hour is as following; 8:30–17:00 during the “Acceptance Period of Documents for Application Eligibility Screening”. (Except Saturday, Sunday, National holidays and 12:00 to 13:00 of each day)

When sending the documents by mail, they must be sent by “Registered, Express Mail”.

Write “Enc. Documents for Application Eligibility Screening for Doctoral Program of Graduate School of Natural Science and Technology” in red on the envelope and send it to arrive no later than each date stated in the Acceptance Period of Documents for Application Eligibility Screening above.

2) Documents Required for Application Eligibility Screening

| Documents Required for Application | Remarks |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <1> Form of Eligibility for Application | Use the forms prescribed by the Graduate School of Natural Science and Technology. |
| <2> Record of Academic Performance | Use the form prescribed by the Graduate School of Natural Science and Technology. (Briefly describe objective findings from research results relevant to the field of major.) For academic papers, attach an offprint or a copy. In the case of presentations, attach a summary or an abstract for research presentations. |
| <3> Certificate of Research Participation | Use the form prescribed by the Graduate School of Natural Science and Technology. (The form must be completed by the institution with which the applicant is affiliated.) |
| <4> Academic Transcript (of last completed education) | Submit a transcript issued by the president of the final school from which the applicant graduated. |
| <5> Graduation Certificate (of last completed education) | Submit a graduation certificate issued by the president of the final school from which the applicant graduated. |

Note. Documents <1>, <2>, <3>, <4>, and <5> must be submitted in original. For documents <4> and <5>, a copy of the original document verified by the issuer is acceptable.

3) Result of the Eligibility Screening

The result of the eligibility screening will be notified through your prospective supervisor on July 20, 2022.

3. Application of Persons with Disabilities

Applicants with disabilities might need special considerations when taking examinations and classes. Consult with us in the way described below before application.

Have a consultation as early as possible, considering the time necessary to inform you of the results of the consultation and take necessary measures based on special considerations.

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deadline of Consultation | July 1, 2022 |
| Method of Consultation | Request a “Form of Preliminary Consultation for Application”, and consult with a doctor’s medical certificate and (for only those who have been issued) a copy of the handbook for people with disabilities. |
| Request to: Consult with: | Graduate School Section Academic Affairs Division Graduate School of Natural Science and Technology, Okayama University 3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan Phone: 086-251-8810 |

4. Application Procedures

1) How to Apply

Applicants must submit all the document described in “5) Documents Required for Application” below during the acceptance hours (8:30–17:00) in “2) Application Periods.”

Please obtain the forms for submission by requesting them by mail or distributing them over the counter at the section in charge (see page 11). Some of them can be downloaded from our website.

2) Application Periods

August 1, 2022 to August 2, 2022

If you submit application documents directly to the counter, the acceptance hour is as following; 8:30–17:00 during the “Application Period”. (Except Saturday, Sunday, National holidays and 12:00 to 13:00 of each day)

When sending the documents by mail, they must be sent by “Registered, Express Mail”. Write “Enc. Application Form for Doctoral Program of Graduate School of Natural Science and Technology” in red on the envelope and send it must arrive by the last day of the above **Application Period**.

Applicants must contact a prospective supervisor as early as possible before application to consult about research content, etc.

3) Address for Submission

Graduate School Section Academic Affairs Division
Graduate School of Natural Science and Technology
Okayama University
3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan
Phone: 086-251-8810

4) Notes on Application

- (1) No change shall be permitted after submission in terms of the contents of the submitted documents.
- (2) No document shall be returned for any reason after the application documents are accepted.
- (3) Application with incomplete application documents or shortage of entrance examination fee shall not be accepted.
- (4) Please note carefully that admission might be withdrawn even after enrollment if the contents of the submitted documents are found to include false entries.
- (5) Certificates issued under the former name (surname and first name), which differs from the name written on the application form are usable. However, in such cases, attach a document (in any form) that the date of name change and the new name are written personally by the applicant.

5) Documents Required for Application

| Documents Required for Application | Remarks |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>〈1〉 Application for Admission, Curriculum Vitae (CV), Admission Ticket for the Examination and Photograph</p> | <p>Fill out necessary items on the forms prescribed by Graduate School of Natural Science and Technology personally by the applicant.</p> <p>Affix a photograph (4 cm long × 3 cm wide, upper body, no headwear, facing forward, taken within the three months before application) on the prescribed space on the “Application for Admission” and the “Admission Ticket for Examination.” Before affixing, write the name of the intended major course of study and your name on the back of the photographs.</p> |
| <p>〈2〉 Entrance Examination Fee</p> | <p><u>30,000yen (A handling fee is required separately)</u></p> <p>Please refer to “Paying for Entrance Examination Fees” below and pay the entrance examination fee by 17:00 on the last day of the application period on “Payment for Entrance Examination Fee website”.</p> <p>After confirming the payment of the entrance examination fee, print "Certificate of Entrance Examination Fee Payment" and attach it to the prescribed section of the prescribed form.</p> <p>Also note that you can pay Entrance Examination fee from <u>one month before</u> the application period.</p> <p>Paying for Entrance Examination Fees https://www.gnst.okayama-u.ac.jp/en/admission/gnst_dtest_youkoutop_en</p> <p>Payment for Entrance Examination Fee website https://e-apply.jp/n/okayama-payment-eng</p> <p>If you could not pay by the payment method above, contact “Office in charge (see page 10)”.</p> <p style="text-align: right;">【continue to next page】</p> |

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| <p>〈2〉 Entrance Examination Fee (continued from previous page)</p> | <p>Refund of Entrance Examination Fee</p> <p>The entrance examination fee paid is not refundable for any reason, except in the following cases:</p> <ul style="list-style-type: none"> a) Entrance examination fee was paid, but application was not made (or application documents were not submitted or accepted.) b) Entrance examination fee was paid twice by mistake. c) Those applicants who are Monbukagakusho sponsored students need not pay the entrance examination fee, in principle. However, for cases in which the period of their scholarship ends by September 30, 2022, the payment of the entrance examination fee is required. When the extension of the scholarship period is approved, the entrance examination fee will be refunded. d) Those to whom the entrance examination fee exemption described below is applicable paid the entrance examination fee and completed the prescribed application procedures because the acquisition of certificates within the application period was difficult. <p>Entrance examination fee exemption</p> <p>Okayama University offers entrance examination fee exemption for those who fell under the Disaster Relief Law after April 2021 to reduce financial burden and secure an opportunity for advancement.</p> |
| <p>〈3〉 Transcript of Faculty</p> | <p>Submit a certificate issued by the president of the university or the dean of the faculty from which you graduated.</p> |
| <p>〈4〉 Transcript of Graduate School</p> | <p>Submit a certificate issued by the president or the dean of the graduate school from which you graduated.</p> |
| <p>〈5〉 (Prospective) Completion Certificate</p> | <p>Submit a certificate issued by the master’s program (master’s course) or the professional graduate school from which you completed. Those who have completed master’s program at a graduate school of university abroad, submit a certificate that confirms the degree you have been awarded.</p> |
| <p>〈6〉 Theses</p> | <p>Submit one of the following:</p> <ul style="list-style-type: none"> a) For master’s degree holders with a master thesis, a “copy of the master’s thesis” and an “Abstract of Thesis (of approx. 2,000 words using the form prescribed by Graduate School of Natural Science and Technology).” b) For applicants who are expected to complete a master’s program, who are master’s degree holders without a master thesis, or who apply under item (6), (7) or (8) of “1 Eligibility for Application”, a “Report of Research Progress (of approx. 2,000 words using the form prescribed by the Graduate School of Natural Science and Technology).” Attach other materials such as research publications, if any. |
| <p>〈7〉 Research Planning Sheet</p> | <p>Use the form prescribed by Graduate School of Natural Science and Technology.</p> |

| | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <8> Pertaining to the Qualifying Examination | Those who will apply under item (6) of “1 Eligibility for Application” must submit a “Pertaining to the Qualifying Examination” (see an example of the format) issued by the president of the university (or the graduate school) that conducted the screening and its accompanying documents. |
| <9> Sticker of Address | Fill out the necessary items. |
| <10> Copy of Residence Card (both sides) or Original copy of Residence certificate | If you are not a Japanese citizen, please submit following documents for the purpose of confirmation of nationality, name, etc. ○Person who lives in Japan <ul style="list-style-type: none"> • A copy of both sides of the residence card or Original copy of Residence certificate (issued by the city of municipality. The status of residence and residence must be specified) • A copy of passport (the page with your name, nationality, and photo) ○Person who lives outside Japan <ul style="list-style-type: none"> • A copy of passport (the page with your name, nationality, and photo) |
| <11> Copy of Passport | |

Note 1: Documents <1>, <3>, <4>, <5>, <7>, and <8> must be submitted in original. For documents<3> - <5>, a copy of the original document verified by the issuer is acceptable.

Note 2: Applicants who were confirmed to be eligible for application in the application eligibility screening need not submit certificates from <3> - <5>.

6) Purpose of Use of Personal Information

Application documents submitted and personal information written on them are used for affairs related the selection of entrants.

However, regarding entrants, we use their personal information written on the application form, including name, gender, date of birth, current address, and schools graduated from, as registry data for basic student information in the academic affairs system at Okayama University.

In addition, successful applicants' personal information, examinee number and name (kanji/ kana), are used for the systems for tuition fee debt management and tuition fee exemption at Okayama University.

When application for admission fee exemption, postponement of admission fee collection, tuition fee exemption, or scholarships such as those of Japan Student Services Organization was made, the applicant's entrance examination results and academic transcript might be used to handle academic ability judgment related to affairs such as postponement of admission fee collection.

5. Issue of Admission Ticket for Examination

Admission tickets for examination will be sent to your prospective supervisor around date stated below. Please receive it from your prospective supervisor. When hoping for mailing, please inquire to the office in charge (see page 10).

| |
|-----------------------|
| Around August 4, 2022 |
|-----------------------|

6. Methods for Selection of Entrants

Selection of entrants shall be made comprehensively based on the results of an oral examination and document review. The oral examination will be conducted mainly concerning the applicant's master's thesis and research plan document. If necessary, we will pose questions to assess English language ability (or Japanese language ability for international students) during the oral examination.

| Oral Examination Date | Place of Examination | Due date |
|-----------------------|------------------------------------------------------------------------|-----------------|
| August 22, 2022 | A prospective supervisor will notify applicants of the location later. | August 17, 2022 |

Note 1: The Oral Examination Date above might be changed after applicants are contacted.

Note 2: If no information about the date, time, or place of the oral examination has been received by the due date, please inquire to the office in charge (see page 10).

7. Announcement of Successful Applicants

Successful applicants will be announced on a bulletin board.

| Date and Time | Place of Bulletin Board |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| September 7, 2022, 10:00 a.m. | The bulletin board in front of the office of Graduate School Section, Academic Affairs Division, Graduate School of Natural Science and Technology, Okayama University (1F, Building No. 1, Faculty of Engineering) |

Note 1: The examinee numbers of successful applicants will be announced on the bulletin board. A letter of acceptance and other materials will be sent directly to successful applicants dated on the day of the announcement.

Note 2: After the announcement on the bulletin board, the examinee numbers of successful applicants will be posted on the homepage (<https://www.gnst.okayama-u.ac.jp/ja/admission/>).

Note 3: We will never under any circumstances respond to inquiries by phone, etc. concerning passing or failing the examination.

8. Admission Procedures

1) Method of Admission Procedures

Successful applicants will be accepted into the program after having completed the admission procedures. Details will be separately informed to successful applicants later.

2) Period of Admission Procedures

The period of admission procedures has been scheduled as follows. However, successful applicants will be informed about details later.

October 2022 Entrants: September 16, 2022 to September 20, 2022

9. Other

1) Admission Fee and Tuition Fee

Admission fee: 282,000 yen (expected amount)

Tuition fee: 267,900 yen (for half a year); 535,800 yen (for a year) (expected amount)

※ When the amount was revised at the time of admission or while at school, the new amount will be applied from the time of the revision.

In addition, a premium for Personal Accident Insurance for Students Pursuing Education and Research, etc. will be needed as an additional expense.

2) Study Assistance

We have many systems for study assistance: admission fee exemptions, admission fee collection postponement, tuition fee exemptions, and scholarships.

3) Day/Evening Course System

Graduate School of Natural Science and Technology applies the special provision for educational methods (Day/Evening Course System) stipulated in Article 14 of Standards for Establishment of Graduate Schools to make it easier for students who work during class hours to take courses. We provide classes and research guidance not only during the day, but also during evenings (and Saturdays, summer and winter vacations, etc.).

4) Extended doctoral course system

This system is designed that students, who are unable to complete their course within the standard doctoral study term (3 years) due to circumstances such as work schedule, can complete a previously scheduled and extended course period over a certain period of time beyond the standard term. If you are permitted, you can complete the course by paying tuition fee of standard study term (for 3 years). Details will be announced at the entrance procedure.

5) Security Export Control Regulations of Okayama University

Okayama University has established the “Security Export Control Regulations of Okayama University” under the Security Export Control System based on the “Foreign Exchange and Foreign Trade Act (FEFTA)”, and conducts strict screening when accepting foreign students. If you are subjected to this regulation or FEFTA, you may not be accepted or your desired research activities may be restricted.

For details concerning the Security Export Control System in Japan, please refer to the following website.

<https://www.meti.go.jp/policy/anpo/englishpage.html>

6) Emergency Warning or Weather Warnings

The entrance examination day and the start time may be postponed in case of Emergency Warning or Weather Warnings. Therefore, please check the website of the Graduate School before the examination.

https://www.gnst.okayama-u.ac.jp/ja/admission/nittei_henkou/

7) How to request application documents by mail

- 1) Write “Request for Application Documents of Graduate School of Natural Science and Technology, Doctoral Program” in red on the envelope surface.
- 2) Please enclose the following things with the envelope;
 - A stamped and self-addressed envelope. (Stamp:140yen, Envelope size:240mm×332mm)
 - A memo written your contact (phone number and e-mail address) , name of your prospective professor who has accepted / will accept and your nationality.
- 3) Send the envelope with all submissions to the office in charge.
Please note that the mailing address is limited to Japan. (No shipping to foreign countries)

8) Office in charge

If there is anything unclear about application, please inquire to the office in charge below.

Graduate School Section Academic Affairs Division
Graduate School of Natural Science and Technology
Okayama University
3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan
Phone: 086-251-8810

URL of Graduate School of Natural Science and Technology:

<https://www.gnst.okayama-u.ac.jp/>

E-mail: agf8576@adm.okayama-u.ac.jp

III. Guidelines for Screening for Advancement

(Time of Advancement: October 2022)

1. Eligibility for Application

Okayama University Students who are expected to complete the master's program or masters' course at the graduate school by September 2022.

2. Application Procedures

1) How to Apply

Applicants for advancement must bring all the "Documents Required for Application" during the acceptance hours (8:30–17:00) during the "Application Period."

(No examination fee is needed. Do not transfer it by mistake.)

Please obtain the forms for submission by requesting them by mail or distributing them over the counter at the section in charge (see page 15-16). Some of them can be downloaded from our website.

2) Application Periods

August 1, 2022 to August 2, 2022

If you submit application documents directly to the counter, the acceptance hour is as following; 8:30–17:00 during the "Application Period". (Except Saturday, Sunday, National holidays and 12:00 to 13:00 of each day)

When sending the documents by mail, they must be sent by "Registered, Express Mail". Write "Enc. Application Form for Doctoral Program of Graduate School of Natural Science and Technology" in red on the envelope and send it must arrive by the last day of the above **Application Period**.

Applicants must contact a prospective supervisor as early as possible before application to consult about research content, etc.

3) Address for Submission

Graduate School Section Academic Affairs Division
Graduate School of Natural Science and Technology
Okayama University
3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan
Phone: 086-251-8810

4) Notes on Application

- (1) No change shall be permitted after submission in terms of the contents of the submitted documents.
- (2) No document shall be returned for any reason after the application documents are accepted.
- (3) Application with incomplete application documents shall not be accepted.
- (4) Please note carefully that admission might be withdrawn even after advancement if the contents of the submitted documents are found to include false entries.

5) Documents Required for Application

| Documents Required for Application | Remarks |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 〈1〉 Application for Admission, Curriculum Vitae (CV), Admission Ticket for the Examination and Photograph | Fill out necessary items on the forms prescribed by Graduate School of Natural Science and Technology personally by the applicant. Affix a photograph (4 cm long × 3 cm wide, upper body, no headwear, facing forward, taken within the three months before application) on the prescribed space on the “Application for Admission” and the “Admission Ticket for Examination.” Before affixing, write the name of the intended major course of study and your name on the back of the photographs. |
| 〈2〉 Transcript of Graduate School | Submit a certificate issued by the master’s program (master’s course) |
| 〈3〉 Report of Research Progress | Use the form (approx. 2,000 words) prescribed by the Graduate School of Natural Science and Technology |
| 〈4〉 Research Planning Sheet | Use the form prescribed by Graduate School of Natural Science and Technology. |
| 〈5〉 Sticker of Address | Fill out the necessary items. |
| 〈6〉 Copy of Residence Card (both side) or Original copy of Residence certificate | If you are not a Japanese citizen, please submit following documents for the purpose of confirmation of nationality, name, etc. <ul style="list-style-type: none"> • A copy of both sides of the residence card or Original copy of Residence certificate (issued by the city of municipality. The status of residence and residence must be specified) |
| 〈7〉 Copy of Passport | <ul style="list-style-type: none"> • A copy of passport (the page with your name, nationality, and photo) |

6) Purpose of Use of Personal Information

Application documents submitted and personal information written on them are used for affairs related the selection of advancement.

However, regarding advancing students, we use their personal information written on the application form, including name, gender, date of birth, current address, and schools graduated from, as registry data for basic student information in the academic affairs system at Okayama University.

In addition, successful applicants’ personal information, examinee number and name (kanji/ kana), are used for the clerical systems for tuition fee debt management and tuition fee exemption at Okayama University.

When application for tuition fee exemption, or scholarships such as those of Japan Student Services Organization was made, the applicant’s entrance examination results and academic transcript might be used to handle academic ability judgment related to affairs such as tuition fee exemption.

3. Issue of Admission Ticket for Examination

Admission tickets for examination will be sent to your prospective supervisor around date stated below. Please receive it from your prospective supervisor. When hoping for mailing, please inquire to the office in charge (see page 16).

| |
|-----------------------|
| Around August 4, 2022 |
|-----------------------|

4. Methods for Screening for Advancement

Selection of advancing students shall be made in a comprehensive manner on the basis of results of an oral examination and document screening.

The oral examination will be conducted mainly concerning the applicant's progress report of research and the research plan document.

If necessary, we will present questions related to English language ability (or Japanese language ability for international students) during the oral examination.

When an applicant's ability can be fully assessed by document screening, etc., the applicant's oral examination might be omitted.

| Oral Examination Date | Place of Examination | Due date |
|-----------------------|------------------------------------------------------------------------|-----------------|
| August 22, 2022 | A prospective supervisor will notify applicants of the location later. | August 17, 2022 |

Note 1: The Oral Examination Date above might be changed after applicants are contacted.

Note 2: If no information about the date, time, or place of the oral examination has been received by the due date, please inquire to the office in charge (see page 16).

5. Announcement of Successful Applicants

Successful applicants will be announced on a bulletin board.

| Date and Time | Place of Bulletin Board |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| September 7, 2022, 10:00 a.m. | The bulletin board in front of the office of Graduate School Section, Academic Affairs Division, Graduate School of Natural Science and Technology, Okayama University (1F, Building No. 1, Faculty of Engineering) |

Note 1: The examinee numbers of successful applicants will be announced on the bulletin board. A letter of acceptance and other materials will be sent directly to successful applicants dated on the day of the announcement.

Note 2: After the announcement on the bulletin board, the examinee numbers of successful applicants will be posted on the homepage (<https://www.gnst.okayama-u.ac.jp/ja/admission/>).

Note 3: We will never under any circumstances respond to inquiries by phone, etc. concerning passing or failing the examination.

6. Admission Procedures

1) Method of Admission Procedures

Successful applicants will be accepted into the program after having completed the admission procedures.

Details will be separately informed to successful applicants later.

2) Period of Admission Procedures

The period of admission procedures has been scheduled as follows. However, successful applicants will be informed about details later.

October 2022 Entrants: September 16, 2022 to September 20, 2022

7. Other

1) Admission Fee and Tuition Fee

No Admission fee is needed.

Tuition fee: 267,900 yen (for half a year); 535,800 yen (for a year) (expected amount)

※ When the amount was revised at the time of admission or while at school, the new amount will be applied from the time of the revision.

In addition, a premium for Personal Accident Insurance for Students Pursuing Education and Research, etc. will be needed as an additional expense.

2) Study Assistance

We have many systems for study assistance: tuition fee exemptions, and scholarships.

3) Day/Evening Course System

Graduate School of Natural Science and Technology applies the special provision for educational methods (Day/Evening Course System) stipulated in Article 14 of Standards for Establishment of Graduate Schools to make it easier for students who work during class hours to take courses. We provide classes and research guidance not only during the day, but also during evenings (and Saturdays, summer and winter vacations, etc.).

4) Extended doctoral course system

This system is designed that students, who are unable to complete their course within the standard doctoral study term (3 years) due to circumstances such as work schedule, can complete a previously scheduled and extended course period over a certain period of time beyond the standard term. If you are permitted, you can complete the course by paying tuition fee of standard study term (for 3 years). Details will be announced at the entrance procedure.

5) Security Export Control Regulations of Okayama University

Okayama University has established the “Security Export Control Regulations of Okayama University” under the Security Export Control System based on the “Foreign Exchange and Foreign Trade Act (FEFTA)”, and conducts strict screening when accepting foreign students. If you are subjected to this regulation or FEFTA, you may not be accepted or your desired research activities may be restricted.

For details concerning the Security Export Control System in Japan, please refer to the following website.

<https://www.meti.go.jp/policy/anpo/englishpage.html>

6) Emergency Warning or Weather Warnings

The entrance examination day and the start time may be postponed in case of Emergency Warning or Weather Warnings. Therefore, please check the website of the Graduate School before the examination.

https://www.gnst.okayama-u.ac.jp/ja/admission/nittei_henkou/

7) How to request application documents by mail

1) Write “Request for Application Documents of Graduate School of Natural Science and Technology, Doctoral Program” in red on the envelope surface.

2) Please enclose the following things with the envelope;

- A stamped and self-addressed envelope. (Stamp:140yen, Envelope size:240mm×332mm)

- A memo written your contact (phone number and e-mail address) , name of your prospective professor who has accepted / will accept and your nationality.

3) Send the envelope with all submissions to the office in charge.

Please note that the mailing address is limited to Japan. (No shipping to foreign countries)

8) Office in charge

If there is anything unclear about application, please inquire to the office in charge below.

Graduate School Section Academic Affairs Division

Graduate School of Natural Science and Technology

Okayama University

3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan

Phone: 086-251-8810

URL of Graduate School of Natural Science and Technology:

<https://www.gnst.okayama-u.ac.jp/>

E-mail: agf8576@adm.okayama-u.ac.jp

IV. Purpose of Human Resources Development in Each Division

[Mathematics and Physics]

This division course develops pioneering researchers who can open up important subjects of research in advanced basic science and who can promote them independently with the practical ability that is supported by mathematical basic ability in natural sciences and broad knowledge of basic science and the experience of cutting-edge science research that implements it as their sustenance. We also develop researchers and engineers who have both a high level of numerical analysis capability and a deep understanding of basic concepts and who can conceive of new principles.

[Earth, Life, and Molecular Sciences]

This division conducts wide-ranging, interdisciplinary education and research on phenomena associated with the universe, the earth, and the atmosphere, structure and function of organisms, and properties of atoms and molecules and their aggregates, using experiments and theoretical methods based on substances. Through the educational and research activities, we develop personnel to become researchers, engineers, and educators who have deep knowledge and a broad view of natural sciences and possess a high level of research ability and rich creativity.

[Interdisciplinary Science]

Our mission of this division is to cultivate global scientific leaders of the next generation who have strengths in a wide range of scientific disciplines and a high level of research ability and a rich creativity in the field of interdisciplinary science.

[Industrial Innovation Sciences]

This division course of study develops researchers and core engineers for employment in industry who advance research and development through the use of advanced knowledge of mechanical and systems engineering and electronic information system engineering, with problem-seeking ability and communication skills, who have the ability to create new industries and new businesses that have put cutting-edge technology, and who are able to play an active role internationally with a wide-ranging perspective, a high degree of specialization, and problem-solving ability.

[Applied Chemistry]

Chemistry is the starting point of manufacturing. This division develops personnel who understand the properties based on the molecules that are the building blocks of substances, not only manufacturing things by engineering molecules but also opening up various functions of inorganic and organic molecules, and who further have widely various disciplines covering biological macromolecules and microorganisms. Additionally, we develop researchers, technology developers, and business creators who can play an active role internationally.

Guide to Divisions (As of April 1, 2022)

[1] Division of Mathematics and Physics

1. Department of Mathematics

| Research Areas | Subjects | Instructors |
|----------------|-----------------------------------------|--------------------------------------|
| Algebra | Theory of Representations | ISHIKAWA Masao, Professor |
| | Commutative Algebra | TERAI Naoki, Professor |
| | Model Theory | TANAKA Katsumi, Professor ☆ |
| | Rings and Categories of Modules | SUZUKI Takeshi, Associate Professor |
| | Algebraic Geometry | ITO Atsushi, Associate Professor |
| | Seminar in Algebra | Faculty Members in the Research Area |
| Geometry | Geometric Structures | KONDO Kei, Professor |
| | Geometry and Mathematical Physics | JINZENJI Masao, Professor |
| | Advanced Topics in Topology | MONDEN Naoyuki, Associate Professor |
| | Stable Homotopy Theory | TORII Takeshi, Professor |
| | Seminar in Geometry | Faculty Members in the Research Area |
| Analysis | Nonlinear Partial Differential Equation | OSHITA Yoshihito, Professor |
| | Applied Analysis | UEHARA Takato, Associate Professor |
| | Seminar in Analysis | Faculty Members in the Research Area |

A name marked with a star (☆) is scheduled for retirement as of March 31, 2023

2. Department of Physics

| Research Areas | Subjects | Instructors |
|-------------------------------------------------|------------------------------------------------------------|--------------------------------------|
| Quantum Structural Physics in Correlated Matter | Quantum Structural Physics in Correlated Matter | NOGAMI Yoshio, Professor |
| | Quantum Structural Physics in low Dimensional Materials | KONDO Ryusuke, Associate Professor |
| | Seminar in Quantum Structural Physics in Correlated Matter | Faculty Members in the Research Area |
| Quantum Physics in Correlated Matter | Magnetism in Correlated Matter | MINO Michinobu, Professor |
| | Seminar in Quantum Physics in Correlated Matter | Faculty Members in the Research Area |
| Physics in Advanced Functional Materials | Functional Correlated Electron System | IKEDA Naoshi, Professor |
| | Advanced Solid State Spectroscopy | KAMBE Takashi, Associate Professor |
| | Seminar in Physics in Advanced Functional Materials | Faculty Members in the Research Area |
| Materials Physics in Extreme Environments | Physics Under Extreme Environment | KOBAYASHI Tatsuo, Professor |
| | Low Temperature Physics in Strongly Correlated Matter | INADA Yoshihiko, Professor |
| | Low Temperature Magnetism | ARAKI Shingo, Associate Professor |
| | Seminar in Materials Physics in Extreme Environments | Faculty Members in the Research Area |
| Low Temperature Condensed Matter Physics | Superconductivity | ZHENG Guo-Qing, Professor |
| | Physical Properties of Solids in High Magnetic Fields | KAWASAKI Shinji, Associate Professor |
| | Seminar in Low Temperature Condensed Matter Physics | Faculty Members in the Research Area |
| Physics of Condensed Matter | Quantum Theory for Solid-State Spectroscopy | OKADA Kozo, Professor |
| | Seminar in Physics of Condensed Matter | Faculty Members in the Research Area |
| Astroparticle Physics | Cosmology | ISHINO Hirokazu, Professor |
| | Seminar in Astroparticle Physics | Faculty Members in the Research Area |
| High Energy Physics | High Energy Particle Physics | KOSHIO Yusuke, Associate Professor |
| | Seminar in High Energy Physics | Faculty Members in the Research Area |

3. Cooperative Course (Department of X-ray Frontier Physics)

| Research Areas | Subjects | Instructors |
|---------------------------------------|---------------------------------------------------------------------|--------------------------------------|
| Advance Synchrotron Radiation Physics | Condensed Matter Physics Using Synchrotron Radiation | MIZUMAKI Masaitiro, Guest Professor |
| | Instrumentation for Synchrotron Radiation Physics | TAMENORI Yusuke, Guest Professor |
| | Application of Condensed Matter Physics Using Synchrotron Radiation | SATO Masugu, Guest Professor |
| | Structural Physics Using Synchrotron Radiation | ISHII Kenji, Guest Professor |
| | Seminar in Advance Synchrotron Radiation Physics | Faculty Members in the Research Area |

[2] Division of Earth, Life, and Molecular Sciences

1. Department of Chemistry

| Research Areas | Subjects | Instructors |
|------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------|
| Structural Chemistry | Solid Structural Chemistry | GOTOH Kazuma, Associate Professor |
| | Seminar in Structural Chemistry | Faculty Members in the Research Area |
| Spectrochemistry | Laser Spectroscopy | TANG Jian, Professor |
| | Seminar in Spectrochemistry | Faculty Members in the Research Area |
| Synthetic and Physical Organic Chemistry | Organic Photochemistry | OKAMOTO Hideki, Associate Professor |
| | Seminar in Synthetic and Physical Organic Chemistry | Faculty Members in the Research Area |
| Inorganic Chemistry | Surface Inorganic Chemistry | OHKUBO Takahiro, Associate Professor |
| | Seminar in Inorganic Chemistry | Faculty Members in the Research Area |
| Organic Chemistry | Natural Products Chemistry | KADOTA Isao, Professor TAKAMURA Hiroyoshi, Associate Professor |
| | Seminar in Organic Chemistry | Faculty Members in the Research Area |
| Analytical Chemistry | Analytical Chemistry | KANETA Takashi, Professor TAKEYASU Nobuyuki, Associate Professor |
| | Seminar in Analytical Chemistry | Faculty Members in the Research Area |
| Organic Synthetic Chemistry | Synthetic Carbohydrate Chemistry | HANAYA Tadashi, Professor |
| | Seminar in Organic Synthetic Chemistry | Faculty Members in the Research Area |
| Nanochemistry | Advanced Nanoscience | FUJIWARA Masazumi, Associate Professor |
| | Seminar in Nanochemistry | Faculty Members in the Research Area |
| Surface Physical Chemistry | Advanced Surface Physical Chemistry | YAMAKATA Akira, Professor |
| | Seminar in Surface Physical Chemistry | Faculty Members in the Research Area |

2. Department of Biological Sciences

| Research Areas | Class Subjects | Instructors |
|-----------------------------------------|----------------------------------------------------|--------------------------------------|
| Molecular Genetics | Molecular and Developmental Genetics | NAKAGOSHI Hideki, Professor |
| | Biological Chemistry of Gene Regulation | ABO Tatsuhiko, Professor |
| | Seminar in Molecular Genetics | Faculty Members in the Research Area |
| Plant Ecology and Evolution | Evolutionary Ecology | MIMURA Makiko, Associate Professor |
| | Seminar in Plant Ecology and Evolution | Faculty Members in the Research Area |
| Neural Control of Behavior | Behavioral Neurobiology | SAKAMOTO Hirota, Associate Professor |
| | Neural Information Processing | MATSUI Teppei, Associate Professor |
| | Seminar in Neural Control of Behavior | Faculty Members in the Research Area |
| Environmental Biology and Chronobiology | Marine Genomics | HAMADA Mayuko, Associate Professor |
| | Chronoecology | YOSHII Taishi, Professor |
| | Seminar in Environmental Biology and Chronobiology | Faculty Members in the Research Area |
| Chemical Correlation and Control | Adaptational Zoology | SAKAMOTO Tatsuya, Professor |
| | Humoral Regulation of Cell Function | TAKEUCHI Sakae, Professor |
| | Endocrinology | AIZAWA Sayaka, Associate Professor |
| | Seminar in Chemical Correlation and Control | Faculty Members in the Research Area |
| Developmental Biology | Developmental Genetics | UEDA Hitoshi, Professor ☆ |
| | Plant Developmental Genetics | TAKAHASHI Taku, Professor |
| | Regeneration Biology | SATOH Akira, Associate Professor |
| | Plant Cell Biology | MOTOSE Hiroyasu, Associate Professor |
| | Seminar in Developmental Biology | Faculty Members in the Research Area |

A name marked with a star (☆) is scheduled for retirement as of March 31, 2023

3. Department of Earth System Science

| Research Areas | Subjects | Instructors |
|----------------------------------------------|---------------------------------------------------------|------------------------------------------|
| Petrology | Crustal Evolution | NAKAMURA Daisuke, Associate Professor |
| | Petrology of Fluid-Rock Interaction | NOZAKA Toshio, Associate Professor |
| | Seminar in Petrology | Faculty Members in the Research Area |
| Seismology | Earthquake Physics | TAKENAKA Hiroshi, Professor |
| | Active Tectonics | MATSUTA Nobuhisa, Professor |
| | Seminar in Seismology | Faculty Members in the Research Area |
| Geoinformatics | Seismotectonics | KUMAMOTO Takashi, Professor |
| | Seminar in Geoinformatics | Faculty Members in the Research Area |
| Physics of the Earth and Planetary Interiors | Mineral Physics | URAKAWA Satoru, Professor |
| | Material Science of Earth and Planetary Deep Interiors | TERASAKI Hidenori, Professor |
| | Paleomagnetism and Rock Magnetism | UNO Koji, Professor |
| | Seminar in Physics of the Earth and Planetary Interiors | Faculty Members in the Research Area |
| Geochemistry | Solar System Chemistry | YAMASHITA Katsuyuki, Associate Professor |
| | Carbonate Geochemistry | INOUE Mayuri, Professor |
| | Seminar in Geochemistry | Faculty Members in the Research Area |
| Atmospheric Sciences | Physical Climatology | NOZAWA Toru, Professor |
| | Earth System Dynamics and Environment | MICHIBATA Takuro, Associate Professor |
| | Seminar in Atmospheric Sciences | Faculty Members in the Research Area |
| Planetary Sciences | Science of Planetary Surface Environment | HASHIMOTO George L, Professor |
| | Seminar in Planetary Sciences | Faculty Members in the Research Area |

【 3 】 Division of Interdisciplinary Science
1 . Department of Interdisciplinary Science

| Research Areas | Subjects | Instructors | |
|---------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Mathematical Analysis | Mathematical Theory on Traveling Waves | TANIGUCHI Masaharu, Professor | |
| | Stochastic Differential Equations | TAGUCHI Dai, Associate Professor | |
| | Seminar in Mathematical Analysis | Faculty Members in the Research Area | |
| Extreme Quantum Physics | Experimental Quantum Physics | YOSHIMURA Koji, Professor | |
| | Fundamental Atomic Physics | YOSHIMI Akihiro, Associate Professor | |
| | Seminar in Extreme Quantum Physics | Faculty Members in the Research Area | |
| Physics of Quantum Universe | Atomic, Molecular, and Optical Physics | UETAKE Satoshi, Associate Professor | |
| | Seminar in Physics of Quantum Universe | Faculty Members in the Research Area | |
| Structural Biology | Structural Biology | SHEN Jian-Ren, Professor AKITA Fusamichi, Associate Professor | |
| | Structural Biochemistry | SUGA Michihiro, Professor | |
| | Seminar in Structural Biology | Faculty Members in the Research Area | |
| Coordination Chemistry | Advanced Coordination Chemistry | SUZUKI Takayoshi, Professor | |
| | Seminar in Coordination Chemistry | Faculty Members in the Research Area | |
| Quantum Physics in Condensed Matter | Advanced Quantum Condensed Matter Physics | KASAHARA Shigeru, Professor KIHARA Takumi, Associate Professor | |
| | Seminar in Quantum Physics in Condensed Matter | Faculty Members in the Research Area | |
| Physics of Solid Surfaces and Interfaces | Photoemission Spectroscopy of Solid Interfaces | YOKOYA Takayoshi, Professor | |
| | Physical Properties of Thin Films | MURAOKA Yuji, Associate Professor | |
| | Physics of Quantum Electronics | KOBAYASHI Kaya, Associate Professor | |
| | Seminar in Physics of Solid Surfaces and Interfaces | Faculty Members in the Research Area | |
| Quantum Many-Body Physics | Quantum Many-Body Physics | ICHIOKA Masanori, Professor | |
| | Physics in Strongly Correlated Electron Systems | JESCHKE Harald Olaf, Special Contract Personnel Professor (Special Appointment) OTSUKI Junya, Associate Professor | |
| | Quantum Transport Physics | ADACHI Hiroto, Associate Professor | |
| | Seminar in Quantum Many-Body Physics | Faculty Members in the Research Area | |
| Physical Chemistry of Surface and Interface | Science of Semiconductor Materials | KUBOZONO Yoshihiro, Professor | |
| | Solid Material Science | GOTO Hidenori, Associate Professor | |
| | Science of Interface Physics | EGUCHI Ritsuko, Senior Assistant Professor | |
| | Seminar in Physical Chemistry of Surface and Interface | Faculty Members in the Research Area | |
| Theoretical Physical Chemistry | Statistical Mechanics | KOGA Kenichiro, Professor SUMI Tomonari, Associate Professor | |
| | Seminar in Theoretical Physical Chemistry | Faculty Members in the Research Area | |
| Theoretical and Computational Chemistry | Advanced Molecular Simulation | SHINODA Wataru, Professor | |
| | Seminar in Theoretical Physical Chemistry | Faculty Members in the Research Area | |
| Theoretical Chemistry | Theoretical Chemistry of Condensed Matter | MATSUMOTO Masakazu, Associate Professor | |
| | Seminar in Theoretical Chemistry | Faculty Members in the Research Area | |
| Functional Organic Chemistry | Synthetic Organic Chemistry | NISHIHARA Yasushi, Professor MORI Hiroki, Assistant Professor TANAKA Kenta, Assistant Professor | |
| | | Seminar in Functional Organic Chemistry | Faculty Members in the Research Area |

【 4 】 Division of Industrial Innovation Sciences

1. Department of Computer Science

| Research Areas | Subjects | Instructors |
|---------------------------------------------------|--------------------------------------------------------------|---------------------------------------|
| Computer Engineering | Advanced Research in Computer Software | YAMAUCHI Toshihiro, Professor |
| | Advanced Research in Computer Hardware | WATANABE Minoru, Professor |
| | Software Design | NOMURA Yoshinari, Associate Professor |
| | Seminar in Computer Engineering | Faculty Members in the Research Area |
| Pattern Information Processing | Intelligent Image Information Processing | MOROOKA Ken'ichi, Professor |
| | Natural Language Processing | TAKEUCHI Koichi, Associate Professor |
| | Seminar in Pattern Information Processing | Faculty Members in the Research Area |
| Intelligent Design | Information Retrieval and Data Mining | OHTA Manabu, Professor |
| | Advanced Research in Applied Information System | GOTOH Yusuke, Associate Professor |
| | Seminar in Intelligent Design | Faculty Members in the Research Area |
| Theory of Programming and Artificial Intelligence | Network Computation Theory | TAKAHASHI Norikazu, Professor |
| | Software Analytics | MONDEN Akito, Professor |
| | Human Behavior Analysis | YÜCEL Zeynep, Associate Professor |
| | Seminar in Theory of Programming and Artificial Intelligence | Faculty Members in the Research Area |

2. Department of Information and Communication Systems

| Research Areas | Subjects | Instructors |
|---------------------------------------------|--------------------------------------------------------|-----------------------------------------|
| Mobile Communications | Mobile Communications | UEHARA Kazuhiro, Professor |
| | Mobile Radio Transmission | TOMISATO Shigeru, Associate Professor |
| | Seminar in Mobile Communications | Faculty Members in the Research Area |
| Multimedia Radio Systems | Multimedia Radio Systems | DENNO Satoshi, Professor |
| | Seminar in Multimedia Radio Systems | Faculty Members in the Research Area |
| Distributed System Design | Theory of Distributed Algorithms | FUNABIKI Nobuo, Professor |
| | Advanced Information Hiding Techniques | KURIBAYASHI Minoru, Associate Professor |
| | Seminar in Distributed System Design | Faculty Members in the Research Area |
| Optical and Electromagnetic Waves | Optical and Electromagnetic Waves and Circuits | TOYOTA Yoshitaka, Professor |
| | Digital EMC Design | TOYOTA Yoshitaka, Professor |
| | Seminar in Optical and Electromagnetic Waves | Faculty Members in the Research Area |
| Information Security | Cryptography Design | NOGAMI Yasuyuki, Professor |
| | High Reliable Communication | KUSAKA Takuya, Associate Professor |
| | Seminar in Information Security | Faculty Members in the Research Area |
| Network Systems | Network Systems | FUKUSHIMA Yukinobu, Associate Professor |
| | Seminar in Network Systems | Faculty Members in the Research Area |
| Power System and Energy Network Engineering | Advanced Energy Network Engineering | TAKAHASHI Akiko, Associate Professor |
| | Seminar in Power System and Energy Network Engineering | Faculty Members in the Research Area |

3. Department of Electrical and Electronic Engineering

| Research Areas | Subjects | Instructors |
|-----------------------------------------------------|----------------------------------------------------------------|------------------------------------------|
| Applied Superconductivity Engineering | High Tc Superconductor Engineering | KIM Seok Beom, Professor |
| | Applied Superconductivity Machinery | UEDA Hiroshi, Associate Professor |
| | Seminar in Applied Superconductivity Engineering | Faculty Members in the Research Area |
| Electric Power Conversion System Engineering | Power Quality | HIRAKI Eiji, Professor |
| | Modern Power Electronics | UMETANI Kazuhiro, Associate Professor |
| | Seminar in Electric Power Conversion System Engineering | Faculty Members in the Research Area |
| Motor System Engineering | Motor Design Engineering | TAKEMOTO Masatsugu, Professor |
| | Seminar in Motor System Engineering | Faculty Members in the Research Area |
| Electronic Control Engineering | Distributed Parameter Systems | IMAI Jun, Associate Professor |
| | Seminar in Electronic Control Engineering | Faculty Members in the Research Area |
| Microwave Circuits | Microwave Circuit Analysis | SANAGI Minoru, Associate Professor |
| | Microwave Circuit Design | SANAGI Minoru, Associate Professor |
| | Seminar in Microwave Circuits | Faculty Members in the Research Area |
| Nanodevice and Materials Engineering | Introduction to Nanotechnology for Energy Research | HAYASHI Yasuhiko, Professor |
| | Materials Properties | YAMASHITA Yoshifumi, Associate Professor |
| | Seminar in Nanodevice and Materials Engineering | Faculty Members in the Research Area |
| Multiscale Device Design | Multiscale Numerical Analysis | TSURUTA Kenji, Professor |
| | Functional Materials and Devices | TSURUTA Kenji, Professor |
| | Seminar in Multiscale Device Design | Faculty Members in the Research Area |
| Optoelectronic and Electromagnetic Wave Engineering | Photonics Device Engineering | FUKANO Hideki, Professor |
| | Wireless Power Transmission Systems | FUJIMORI Kazuhiro, Associate Professor |
| | Seminar in Optoelectronic and Electromagnetic Wave Engineering | Faculty Members in the Research Area |

4. Department of Intelligent Mechanical Systems

| Research Areas | Subjects | Instructors |
|------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------|
| Intelligent Systems Optimization | Advanced Course on Intelligent Systems Optimization | NISHI Tatsushi, Professor |
| | Environmental Safety System Engineering | SATO Haruo, Associate Professor |
| | Seminar in Intelligent Systems Optimization | Faculty Members in the Research Area |
| Intelligent Adaptive and Learning System | Construction Methodology of Robot System | MATSUNO Takayuki, Professor |
| | Seminar in Intelligent Adaptive and Learning System | Faculty Members in the Research Area |
| Intelligent System Organization and Management | Intelligent Human Interface Engineering | MURATA Atsuo, Professor |
| | Seminar in Intelligent System Organization and Management | Faculty Members in the Research Area |
| Production Intelligence | Selected Topics in Systems Management | ARIZONO Ikuo, Professor |
| | Decision Making for Production | YANAGAWA Yoshinari, Associate Professor |
| | Seminar in Production Intelligence | Faculty Members in the Research Area |
| Intelligent Mechanical Control | Intelligent Mechanical Control System | HIRATA Kentaro, Professor |
| | Intelligent Mechanical Control Elements | NAKAMURA Yukinori, Senior Assistant Professor |
| | Seminar in Intelligent Mechanical Control | Faculty Members in the Research Area |
| System Integration | Micro Sensors and Actuators | KANDA Takefumi, Professor |
| | Actuator Engineering | WAKIMOTO Shuichi, Associate Professor |
| | Seminar in System Integration | Faculty Members in the Research Area |
| Mechatronic Systems | Micro Robotics | MASHIMO Tomoaki, Professor |
| | Biological Information Systems | SHIBANOKI Taro, Associate Professor |
| | Seminar in Mechatronic Systems | Faculty Members in the Research Area |

5. Department of Advanced Mechanics

| Research Areas | Subjects | Instructors |
|----------------------------------|------------------------------------------------------------------------------|---------------------------------------------|
| Structural Materials Engineering | Prediction and Control of Microstructure and Mechanical Properties of Metals | OKAYASU Mitsuhiro, Professor |
| | Materials Analysis | TAKEMOTO Yoshito, Associate Professor |
| | Seminar in Structural Materials Engineering | Faculty Members in the Research Area |
| Applied Solid Mechanics | Solid Engineering | TADA Naoya, Professor |
| | Materials Design | UEMORI Takeshi, Associate Professor |
| | Seminar in Applied Solid Mechanics | Faculty Members in the Research Area |
| Machine Design and Tribology | Advanced Machine Design | FUJII Masahiro, Professor |
| | Applied Surface Engineering | SHIOTA Tadashi, Associate Professor |
| | Seminar in Machine Design and Tribology | Faculty Members in the Research Area |
| Nontraditional Machining | High Energy Beam Machining | OKADA Akira, Professor |
| | Nontraditional Micro-machining | OKAMOTO Yasuhiro, Associate Professor |
| | Seminar in Nontraditional Machining | Faculty Members in the Research Area |
| Manufacturing Engineering | Advanced Precision Machining Technology | OHASHI Kazuhito, Professor |
| | Advanced Manufacturing System Design Engineering | KODAMA Hiroyuki, Senior Assistant Professor |
| | Seminar in Manufacturing Engineering | Faculty Members in the Research Area |
| Fluid Dynamics | Aerospace Propulsion Engineering | KOUCHI Toshinori, Professor |
| | Turbulent Flows in Engineering | SUZUKI Hiroki, Associate Professor |
| | Seminar in Fluid Dynamics | Faculty Members in the Research Area |
| Heat Transfer Engineering | Heat Transfer of Multi-phase Flow | HORIBE Akihiko, Professor |
| | Utilization of Phase-change Phenomena | YAMADA Yutaka, Senior Assistant Professor |
| | Seminar in Heat Transfer Engineering | Faculty Members in the Research Area |
| Heat Power Engineering | Laser-aided Diagnostics | KAWAHARA Nobuyuki, Professor |
| | Special Topics in Thermal Energy | KOBASHI Yoshimitsu, Associate Professor |
| | Seminar in Heat Power Engineering | Faculty Members in the Research Area |

【 5 】 Division of Applied Chemistry
1. Department of Applied Chemistry

| Research Areas | Subjects | Instructors |
|----------------------------------------|---------------------------------------------------|----------------------------------------------|
| Inorganic Materials | Thin Films of Inorganic Materials | FUJII Tatsuo, Professor |
| | Chemistry of Functional Inorganic Materials | KANO Jun, Associate Professor |
| | Seminar in Inorganic Materials | Faculty Members in the Research Area |
| Solid State Chemistry | Ceramics Materials | KISHIMOTO Akira, Professor |
| | Energy Materials Chemistry | TERANISHI Takashi, Associate Professor |
| | Seminar in Solid State Chemistry | Faculty Members in the Research Area |
| Interface Process Engineering | Advanced Interface Design | ONO Tsutomu, Professor |
| | Seminar in Interface Process Engineering | Faculty Members in the Research Area |
| Fluid and Particle Process Engineering | Advance in Particle Characteristics | GOTOH Kuniaki, Professor |
| | Thermal Transport Phenomena | NAKASO Koichi, Associate Professor |
| | Seminar in Fluid and Particle Process Engineering | Faculty Members in the Research Area |
| Bioprocess Engineering | Design of Biocatalysts and Bioprocesses | IMAMURA Koreyoshi, Professor |
| | Interface Science and Technology for Biomaterials | ISHIDA Naoyuki, Associate Professor |
| | Seminar in Bioprocess Engineering | Faculty Members in the Research Area |
| Synthetic Process Chemistry | Green Process Chemistry | SUGA Seiji, Professor |
| | Synthetic Processes of Organic Materials | MITSUDO Koichi, Associate Professor |
| | Seminar in Synthetic Process Chemistry | Faculty Members in the Research Area |
| Organometallic Chemistry | Organometallic Chemistry | MIURA Tomoya, Professor |
| | Seminar in Organometallic Chemistry | Faculty Members in the Research Area |
| Synthetic Organic Chemistry | The Logic for Organic Synthesis | EMA Tadashi, Professor |
| | Mechanisms of Organic Reactions | TAKAISHI Kazuto, Associate Professor |
| | Seminar in Synthetic Organic Chemistry | Faculty Members in the Research Area |
| Bioorganic Chemistry | Chemistry of Biological Reactions | SAKAKURA Akira, Professor |
| | Chemistry of Natural Product Synthesis | MIZOGUCHI Haruki, Associate Professor |
| | Seminar in Bioorganic Chemistry | Faculty Members in the Research Area |
| Heteroatom Chemistry | Organic Electron Transfer Chemistry | KUROBOSHI Manabu, Associate Professor |
| | Seminar in Heteroatom Chemistry | Faculty Members in the Research Area |
| Industrial Catalysis | Chemistry of Homogeneous Catalysts | OSHIKI Toshiyuki, Senior Assistant Professor |
| | Seminar in Industrial Catalysis | Faculty Members in the Research Area |
| Polymeric Materials | Physical Properties of Polymers | UCHIDA Tetsuya, Associate Professor |
| | Fundamentals of Polymer Solid Materials | OKIHARA Takumi, Senior Assistant Professor |
| | Seminar in Polymeric Materials | Faculty Members in the Research Area |
| Functional Molecular Engineering | Molecular Technology | NISHINA Yuta, Associate Professor |
| | Seminar in Functional Molecular Engineering | Faculty Members in the Research Area |