Student Handbook

2023

Graduate School of Integrated
Sciences for Life

HIROSHIMA　UNIVERSITY

Academic Calendar and School Hours

1 Academic Calendar

First Semester	Spring Holiday	April 1 to April 7
	Classes	April 8 to August 10
	Summer Holiday	August 11 to September 30
Second Semester	Classes	October 1 to December 25
	University Foundation Day	November 5 (has classes)
	Winter Holiday	December 26 to January 5
	Classes	January 6 to February 15
	End-of-Academic-Year Holiday	February 16 to March 31

(Note)

At Hiroshima University, we employ a quarter system, under which an academic year consists of a first term (the first half of the first semester), a second term (the second half of the first semester), a third term (the first half of the second semester), and fourth term (the second half of the second semester).

The periods described above are based on Hiroshima University's general regulations, and there are cases where class schedules are not in line with the periods. For your class schedules, please check each year's academic calendar released on Student Information Momiji.

2 Periods of Class Time in the Daytime

Period	1	2	3	4	5	6	7	8	9	10
Time	8:45 ▽ 9:30	9:30 ▽ 10:15	10:30 ▽ 11:15	11:15 ▽ 12:00	12:50 ▽ 13:35	13:35 ▽ 14:20	14:35 ▽ 15:20	15:20 ▽ 16:05	16:20 ▽ 17:05	17:05 ▽ 17:50

Period	11	12	13	14
Time	18:00 ▽ 18:45	18:45 ▽ 19:30	19:40 ▽ 20:25	20:25 ▽ 21:10

Contents

Guiding Principles

- The Pursuit of Peace
  To develop intellectual attitudes which always seek peaceful solutions to the problems affecting society and the world at large.
- The Creation of New Forms of Knowledge
  To evolve new systems of study which surpass existing frontiers of knowledge and encourage intellectual innovation.
- The Nurturing of Well-Rounded Human Beings
  To train graduates with well-developed and multifaceted personalities by means of an education which has breadth as well as depth.
- Collaboration with the Local, Regional, and International Community
  To create a university with a strong international awareness which can efficiently disseminate knowledge on a worldwide scale, in collaboration with local and regional communities.
- Continuous Self-Development
  To maintain a constant readiness to re-examine established ways of acting, and a constant openness to improvement and innovation.

Graduate School of Integrated Sciences for Life
Background and Purpose of Establishment

With the disciplines of biology and life sciences seeing rapid development and innovative changes, Hiroshima University's existing graduate education system, which provides curriculums that focus on specific narrow academic fields, is insufficient in fostering human resources who have the capability to create innovation through a flexible, multidisciplinary approach.

Now that we have entered a post-genome age, there is a growing demand for talents who have deep expertise and understanding in a wide range of fields, from the basics to applications, that include genomics, biofunctional science, biology, geoenvironmental science, mathematical and life science, and medical science. In other words, it is expected of us to develop human resources who have a keen interest in other academic disciplines and the ability to play an active role in interdisciplinary and integrated research fields, and who have the ability to promptly adapt to ever-changing and developing biological and life science research areas – including genomics, brain and neurological sciences, food science, ecosystem/environmental science, and medical science – and to solve various challenges facing global society.

With this as a backdrop, Hiroshima University will establish the Graduate School of Integrated Sciences for Life as an educational and research organization that meets increasingly diversified social needs, by organically reorganizing and integrating the existing biology- and life science-related departments.

The mission of the Graduate School of Integrated Sciences for Life is to equip students with deep knowledge and expertise based on a holistic perspective, which enables an organic link of increasingly fragmented areas of biology and life sciences within the fields of science, engineering, agriculture and medicine. To educate all the biology and life science students of Hiroshima University under the same academic vision, the Graduate School features a single division (Division of Integrated Sciences for Life).

Graduate School of Integrated Sciences for Life Human Resource Development Goals

The Graduate School of Integrated Sciences for Life aims to produce researchers, educators and highly skilled professionals who have the abilities to promptly adapt to ever-changing and developing biological and life science research areas and create innovation through a flexible, multidisciplinary approach; who have deep expertise and understanding in a wide range of fields, from the basics to applications; and who can solve various challenges facing global society.

Hiroshima University Charter

Hiroshima University is a national research university established in 1949 in Hiroshima, which is the first atomic-bomb stricken city in the history of humankind.

Hiroshima University's mission is to contribute to the well-being of humankind by realizing a free and peaceful society based on the following five guiding principles: The Pursuit of Peace; The Creation of New Forms of Knowledge; The Nurturing of Well-Rounded Human Beings; Collaboration with the Local, Regional and International Community; and Continuous Self-Development.

1. Respect for human rights

In all its activities, Hiroshima University will not tolerate discrimination or harassment of any kind in relation to ethnicity, nationality, religion, belief, gender, economic or social status, or disability, and will respect and protect the human rights and individuality of each person.

2. Education

Hiroshima University will create an environment in which each student can learn independently and flexibly, while nurturing individuals with a rich sense of humanity, broad education, excellent specialized knowledge, and the ability to discover and solve problems on their own, who will contribute to the realization of a society that enables free and peaceful sustainable development.

3. Research

Hiroshima University will strive for an in-depth search for the truth and the creation of new knowledge through advanced and innovative research based on the free thinking of its researchers, and will share the fruits of such endeavors with the wider community, in order to continuously create innovations to solve the problems faced by the local, national and international communities.

4. Social Contributions

As a university aspiring to be open to and trusted by society, Hiroshima University is determined to contribute to local and international society by actively publicizing its activities, securing cooperation and collaboration with local communities, industry and other organizations concerned, and engaging itself in all activities including education, research, and medical care.

5. Realization of a sustainable society

Hiroshima University, as a university engaged in world-class activities for the realization of a sustainable society, will strive to lead the world in providing cutting-edge solutions to global issues such as poverty, conflict, the suppression of human rights, infectious diseases, and environmental, resource and energy problems.

The members of Hiroshima University will take pride in their work, reflect tirelessly on the role expected of them by the nation and the world, and continue to fulfill each member's mission by fully demonstrating his/her individuality and abilities, while ensuring full compliance and showing mutual trust and respect.

(Enacted on December 27, 2021)

Hiroshima University Code of Conduct

As a national research university established in Hiroshima, Hiroshima University is committed to fulfilling its mission of contributing to the well-being of humankind by realizing a free and peaceful society, and at the same time, it is required to be highly ethical, transparent and fully accountable for its activities. In order to live up to this responsibility, the University has established the “Hiroshima University Code of Conduct” as a guideline that all members should always be aware of and follow.

1. Respect for human rights and diversity

We will respect the human rights and personality of each individual, will not tolerate discrimination or harassment of any kind, and will realize a campus where all members can fully demonstrate their individuality and abilities.

2. Upholding independence and autonomy

While giving due consideration to social norms, ethics, and the integrity of our individual activities, we will uphold academic freedom and the autonomy and independence of education and research. We will aspire to conduct and develop research and education that are of the highest international standard, and return the fruits of such research and education to society.

3. Compliance with laws and regulations

In our activities as members of Hiroshima University, we will comply with social norms and rules, relevant laws and regulations, and university regulations.

4. Disclosure/Protection of Information

In order to fulfill our accountability to society in a transparent and fair manner, we will disclose to society the content and results of our activities and other information held by the University in a timely and appropriate manner, and will hold ourselves to high ethical standards in the use of that information, as well as in the protection of personal information.

5. Information Management

In order to ascertain the value of Hiroshima University's information assets and to ensure their safety and reliability, we shall fully recognize the threats to information security, and shall manage and operate information appropriately in accordance with our respective duties.

6. Appropriate management of expenses and assets

We will manage and use the university’s expenses and assets in an appropriate and efficient manner, always being aware that most of the expenses and assets for our activities come from taxes and other forms of social support.

7. Maintenance of a safe and secure environment

We will raise awareness of safety in the conduct of our operation and provide a safe, secure and comfortable environment for education, study, research and work.

8. Addressing environmental issues

We will take the initiative in addressing global environmental issues such as climate change, large-scale disasters, environmental pollution, and resource and energy problems, to hand over a stable environment to future generations.

(Enacted on December 27, 2021)

Diploma Policy

【The Graduate School of Integrated Sciences for Life (Master's Course)】

The Graduate School of Integrated Sciences for Life aims to foster human resources equipped with deep understanding and expertise, from the basics to application, in the areas of study related to biology and life sciences, and capable of creating "science that can guide sustainable development" based on the broad and deep general education acquired and by flexibly working in close collaboration with other fields of study. Moreover, we are dedicated to helping students develop applied and practical skills required to solve real-life problems by offering education to enhance their global perspective and awareness of social implementation.

The Graduate School of Integrated Sciences for Life will confer an applicable degree – Master of Science, Master of Engineering, Master of Agriculture or Master of Philosophy – on those who have acquired the following abilities, earned the required number of credits, and passed the screening of their master's thesis and the final examination or Qualifying Examination conducted by the Graduate School.

1. A student must have acquired research skills and expertise in basic biology, mathematical science, molecular science, biofunctional science, environmental science, bioresource science, biological production science, food science, biotechnology, medical science and other related fields, as well as in integrated fields.
2. A student must have acquired a high degree of specialist knowledge in the above-mentioned areas of study and an appropriate understanding of different disciplines, from the basics to applications; applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges.
3. A student must have acquired a rich and broad general knowledge and have strong eagerness to create "science that can guide sustainable development."
4. A student must have an appropriate understanding of scientific theories and research ethics, information dissemination capabilities, and international and interdisciplinary communication skills; he/she can be expected to take full advantage of his/her specialized knowledge and interdisciplinary capabilities and play an active role in Japan and abroad as a researcher, highly specialized professional, or educator equipped with a high level of awareness of how to link academic disciplines with practical expertise necessary in the real world.

【The Graduate School of Integrated Sciences for Life (Doctoral Course)】

The Graduate School of Integrated Sciences for Life aims to foster human resources equipped with deep understanding and expertise, from the basics to application, in the areas of study related to biology and life sciences, and capable of creating "science that can guide sustainable development" based on the broad and deep general education acquired and by flexibly working in close collaboration with other fields of study. Moreover, we are dedicated to helping students develop practical problem-identifying and problem-solving capabilities by offering education to enhance their global perspective and awareness of social implementation.

The Graduate School of Integrated Sciences for Life will confer an applicable degree – Doctor of

Philosophy in Science, Doctor of Philosophy in Engineering, Doctor of Philosophy in Agriculture or Doctor of Philosophy – on those who have acquired the following abilities, earned the required number of credits, received research guidance, and passed the screening of their doctoral thesis and final examination conducted by the Graduate School.

1. A student must have acquired high-level research skills and expertise in basic biology, mathematical science, molecular science, biofunctional science, environmental science, bioresource science, biological production science, food science, biotechnology, medical science and surrounding fields, as well as in integrated fields. Students are also required to have the ability to disseminate their research findings inside and outside of Japan.
2. A student must have acquired a high degree of specialist knowledge in the above-mentioned areas of study; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through an interdisciplinary approach.
3. A student must have acquired a rich and broad general knowledge and have strong eagerness to create "science that can guide sustainable development."
4. A student must have an appropriate understanding of scientific theories and professional research ethics, information dissemination capabilities, and high-level international/interdisciplinary communication skills, and can be expected to play an active role independently in Japan and abroad as a researcher, highly specialized professional or educator equipped with a high level of specialized knowledge, an interdisciplinary perspective and practical expertise necessary in the real world.

【Program of Biotechnology (Master's Course)】

In the Program of Biotechnology, we will award either a Master of Engineering or a Master of Philosophy as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. Research skills and specialized skills in biotechnology with advanced bioscience as the base;
2. A high degree of specialist knowledge in biotechnology and advanced sciences of matter, the applied skills and practical expertise required to integrate and link these two different fields, and the ability to identify challenges; and
3. An appropriate understanding of the scientific theories and communication skills required to play an active role in Japan and abroad as a highly specialized professional or a researcher.

【Program of Biotechnology (Doctoral Course)】

In the Program of Biotechnology, we will award any of a Doctor of Philosophy in Engineering, a Doctor of Philosophy in Science, or a Doctor of Philosophy, according to the student's major research themes and specialized areas, as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final

examination:

1. A high degree of specialized knowledge, highly advanced research skills and specialized skills in biotechnology with advanced bioscience as the base, and the ability to internationally disseminate their research findings;
2. An interdisciplinary perspective and practical abilities, from the basics to applications in the area of biotechnology, and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach; and
3. The higher-order scientific thinking skills and practical expertise required to contribute to the international community or the betterment of life for humanity.

【Program of Food and AgriLife Science (Master's Course)】

In the Program of Food and AgriLife Science, we will award either a Master of Agriculture or a Master of Philosophy, according to the student's major research themes and specialized areas, as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. Broad specialized knowledge of the uncovering and utilization of food and biological functions;
2. A high degree of specialist knowledge and skills in the area of food and agrilife science and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges;
3. A high standard of ethics as a scientist or engineer in pursuing research in the area of specialization; and
4. The abilities required to present research findings at academic conferences in Japan and abroad as a researcher or a highly specialized professional, as well as the skills required to write a paper and deliver a presentation.

【Program of Food and AgriLife Science (Doctoral Course)】

In the Program of Food and AgriLife Science, we will award either a Doctor of Philosophy in Agriculture or a Doctor of Philosophy, according to the student's major research themes and specialized areas, as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A broad specialized knowledge required to undertake research independently to uncover food and biological functions and utilize them;
2. A high degree of specialist knowledge and skills in the area of food and agrilife science; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach;
3. The ability to appropriately understand issues in the area of specialization, design a scientific

solution for such an issue, and carry out research;
4. The ability to compile a report on research results based on logical and ethical thought, and effectively present such a report using high-level communication skills; and
5. The skills, as an independent researcher or highly specialized professional, to present research results at academic conferences in Japan and abroad or in academic journals and the ability to write for academic journals.

【Program of Bioresource Science (Master's Course)】

In the Program of Bioresource Science, we will award either of a Master of Agriculture or a Master of Philosophy, according to the student's major research themes and specialized areas, as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. Broad specialized knowledge of sustainable biological production and the utilization of biological resources in the terrestrial and aquatic biospheres;
2. A high degree of specialist knowledge and skills in the area of bioresource science and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges;
3. A high standard of ethics as a scientist or engineer in pursuing research in the area of specialization; and
4. The abilities required to present research results at academic conferences in Japan and abroad as a researcher or a highly specialized professional, as well as the skills to write a paper and deliver a presentation.

【Program of Bioresource Science (Doctoral Course)】

In the Program of Bioresource Science, we will award either a Doctor of Philosophy in Agriculture or a Doctor of Philosophy, according to the student's major research themes and specialized areas, as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A broad specialized knowledge required to undertake research independently on sustainable biological production and the utilization of biological resources in the terrestrial and aquatic biospheres;
2. A high degree of specialist knowledge and skills in the area of bioresource science; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach;
3. The ability to appropriately understand issues in the area of specialization, design a scientific solution to such an issue, and carry out research;
4. The ability to compile a report on research results based on logical and ethical thought, and

effectively present such a report using high-level communication skills; and
5. The skills, as an independent researcher or a highly specialized professional, to present research results at academic conferences in Japan and abroad or in academic journals and the ability to write for academic journals.

【Program of Life and Environmental Sciences (Master's Course)】

In the Program of Life and Environmental Sciences, we will award either a Master of Philosophy or a Master of Agriculture, according to the student's major research themes and specialized areas, as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. Specialized knowledge and skills on matters relating to life science and environmental science—micro systems (molecules, genomes, etc.), complex systems (the brain, symbiosis, etc.), and macro systems (the environment, ecosystems, etc.) in particular;
2. A high degree of expertise in life science and environmental science and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges; and
3. The ability to contribute to the "knowledge-based society" of the 21st century through a holistic approach—from an interdisciplinary, comprehensive and creative perspective—based on a high level of understanding and insight into life science and environmental science.

【Program of Life and Environmental Sciences (Doctoral Course)】

In the Program of Life and Environmental Sciences, we will award either a Doctor of Philosophy or a Doctor of Philosophy in Agriculture, according to the student's major research themes and specialized areas, as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A high degree of specialized knowledge and skills in matters relating to life science and environmental science—micro systems (molecules, genomes, etc.), complex systems (brain, symbiosis, etc.), and macro systems (the environment, ecosystems, etc.) in particular—and the ability to carry out research independently;
2. A high degree of expertise in life science and environmental science; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach; and
3. The ability to play a leadership role in the "knowledge-based society" of the 21st century through a holistic approach—from an interdisciplinary, comprehensive and creative perspective—based on a high level of understanding and insight into life science and environmental science.

【Program of Basic Biology (Master's Course)】

In the Program of Basic Biology, we will award either a Master of Science or a Master of Philosophy as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. Specialized knowledge, research skills and specialized skills in the field of basic biology.
2. A high degree of expertise in basic biology and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges; and
3. An appropriate understanding of the scientific theories, and communication and presentation skills required to play an active role in Japan and abroad as a highly specialized professional or a researcher.

【Program of Basic Biology (Doctoral Course)】

In the Program of Basic Biology, we will award either a Doctor of Philosophy in Science or a Doctor of Philosophy as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A high degree of specialized knowledge, research skills and specialized skills in the field of basic biology;
2. A high degree of expertise in the field of basic biology; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach;
3. The ability to internationally disseminate academic achievements in the field of basic biology; and
4. An appropriate understanding of scientific theories, a high level of communication and presentation skills, and the higher-order scientific thinking skills and practical expertise required to contribute to the international community.

【Program of Mathematical and Life Sciences (Master's Course)】

In the Program of Mathematical and Life Sciences, we will award either a Master of Science or a Master of Philosophy as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. A broad knowledge of mathematical science, molecular science and life science, and the creative capability, research skills and high level of expertise required to develop a field that integrates these areas of study;

2. A high degree of specialist knowledge and skills in the field of mathematical and life sciences and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges;
3. Applied skills and practical skills in mathematical science, molecular science and life science, or in integrated fields; and
4. An appropriate understanding of the scientific theories and the communication skills required to play an active role in Japan and abroad as a highly specialized professional or a researcher.

【Program of Mathematical and Life Sciences (Doctoral Course)】

In the Program of Mathematical and Life Sciences, we will award either a Doctor of Philosophy in Science or a Doctor of Philosophy as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A broad knowledge of mathematical science, molecular science and life science, and the creative capability and research skills required to carry out research independently in a field that integrates these areas of study;
2. A high degree of specialist knowledge and expertise in the field of mathematical and life sciences; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach;
3. The international perspective, interdisciplinary knowledge, and high degree of expertise required to develop mathematical science, molecular science, life science, or integrated fields; and the ability to internationally disseminate academic achievements; and
4. An appropriate understanding of scientific theories and the communication skills required to play an active role in Japan and abroad as a highly specialized professional or a researcher.

【Program of Biomedical Science (Master's Course)】

In the Program of Biomedical Science, we will award either of a Master of Science or a Master of Philosophy as a master's degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, have passed the screening of their master's thesis or research results based on certain criteria, and have passed the final examination or the qualifying examination for research in the doctoral course:

1. A broad knowledge of life science, medical science and the surrounding fields and applied skills, as well as the ability to perform analyses and evaluations;
2. Research skills and a high degree of expertise in these areas of specialization; and
3. A high degree of specialist knowledge and skills in the field of biomedical science and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges.

【Program of Biomedical Science (Doctoral Course)】

In the Program of Biomedical Science, we will award either a Doctor of Philosophy in Science or a Doctor of Philosophy as a doctoral degree to students who have acquired the capabilities described below, have earned the required number of credits, have conducted research activities under research guidance, and have passed the doctor's thesis screening and the final examination:

1. A broad knowledge of life science, medical science and the surrounding fields and applied skills, as well as the ability to perform analyses and evaluations;
2. Interdisciplinary knowledge from an international perspective and the skills and high-level expertise required to carry out research independently in the fields of life science and medical science; and
3. A high degree of specialist knowledge and skills in the field of biomedical science; an interdisciplinary perspective and practical abilities, from the basics to applications; and the ability to identify challenges and solve them through a comprehensive and interdisciplinary approach.

Curriculum Policy

【The Graduate School of Integrated Sciences for Life (Master's Course)】

The Graduate School of Integrated Sciences for Life designs and implements curriculums under the policy below to ensure that students can achieve the goals stated in its Diploma Policy.

1. Common courses for the Graduate School will be established to help students acquire a deep and broad education, increase their eagerness to create "science that can guide sustainable development", and develop an integrative capability that is essential to pursue research in the areas of study related to biology and life sciences.
2. Specialized courses for each degree-granting program will be established to develop students' specialist knowledge and capabilities required to complete the program.
3. Students will receive multiple kinds of research guidance by one main supervisor and two or more sub-supervisors, at least one of whom must be from a different specialized area as that of the main supervisor. Faculty members from other graduate schools of Hiroshima University or other universities may serve as sub-supervisors.
4. Students will promote their understanding of different areas of study and interdisciplinary knowledge by taking other degree-granting courses or integrated courses. Students will also be allowed to take courses provided by other graduate schools of Hiroshima University or other universities.
5. Students will gain skills to make presentations at international academic conferences, thereby developing international communication ability.
6. An interdisciplinary master thesis interim presentation system will be established to help students apply their information dissemination capabilities to other fields and enhance their understanding of other fields.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【The Graduate School of Integrated Sciences for Life (Doctoral Course)】

The Graduate School of Integrated Sciences for Life designs and implements curriculums under the policy below to ensure that students can achieve the goals stated in its Diploma Policy.

1. Common courses for the Graduate School will be established to help students acquire a deep and broad education, increase their willingness to create "science that can guide sustainable development", and develop practical expertise necessary in society and a sense of professional research ethics.
2. Specialized courses for each degree-granting program will be established to develop students' specialist knowledge and capabilities required to complete the program.
3. Students will receive multiple kinds of research guidance by one main supervisor and two or more sub-supervisors, at least one of whom must be from a different specialized area as

that of the main supervisor. Sub-supervisors can be chosen from among faculty members of other graduate schools of Hiroshima University and researchers of other research institutes in Japan and abroad.

4. To promote their understanding of different areas of study and disciplinary knowledge, students will participate in cutting-edge research programs or research activity conducted by research institutes to which their sub-supervisors belong.
5. To enhance their practical expertise necessary in society, students will work as a research assistant in other research institutes in Japan and abroad.
6. To acquire international communication ability, students will provide assistance in presentations delivered at international conferences.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Biotechnology (Master's Course)】

The Program of Biotechnology designs and implements curriculums under the policy below.

1. We will provide education designed to help students deepen their expertise in the field of biotechnology and develop the applied skills and practical expertise required to integrate cutting-edge knowledge in different fields.
2. We will establish basic interdisciplinary courses that cover the fields of advanced bioscience and advanced sciences of matter, in addition to biotechnology courses.
3. We will provide education designed to help students develop a high level of communication skills, so that they can play an active role as a highly specialized professional or researcher on the global stage.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Biotechnology (Doctoral Course)】

The Program of Biotechnology designs and implements curriculums under the policy below.

1. We will provide education designed to help students develop a high degree of combined knowledge in the field of biotechnology.
2. We will equip students with a high degree of research skills and a broad perspective in the field of biotechnology with advanced bioscience as the base, through lectures offered by multiple faculty members and their independent and creative research activities.
3. We will equip students with a high level of communication skills and other abilities required

to internationally disseminate their academic achievements and play a leadership role on the global stage.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Food and AgriLife Science (Master's Course)】

The Program of Food and AgriLife Science designs and implements curriculums under the policy below.

1. We will establish courses designed to help students develop a high degree of specialized knowledge and specialized skills concerning the uncovering and utilization of food and biological functions.
2. We will establish courses designed to help students develop the abilities required to resolve issues related to the uncovering and utilization of food and biological functions.
3. We will establish courses that enable various students to study a broad range of biosphere science.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results in academic and research conferences in Japan and abroad, and write academic papers, including a master's thesis.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Food and AgriLife Science (Doctoral Course)】

The Program of Food and AgriLife Science designs and implements curriculums under the policy below.

1. We equip students with knowledge concerning the uncovering and utilization of food and biological functions, and a high level of research skills and expertise based on ethics.
2. We will equip students with the abilities required to resolve issues related to the uncovering and utilization of food and biological functions.
3. We will equip students with the ability to independently design a research project, implement it and sum up the research results, and the ability to carry out research on their own initiative.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results in academic and

research conferences in Japan and abroad, and write academic papers, including a doctoral thesis.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Bioresource Science (Master's Course)】

The Program of Bioresource Science designs and implements curriculums under the policy below.

1. We will establish courses designed to help students develop knowledge concerning life phenomena related to the production and utilization of biological resources in the terrestrial and aquatic biospheres, as well as research skills and practical expertise based on ethics.
2. We will establish courses designed to help students develop the abilities required to resolve issues related to the utilization of biological resources and the production of food resources.
3. We will establish courses designed to help students develop knowledge of a broad range of biosphere science related to the maintenance of biological diversity and the preservation of the biosphere environment, as well as research skills and practical expertise.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results at academic and research conferences in Japan and abroad, and write academic papers, including a doctoral thesis.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Bioresource Science (Doctoral Course)】

The Program of Bioresource Science designs and implements curriculums under the policy below.

1. We will equip students with knowledge concerning life phenomena related to the production and utilization of biological resources in the terrestrial and aquatic biospheres, as well as a high level of research skills and practical expertise based on ethics.
2. We will equip students with the abilities required to resolve issues related to the utilization of biological resources and the production of food resources.
3. We will equip students with knowledge of a broad range of biosphere science related to the maintenance of biological diversity and the preservation of the biosphere environment, as well as a high level of research skills and practical expertise.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results at academic and

research conferences in Japan and abroad, and write academic papers, including a doctoral thesis.

【Program of Life and Environmental Sciences (Master's Course)】

The Program of Life and Environmental Sciences designs and implements curriculums under the policy below.

1. We will establish courses designed to help students develop the ability to take an integrated approach to life science.
2. We will establish courses designed to help students deepen their knowledge of specific areas in the fields of life science and environmental science and, at the same time, acquire a broad range of knowledge in those fields.
3. We will equip students, through research guidance by multiple faculty members, with the ability to use their research skills and practical expertise to verify matters related to life and environmental sciences from an integrated perspective.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Life and Environmental Sciences (Doctoral Course)】

The Program of Life and Environmental Sciences designs and implements curriculums under the policy below.

1. We will establish courses designed to help students develop the ability to take an integrated approach to life science.
2. We will establish courses designed to help students deepen their knowledge of specific areas in the fields of life science and environmental science and, at the same time, acquire a broad range of knowledge in those fields.
3. We will equip students, through research guidance by multiple faculty members including at least one from a different specialized area, with the ability to effectively use their research skills and practical expertise to verify matters related to life and environmental sciences from an integrated perspective.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Basic Biology (Master's Course)】

The Program of Basic Biology designs and implements curriculums under the policy below.

1. We will establish specialized courses related to basic biology to nurture students who have knowledge of basic biology, as well as research skills and practical expertise.
2. We will foster students with a high level of ability to carry out research by providing seminars and research guidance.
3. We will actively send students to academic and research conferences in Japan and abroad, and establish courses to develop presentation skills.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Basic Biology (Doctoral Course)】

The Program of Basic Biology designs and implements curriculums under the policy below.

1. We will establish specialized courses related to basic biology to nurture students who have a high level of interdisciplinary knowledge of basic biology, as well as research skills and practical expertise.
2. We will equip students with a high level of research skills and a broad perspective, through research activities that the students conduct based on their creative ideas and on their own initiative, discussions with faculty members and research collaborators, and research guidance by multiple faculty members.
3. We will foster students with a high level of ability to carry out research by providing seminars and research guidance.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results in academic and research conferences in Japan and abroad, and write academic papers, including a doctoral thesis.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Mathematical and Life Sciences (Master's Course)】

The Program of Mathematical and Life Sciences designs and implements curriculums under the policy below.

1. We will establish specialized courses for mathematical science, molecular science, life science and integrated fields, to nurture students who have specialized knowledge, research

skills and practical expertise in these fields.

2. We will nurture students with excellent practical abilities, through seminars and experimental and theoretical studies related to mathematical science, molecular science, life science and integrated fields.
3. We will establish courses designed to help students acquire international communication skills by actively sending them to academic and research conferences in Japan and abroad.
4. We will provide education to instill in students a positive attitude toward bettering themselves throughout their lifetimes so they can pursue peace with a global mindset, and respond proactively on their own initiative.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Mathematical and Life Sciences (Doctoral Course)】

The Program of Mathematical and Life Sciences designs and implements curriculums under the policy below.

1. We will establish specialized courses for mathematical science, molecular science, life science and integrated fields, to nurture students who have specialized knowledge, research skills and practical expertise in these fields.
2. We will equip students with the ability to independently carry out research in mathematical science, molecular science, life science, or integrated fields, as well as a high level of practical expertise.
3. We will equip students with a high level of research skills and a broad perspective, through research activities that students conduct based on their creative ideas and on their own initiative, discussions with faculty members and research collaborators, and research guidance by multiple faculty members.
4. We will equip students with the ability to internationally disseminate their research results by providing them with opportunities to present their research results at academic and research conferences in Japan and abroad, and write academic papers, including a doctoral thesis.
5. We will provide education to instill in students a positive attitude toward bettering themselves throughout their lifetimes so that they can pursue peace with a global mindset, and respond proactively on their own initiative.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Biomedical Science (Master's Course)】

The Program of Biomedical Science designs and implements curriculums under the policy below.

1. We will help students further develop the abilities they have acquired through undergraduate education in life science and medical science, and acquire research skills and practical expertise in life science, medical science and the surrounding fields.
2. We will foster personnel who can play a leadership role in life science and medical science in the future by offering systematic education in interdisciplinary life sciences* from the perspective of the wellness and longevity of humanity.
3. We will foster personnel who can better themselves throughout their lives to pursue the wellness and longevity of humanity from a global perspective.

* Interdisciplinary life sciences include medicine, dentistry, pharmacy, science, engineering and agriculture.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

【Program of Biomedical Science (Doctoral Course)】

The Program of Biomedical Science designs and implements curriculums under the policy below.

1. We will equip students with interdisciplinary knowledge based on a global perspective, the ability to carry out research independently in life science, medical science and the surrounding fields, and highly advanced practical expertise.
2. We will foster personnel who can play a leadership role in life science and medical science in the future by offering systematic education in interdisciplinary life sciences* from the perspective of the wellness and longevity of humanity.
3. We will foster personnel who can better themselves throughout their lives to pursue the wellness and longevity of humanity from a global perspective.

In the curriculum described above, teaching and learning will be implemented by utilizing active learning and online classes, depending on the delivery methods of each program, such as lectures and seminars.

In regards to grading, the standards are clearly outlined in the syllabus, and strict grading is conducted. Thesis defenses will be conducted in accordance with the standards established by each graduate school.

* Interdisciplinary life sciences include medicine, dentistry, pharmacy, science, engineering and agriculture.

Hiroshima University Graduate School of Integrated Sciences for Life
Decision Criteria for Awarding Degrees and Evaluation Standards for Degree Theses

【Master's Courses】

At the Graduate School of Integrated Sciences for Life of Hiroshima University, we shall award an applicable degree—Master of Science, Master of Engineering, Master of Agriculture, or Master of Philosophy—to those who are deemed eligible after the screening process for the master's degree based on the decision criteria below.

(Decision Criteria for Awarding Degrees)

1. In accordance with the Diploma Policy, those who will earn a master's degree shall have acquired deep understanding and expertise, from the basics to application, in the areas of study related to biology and life sciences; the capability to create "science that can guide sustainable development" based on the broad and deep general education acquired and by flexibly working in close collaboration with other fields of study; and the applied and practical skills required to solve real-life problems from a global perspective and with an awareness of social implementation.
2. Those who will earn a master's degree shall have met the "Evaluation Standards for Degree Theses" below.
3. Those who will earn a master's degree shall give a research presentation suitable for academic pursuits to a presentation session/screening committee meeting in their fields of specialization, and respond logically and coherently to questions concerning their research.
4. The procedure for submitting a thesis for a master's degree is set forth separately.

(Evaluation Standards for Degree Theses)

Thesis Evaluation Points

1. Whether or not the student has completed research ethics education (standard program) and has carried out his/her research appropriately in full consideration of research ethics
2. Whether or not the student has acquired sufficient knowledge as a master's degree holder in the relevant research area and has obtained the ability to identify problems clearly and solve them
3. Whether or not the student's research theme is appropriate for the degree for which he/she has applied, and whether or not he/she was clearly aware of relevant problems when writing the thesis
4. Whether or not the thesis description (e.g., main text, figures, tables, quotations) are sufficient and appropriate, and whether or not the thesis has consistency in terms of logical composition from beginning to end
5. Whether or not the student adopted an appropriate research method, survey/experimentation method, and demonstration method when researching his/her theme, and included specific analysis/discussion based on such methods
6. Whether or not the thesis has its own value from a theoretical or empirical point of view in the relevant research field

【Doctoral Courses】

At the Graduate School of Integrated Sciences for Life of Hiroshima University, we shall award an applicable degree—Doctor of Philosophy in Science, Doctor of Philosophy in Engineering, Doctor of Philosophy in Agriculture, or Doctor of Philosophy—to those who are deemed eligible after the screening process for the master's degree based on the decision criteria below.

(Decision Criteria for Awarding Degrees)

1. In accordance with the Diploma Policy, those who will earn a doctoral degree shall have acquired deep understanding and expertise, from the basics to application, in the areas of study related to biology and life sciences; the capability to create "science that can guide sustainable development" based on the broad and deep general education acquired and by flexibly working in close collaboration with other fields of study; and the applied and practical skills required to solve real-life problems from a global perspective and with an awareness of social implementation.
2. Those who will earn a doctoral degree shall have met the "Evaluation Standards for Degree Theses" below.
3. Those who will earn a doctoral degree shall give a research presentation suitable for academic pursuits to a presentation session/screening committee meeting in their fields of specialization, and respond logically and coherently to questions concerning their research.
4. The procedure for submitting a thesis for a doctoral degree is set forth separately.

(Evaluation Standards for Degree Theses)

Thesis Evaluation Points

1. Whether or not the student has completed research ethics education (standard program) and has carried out his/her research appropriately in full consideration of research ethics
2. Whether or not the student has acquired sufficient knowledge as a doctoral degree holder in the relevant research area and has obtained the ability to identify problems clearly and solve them
3. Whether or not the student's research theme is appropriate for the degree for which he/she has applied, and whether or not he/she was clearly aware of relevant problems when writing the thesis
4. Whether or not the thesis description (e.g., main text, figures, tables, quotations) are sufficient and appropriate, whether or not the thesis has consistency in terms of logical composition from beginning to end, and whether or not the thesis forms a definite conclusion
5. Whether or not the student adopted an appropriate research method, survey/experimentation method, and demonstration method when researching his/her theme, and included specific analysis/discussion based on such methods
6. Whether or not the thesis has its own value from a theoretical or empirical point of view in the relevant research field, by international academic standards, and from an interdisciplinary perspective

Standards for Degree Titles Conferred by the Graduate School of Integrated Sciences for Life, Hiroshima University

Amended by the Board of Representatives on November 30, 2021

A doctoral degree (Doctor of Philosophy in Science) is conferred on a student whose research theme and area of specialization is mathematical science, molecular science, life science or an area peripheral to those areas, and who has achieved outstanding research results mainly from a scientific point of view.

A doctoral degree (Doctor of Philosophy in Engineering) is conferred on a student whose research theme and area of specialization is biotechnology based on life science, and who has achieved outstanding research results mainly from a bioengineering point of view.

A doctoral degree (Doctor of Philosophy in Agriculture) is conferred on a student whose research theme and area of specialization is related to food science, bioresource science, or environmental science, and who has achieved outstanding research results mainly from an agricultural point of view.

A doctoral degree (Doctor of Philosophy) is conferred on a student whose research theme and area of specialization is life science or a related field, and who has conducted excellent research mainly from an interdisciplinary point of view.

A master's degree (Master of Science) is conferred on a student whose research theme and area of specialization is mathematical science, molecular science, life science or an area peripheral to those areas, and who has achieved research results mainly from a scientific point of view.

A master's degree (Master of Engineering) is conferred on a student whose research theme and area of specialization is biotechnology based on life science, and who has achieved research results mainly from a bioengineering point of view.

A master's degree (Master of Agriculture) is conferred on a student whose research theme and area of specialization is related to food science, bioresource science, or environmental science, and who has achieved research results mainly from an agricultural point of view.

A master's degree (Master of Philosophy) is conferred on a student whose research theme and area of specialization is life science or a related field, and who has conducted research mainly from an interdisciplinary point of view.

Common Matters

Master's Courses
Doctoral Courses

1. Hiroshima University By-laws of the Graduate School of Integrated Sciences for Life

(Approved by the Dean of the Graduate School on April 1, 2019)

Hiroshima University By-laws of the Graduate School of Integrated Sciences for Life

(Aim)

Article 1: These By-laws prescribe necessary matters for the studying of students of the Hiroshima University Graduate School of Integrated Sciences for Life (hereinafter referred to as the "Graduate School"), in addition to the provisions of the Hiroshima University Graduate School Regulations (January 15, 2008, Regulation No. 2; hereinafter referred to as the "Graduate School Regulations").

(Education and Research Purposes)

Article 2: The Graduate School aims to produce researchers, educators and highly skilled professionals who have the abilities to promptly adapt to ever-changing and developing biological and life science research areas, and create innovation through a flexible, multidisciplinary approach; who have deep expertise and understanding in a wide range of fields, from the basics to applications; and who can solve various challenges facing global society. To solve various challenges facing global society by creating "science that can guide sustainable development" in research areas related to biology and life sciences through a flexible, multidisciplinary approach, students are expected to acquire the following abilities:

(1) Research skills and specialized skills in basic biology, mathematical science, molecular science, biofunctional science, environmental science, bioresource science, biological production science, food science, biotechnology, medical science and other related fields, as well as in interdisciplinary and integrated fields of science

(2) A high degree of specialist knowledge in the abovementioned areas of study and an appropriate understanding of different disciplines, from the basics to applications; the applied skills and practical expertise required to integrate and link different fields; and the ability to identify challenges

(3) An appropriate understanding of scientific theories and research ethics, information dissemination capabilities, and international/interdisciplinary communication skills

(Degree Programs)

Article 3: The degree programs listed in the following items shall be established under the Graduate School of Integrated Sciences for Life:

(1) Program of Biotechnology
(2) Program of Food and AgriLife Science
(3) Program of Bioresource Science
(4) Program of Life and Environmental Sciences
(5) Program of Basic Biology
(6) Program of Mathematical and Life Sciences
(7) Program of Biomedical Science

2. Students shall major in one of the degree programs listed in the preceding paragraph.

(Curricula)

Article 4: The curricula of the Graduate School shall be as specified in Appended Table 1.

(Class Subjects, etc.)

Article 5: Class subjects that are provided at the Graduate School and their numbers of credits shall be as specified in Appended Table 2.

2. The class timetable shall be published at the beginning of each academic year.

(Calculation Standards for the Number of Credits)

Article 6: The number of credits of each class subject shall be calculated based on the following standards:

(1) For lectures, 15 hours of classwork constitute one credit;

(2) For seminars, 15 or 30 hours of classwork constitute one credit; and
(3) For experiments and practical exercises, 30 or 45 hours of classwork constitute one credit.

2. For class subjects provided in two or more modes in parallel, the number of hours of classwork to be conducted in each mode shall be determined in light of the standards specified above, and so that 45 hours of combined classwork constitute one (1) credit.

(Registration Procedure)

Article 7: Students shall select class subjects in consultation with their supervisor, obtain approval from the faculty members in charge of the class subjects, and complete the prescribed procedures to register for the class subjects within the period designated for each semester.

2. Students who fail to complete the procedure as stated in the preceding paragraph shall not be allowed to take class subjects unless there are legitimate circumstances, in which case the students may take class subjects upon obtaining approval from the faculty members in charge of the class subjects concerned.
3. Students may take class subjects offered by other Hiroshima University graduate schools that are deemed necessary by their supervisor, in accordance with the rules of the graduate school concerned.
4. Students of other graduate schools wishing to register for class subjects offered by the Graduate School must complete the prescribed procedure within the designated period for each semester upon obtaining approval from the faculty members in charge of the class subjects concerned.

(Supervisor/Deputy supervisors)

Article 8: Upon students' enrollment in the Graduate School, the Faculty Council of the Graduate School of Integrated Sciences for Life, Hiroshima University ("Faculty Council"), shall promptly assign to each student a supervisor and two or more deputy supervisors, who will offer advice and guidance on class subjects and research. The deputy supervisors must include at least one faculty member whose specialized field is different from that of the supervisor, and may be chosen, as the need arises, from teaching faculty members of other Hiroshima University graduate schools or other universities' graduate schools.

2. Students wishing to change their supervisor or deputy supervisors shall obtain approval from the relevant supervisor/deputy supervisor before applying to and obtaining approval from the Dean of the Graduate School. However, they can directly apply to the Dean of the Graduate School in special circumstances.

(Research Title)

Article 9: Students must promptly decide their research title in consultation with their supervisor after their enrollment in the Graduate School, and submit it to the Dean of the Graduate School.

(Special Arrangements of the Education Method)

Article 10: Special arrangements may be made to facilitate the pursuance of education at the Graduate School, if the Dean of the Graduate School considers it especially necessary from an educational standpoint following deliberations by the Faculty Council, by scheduling classes or research guidance sessions in the evening, at specific hours, or during a specific period, or devising other appropriate measures.

2. The handling of such special arrangements of the education method shall be prescribed separately.

(Long-term Completion of Curricula)

Article 11: The treatment of long-term completion of curricula shall be in accordance with the Hiroshima University By-Laws on the Treatment of Long-term Completion of Curricula (approved by the Vice President [Education/Student] on April 1, 2004).

2. The maximum period of long-term completion of curricula shall be four years in the master's courses and six years in the doctoral courses.

(Recognition of Credits Acquired Prior to Admission)

Article 12: The Graduate School may, if it considers it to be beneficial from an educational standpoint, recognize credits that students have acquired by completing class subjects at other graduate schools in Japan or overseas (including credits acquired as credited auditors) prior to their admission to the Graduate School as credits earned by completing class subjects at the

Graduate School.

2. The number of credits other than those acquired at the Graduate School (including credits acquired as credited auditors) that may be recognized as credits earned by completing class subjects at the Graduate School pursuant to the provision of the preceding paragraph shall not exceed 10 credits, except in cases of transfer.
3. The recognition of credits acquired prior to admission to the Graduate School as prescribed in the preceding two paragraphs shall be determined in accordance with the Hiroshima University By-Laws Regarding Approval of Previously Acquired Credits (approved by the Vice President [Education/Student] on April 1, 2004).

(Teaching License)

Article 13: Students who have acquired the necessary credits by completing the class subjects prescribed in the Education Personnel Certification Act (Act No. 147 of 1949) and the Education Personnel Certification Act Enforcement Regulations (Ordinance of the Ministry of Education No. 26 of 1954) are eligible to obtain teacher's licenses of the types and subjects indicated in the table below.

Type of License	License Subjects
Advanced level teaching certificate for upper secondary school	Mathematics, science, informatics and engineering
Advanced level teaching certificate for lower secondary school	Mathematics and science

2. The class subjects and their registration procedure in the preceding paragraph shall be prescribed separately.

(Requirements for Completing Master's Courses)

Article 14: To complete a master's course, students need to be enrolled in the course for at least two years, obtain 30 credits or more by completing the class subjects specified in Appended Table 1, receive necessary research guidance, submit a master's thesis during the enrollment period, and pass the screening of the thesis and final examination, with the exception of students whom the Dean of the Graduate School recognizes as having achieved outstanding academic performance following deliberations by the Faculty Council, who may be exempt from the enrollment requirement and may complete the course in one year at least.

2. Notwithstanding the preceding paragraph, students enrolled in the WISE Program as stipulated in Article 25-2, paragraph 1 of the Graduate School Regulations, or student enrolled in the Graduate School Leader Education Program as stipulated in Article 25-3, paragraph 1 of the Graduate School Regulations, may replace the requirements of the successful thesis screening and final examination with the following:
   (1) An examination of advanced specialized knowledge and skills in the student's area of specialization and basic knowledge and understanding in related areas that must be acquired or cultivated in the master's course concerned; and
   (2) A screening of the ability that is required of the student to proactively conduct research leading to a doctoral thesis, and that must be acquired in the master's course concerned.

(Requirements for Completing Doctoral Courses)

Article 15: To complete a doctoral course, students need to be enrolled in the course for at least three years, obtain 20 credits or more by completing the class subjects specified in Appended Table 2, receive necessary research guidance, submit a doctoral thesis during the enrollment period, and pass the screening of the thesis and final examination, with the exception of students whom the Dean of the Graduate School recognizes as having achieved outstanding research results following deliberations by the Faculty Council, for whom an enrollment duration of one year at least shall suffice (for students who completed a Master's Program in less than two years, a total enrollment duration of three years at least).

(Submission of Thesis)

Article 16: Upon approval of their supervisor and deputy supervisors, students in the master's courses must submit a Notification of Master's Thesis Title and their master's thesis to the Dean

of the Graduate School by the date specified separately.

Article 17: Upon approval of their supervisor and deputy supervisors, students in the doctoral courses must submit their doctoral thesis to the Dean of the Graduate School by the date specified separately.

(Thesis Screening)

Article 18: Theses submitted as part of the requirements for academic degrees shall be screened pursuant to the provisions of the Hiroshima University Degree Regulations (Regulations No. 8 of April 1, 2004) and the Internal Regulations of the Graduate School of Integrated Sciences for Life based on the Hiroshima University Degree Regulations (approved by the Dean of the Graduate School on April 1, 2019).

(Final Examination)

Article 19: The final examinations for the master's and doctoral courses shall be taken by students who have obtained required credits, received necessary the research guidance, and submitted their prescribed thesis.

2. The date and method of final examination shall be announced in advance.

(Leave of Absence)

Article 20: Students wishing to take a leave of absence must complete the prescribed procedure and obtain approval from the Dean of the Graduate School.

(Withdrawal)

Article 21: Students wishing to withdraw from the university must complete the prescribed procedure and obtain approval from the President of the University.

(Transfer)

Article 22: Students wishing to transfer to another graduate school must complete the prescribed procedure and apply to the President of the University.

(Re-admission)

Article 23: Students who discontinue their studies in the master's or doctoral course and wish to apply for re-admission to the course may apply to the President of the University only at the beginning of an academic year, following deliberations by the Faculty Council. The year of study and the number of years that students re-admitted to the Graduate School may remain in their respective courses shall be prescribed separately.

(Change in Diploma Programs)

Article 24: Students wishing to change their diploma programs must obtain approval from the Dean of the Graduate School following deliberations by the Faculty Council.

(Miscellaneous Regulations)

Article 25: Any necessary matters relevant to education in the Graduate School not stipulated in these By-laws shall be determined separately following deliberations by the Faculty Council.

Supplementary Provisions

These By-laws shall come into force on April 1, 2019.

2. Class Registration Procedure

Please complete the following procedure in line with the By-laws of the Graduate School of Integrated Sciences for Life, Hiroshima University (Article 7).

(1) Class Registration Procedure

① For your class registration, please complete the necessary procedure through My Momiji, using an on-campus or off-campus PC.

My Momiji is a personal online page which you can access via the Student Information Network Momiji, the online portal for Hiroshima University's students.

②Student Information Network Momiji: https://momiji.hiroshima-u.ac.jp/momiji-top/en/index.shtml

If you cannot register for classes through My Momiji due to some reason, please contact the support office in charge of your program (e.g. support office in charge of your master's/doctoral course).

(2) Class Registration Period

① In principle, you need to complete your class registration within one week from the first class-day of each semester or each term.

② For the specific schedule, please check the Student Information Network Momiji.

③ In principle, you cannot register for classes or change your registration after the class registration period.

④ There are cases where schools and graduate schools set their own class registration periods for intensive lectures and other programs. In these cases, please check relevant notices on My Momiji or contact the support office of the relevant school or graduate school (e.g. support office in charge of the relevant master's/doctoral course).

⑤ Other information related to class registration is provided through My Momiji or other means.

* My Momiji

Since information from the university to students is provided through My Momiji, please be sure to log in to My Momiji and check it at least once a day. If My Momiji does not work properly, however, necessary information is posted on your graduate school's bulletin board. In addition, important information is also posted on the bulletin board.

Please ensure that you are free from any disadvantage caused by your failure to check My Momiji or your graduate school's bulletin board.

3. Research Ethics Education

In August 2014, the "Guidelines for Responding to Misconduct in Research" were adopted by the Ministry of Education, Culture, Sports, Science and Technology. In AY 2015, Hiroshima University made it mandatory for faculty members engaged in research activities to receive research ethics education accordingly.

In addition, the "Outline of the 3rd Graduate School Education Promotion Measures" (decided by the Ministry of Education, Culture, Sports, Science and Technology in March 2016) requires universities to make greater efforts to provide research ethics education and improve their systems for supervising and examining doctoral theses, in order to ensure that students are fully aware of the norms regarding research ethics and to secure the international credibility of doctoral degrees granted by the universities. In line with this, Hiroshima University has introduced "Research Ethics Education for Students."
At the Graduate School of Integrated Sciences for Life, we provide Research Ethics Education for Students as follows:

Overview of Research Ethics Education for Students

① **Research Ethics Education: "Graduate School Students—Basic"**

(Master's Courses)

Schedule : Compulsory subject "Research Methods in Life Science" for students in the first year (Offered for three terms)
* This subject requires students to receive a series of four lectures on research ethics necessary to fulfill their social responsibility.
Target participants : All new students
Method : Lecture style
Language : Distributed handouts in Japanese and English are used.
Attendance check : Students' attendance is confirmed during the lecture.

(Doctoral Courses)

Schedule : When a research ethics seminar is held as part of an orientation session for new students (held twice a year, in April or October, according to the timing of new students' admission)
Target participants : All new students (See the item "Other" below; students from Hiroshima University master's courses are exempted.)
Method : Lecture style (Slides prepared by the Graduate School and DVDs prepared by the Academic Affairs Office are used as teaching materials for basic matters concerning research ethics.)
Language : Distributed handouts in Japanese and English are used.
Attendance check : Students' attendance is confirmed during the lecture.
Other:

Other: (1) Japanese students who cannot take the lecture above due to unavoidable circumstances (e.g., students in full time employment) and international students may take the relevant eAPRIN e-learning course.[1]
Students from a master's course of Hiroshima University who have already received research ethics education (Graduate School Students—Basic) when enrolling in the master's course will be exempted from receiving this lecture.

[1] For the eAPRIN e-learning course that serves as a substitute for "Graduate School Students—Basic," students must take three units of "Responsible Conduct of Research," "Research Misconduct," and "Handling of Data" from the field titled "Responsible Conduct of Research—Basics (RCR)."

② Research Ethics Education (Graduate School Students—Advanced (M), Advanced (D))

Schedule: Prior to the start of master's or doctoral thesis preparation
(By October of the year of completion for students who complete their course in March of that year, and by April of the year of completion for students who complete their course in September of that year)

Implementation unit: In principle, this subject is implemented on a laboratory basis. (It can be implemented in multiple laboratories.)

Person providing research ethics education: In principle, this subject is provided by supervisors/deputy supervisors.

Method: Discussion style (discussion style using Section. IV of the text offered by the JSPS "For the Sound Development of Science"*[2])

Language: Japanese, English

Attendance check: Students' attendance is confirmed by the "certificate of attendance" (signed by the faculty member).

Certificate of attendance: The person providing research ethics education should submit a "certificate of attendance" to the Management Support Office responsible for the program to which the students belong (e.g., the office responsible for the graduate course)*[3] immediately after conducting the course.

Other:Students who cannot take this discussion-style research ethics education (e.g., students in full-time employment) should take the relevant eAPRIN e-learning course*[4] after obtaining the consent of their supervisors/deputy supervisors.

The course should be taken at the time of [Advanced (M)] in the master's course and [Advanced (D)] in the doctoral course, respectively.

Confirmation of students' attendance status in research ethics education

Students and their supervisors/deputy supervisors can check the students' history of attending research ethics education from the student information in "My Momiji." "Student Status-Student Status Information/Information on Licenses, Qualifications and Research Ethics"

<Contact Information>

Program of **Biotechnology**:
Support Branch Office for the fields of Science (responsible for student support)

Program of **Food and AgriLife Science**, Program of **Bioresource Science**:
Support Office for the fields of Biosphere Science / Managing Support Office for the Graduate School of Integrated Sciences for Life (responsible for the graduate course)

Program of **Life and Environmental Sciences**:
Support Office for the fields of Integrated Arts and Sciences (responsible for the graduate course)

Program of **Basic Biology**, Program of **Mathematical and Life Sciences**, Program of **Biomedical Science**: Support Office for the fields of Science (responsible for the graduate course)

*[2] After the faculty and students carefully read Section. IV of the text offered by the JSPS "For the Sound Development of Science," students will give a summary and the faculty will ask questions on the content of the summary explained by the students, and the fraud issues mentioned in the text, the issues related to the relevant field, and general issues will be discussed.

*[3] Please note that the office to which the certificate should be submitted differs depending on the program the students belong to.

*[4] For the eAPRIN e-learning course that serves as a substitute for "Graduate School Students—Advanced (M), Advanced (D)," students must take one unit of "Responsible Authorship" from the field titled "Responsible Conduct of Research—Basics (RCR/Science and Technology)."

4. Graduate Skill Up Subjects

The following subjects are offered at Hiroshima University Graduate School as subjects that all graduate students can take to improve their skills.
In principle, check the syllabus and registration subjects by using "My Momiji".

<Courses opened in AY2023>

Subjects	No. of Credits	Establishment department
Pre Academic English II	2	Institute for Foreign Language Research and Education
Academic Writing I	2	
Academic Presentation I	2	
Advanced English II	2	
Curriculum Development for Chinese Language Education I	1	
Curriculum Development for Chinese Language Education II	1	
Curriculum Development for Chinese Language Education III	1	
Curriculum Development for Chinese Language Education IV	1	
Advanced seminar on English Rhetoric & Writing for Scientific Papers	2	Writing Center
English Rhetoric & Writing Scientific Papers I	1	
Principles and Methods of Academic Writing for Prospective College Teachers	2	
Academic Writing for Research Papers	2	
Pedagogical Approaches in Academic Writing in English	1	
Critical Reading of English Text	2	
Independent Learning of Academic English and Disciplinary Literacies	1	
Career management course by female researchers	1	Headquarters for Education
Progress of Studies and Development of Society	2	Center for Academic Practice and Resources
AIOPs Lab A	1	Education and Research Center for Artificial Intelligence and Data Innovation
AIOPs Lab B	1	
Internship	2	

*Some courses may not be offered depending on the academic year.
*Please use "My Momiji" to check the syllabus and complete course registration procedures.

5. Common Graduate Courses

Graduate Schools of Hiroshima University offer the graduate students the Common Graduate Courses which are designed to develop their broad perspective and interest in society and awareness of problems and deepen their consideration of how each specialized field can contribute as "sciences leading to sustainable development".
Additionally, the courses help them grasp the latest developments in the social system and acquire the basic knowledge to play an active part in modern society.
All graduate students are required to take at least one (1) credit from each of subject types, “Sustainable Development Courses” and “Career Development and Data Literacy Courses”.

〈Subject Type and Educational Goals〉

◆Sustainable Development Courses
To understand the Sustainable Development Goals (SDGs), which are agreed internationally and to acquire the ability to create sciences which lead to sustainable development and to solve various challenges in society.
◆Career Development and Data Literacy Courses
To learn about the development of current social systems and to gain knowledge necessary for the future era and to specifically tackle the challenges of modern society and to acquire the ability to use the knowledge and skills necessary in the future era.

〈Course List（AY2023）〉

1.For the master’s course and professional degree course

Subject Type	Subjects	No. of credits	Subjects available in English
Sustainable Development Courses	World Peace and HIROSHIMA	1	○
	Japanese Experience of Social Development - Economy, Infrastructure, and Peace	1	○
	Japanese Experience of Human Development - Culture, Education, and Health	1	○
	Academic approach to SDGs - A	1	
	Academic approach to SDGs - B	1	○
	Understanding diversity and Inclusion	1	
	Practical Approach to SDGs	1	
	Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1	○
Career Development and Data Literacy Courses	Data Literacy	1	○
	Data Literacy in Medicine	1	○
	Career Management - Theory & Career Development	2	○
	Career Management for Engineers	2	
	Stress Management	2	
	Introduction to MOT	1	○
	Information security	1	○
	Entrepreneurship	1	
	Introduction to Informatics I	1	
	Introduction to Informatics II	1	
	Introduction to Basic Science Researcher	1	

2.For the doctoral course

Subject Type	Subjects	No. of credits	Subjects available in English
Sustainable Development Courses	SDGs Ideas Mining Seminar for Specialists	1	○
	Regional development seminar from the viewpoint of the SDGs	1	○
	Seeking Universal Peace	1	○
	Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1	○
Career Development and Data Literacy Courses	Data Science	2	
	Pattern Recognition and Machine Learning	2	
	Pathway to becoming a Data Scientist	1	
	Utilization of Data Literacy in Medicine	1	○
	Skills and Arts of Leadership	1	○
	Career Management for Highly Skilled Innovators	1	
	Innovation Practice	2	○
	Long-term internship	2	○
	Introduction to business creation	1	○

※Some of the Common Graduate Courses are offered on demand in order to provide opportunities for students who have difficulty attending school to take the courses. For the details, please check Momiji Top（https://momiji.hiroshima-u.ac.jp/momiji-top/en/learning/cgcinfo_e.html） or contact Education Promotion Group (Liberal Arts).

Master's Course

6. Courses and Requirements for Completion

Attached Table

Program of Biotechnology (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	14 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Biotechnology)		Seminar in Biotechnology	1st - 2nd	2	
			Exercises in Biotechnology A	1st	2	
			Exercises in Biotechnology B	1st	2	
			Research for Academic Degree Dissertation in Biotechnology	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Biotechnology)		Integrated Genome Science A	1st or 2nd	2	6 credits or more
			Integrated Genome Science B	1st or 2nd	2	
			Cell Function Science A	1st or 2nd	2	
			Cell Function Science B	1st or 2nd	2	
			Life Science and Gene Technology A	1st or 2nd	2	
			Life Science and Gene Technology B	1st or 2nd	2	
			Environmental Biotechnology A	1st or 2nd	2	
			Environmental Biotechnology B	1st or 2nd	2	
			Integrated Science & Engineering for Nano Bio Materials	1st or 2nd	2	
			Multifunctional Sensing Techniques	1st or 2nd	2	
			Introduction to Life Science	1st or 2nd	2	
			Introduction to Physics and Material Science	1st or 2nd	2	
			Introduction of the Electronics	1st or 2nd	2	
Optional	Specialized Subjects in program (Biotechnology)		Current Topics in Biotechnology A	1st or 2nd	1	
			Current Topics in Biotechnology B	1st or 2nd	1	
			Current Topics in Biotechnology C	1st or 2nd	1	
			Current Topics in Biotechnology D	1st or 2nd	1	

○Curriculum

1. Required Courses
- ●Common Subjects in GSISL* 4 Credits
- ●Specialized Subjects in program 10 Credits

2. Elective Courses
- ●Common Graduate Subjects
  - Sustainable Development Subjects 1 Credit or more
  - Career Development and Data Literacy Subjects 1 Credit or more
- ●Common Subjects in GSISL* 2 Credits or more
- ●Specialized Subjects in program 6 Credits or more

3. Cognate Courses
- ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more

(Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses 14 Credits
   Elective Courses 10 Credits or more
   Cognate Courses 6 Credits or more
   Total **30 Credits or more**
2. Research Instruction
   Must receive the required research instruction
3. Master's Thesis
   Must pass a final examination and screening for master's thesis
   or
   Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE)

*GSISL: The Graduate School of Integrated Sciences for Life

NOTE: Optional Courses cannot be counted as the credits required for completion listed above. "Current Topics in Biotechnology A-D"can be counted as the credits required for application of Specialized Teacher's Certificate.

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum.

1st or 2nd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Food and AgriLife Science (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	○Curriculum **1.** Required Courses ●Common Subjects in GSISL* 4 Credits ●Specialized Subjects in Program 8 Credits **2.** Elective Courses ●Common Graduate Subjects Sustainable Development Subjects 1 Credit or more Career Development and Data Literacy Subjects 1 Credit or more ●Common Subjects in GSISL* 2 Credits or more ●Specialized Subjects in Program 8 Credits or more **3.** Cognate Courses ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more (Must take other than Optional Courses. Optional Courses cannot be counted as the credits required for completion. Should register for the courses after discussion with the academic supervisors.) ○Requirements for Completion 1. Required Courses 12 Credits Elective Courses 12 Credits or more Cognate Courses 6 Credits or more **Total** **30 Credits or more** 2. Research Instruction Must receive the required research instruction 3. Master's Thesis Must pass a final examination and screening for master's thesis or Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE) *GSISL: The Graduate School of Integrated Sciences for Life
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Food and AgriLife Science)		Exercises in Food andAgriLife Science A	1st	2	
			Exercises in Food andAgriLife Science B	1st	2	
			Research for Academic Degree Dissertation in Food andAgriLife Science	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	
			Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Food and AgriLife Science)		Food Physical Chemistry and Food Engineering I	1st or 2nd	2	
			Food Physical Chemistry and Food Engineering II	1st or 2nd	2	
			Bioactive Natural Products Chemistry I	1st or 2nd	2	
			Bioactive Natural Products Chemistry II	1st or 2nd	2	
			Microbiology for Food Safety I	1st or 2nd	2	
			Microbiology for Food Safety II	1st or 2nd	1	
			Animal Life Science	1st or 2nd	2	
			Assisted Reproductive Technology for Animal Production	1st or 2nd	1	
			Molecular Genetics for Animal Production	1st or 2nd	1	
			Nutrition and Food Functions I	1st or 2nd	2	
			Nutrition and Food Functions II	1st or 2nd	2	
			Applied Molecular Cell Biology I	1st or 2nd	2	
			Applied Molecular Cell Biology II	1st or 2nd	2	
			Food Resource Economics I	1st or 2nd	2	
			Food Resource Economics II	1st or 2nd	2	
			Applied Environmental Life Science	1st or 2nd	2	
			Interdisciplinary Seminar A	1st or 2nd	2	
			Brewing Science and Technology	1st or 2nd	2	
			Applied Plant Science	1st or 2nd	2	

12 credits

1 credit or more

1 credit or more

2 credits or more

8 credits or more

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum. (No registration is required.)

1st or 2nd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Bioresource Science (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	12 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Bioresource Science)		Exercises in Bioresource Science A	1st	2	
			Exercises in Bioresource Science B	1st	2	
			Research for Academic Degree Dissertation in Bioresource Science	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Bioresource Science)		Fish Biology and Fisheries I	1st or 2nd	2	8 credits or more
			Fish Biology and Fisheries II	1st or 2nd	2	
			Aquqtic Zoology	1st or 2nd	2	
			Sustainable Production of Fisheries Resources	1st or 2nd	1	
			Aquatic Ecology	1st or 2nd	2	
			Sustainable Marine Environment	1st or 2nd	2	
			Fisheries Oceanography I	1st or 2nd	2	
			Fisheries Oceanography II	1st or 2nd	2	
			Plant Production Science I	1st or 2nd	2	
			Plant Production Science II	1st or 2nd	2	
			Animal Production Science I	1st or 2nd	2	
			Animal Production Science II	1st or 2nd	2	
			Animal Nutrition and Physiology	1st or 2nd	2	
			Smart Livestock Farming	1st or 2nd	1	
			Terrestrial Field Science	1st or 2nd	2	
			Interdisciplinary Seminar A	1st or 2nd	2	
			Animal Life Science	1st or 2nd	2	
			Atmospheric Hydrosphere Chemistry	1st or 2nd	2	
			Environmental Plant Sciences and Symbiotic Microbiology	1st or 2nd	2	
			Ecosystem Ecology	1st or 2nd	2	

○Curriculum

1. Required Courses
- ●Common Subjects in GSISL* 4 Credits
- ●Specialized Subjects in program 8 Credits

2. Elective Courses
- ●Common Graduate Subjects
  - Sustainable Development Subjects 1 Credit or more
  - Career Development and Data Literacy Subjects 1 Credit or more
- ●Common Subjects in GSISL* 2 Credits or more
- ●Specialized Subjects in program 8 Credits or more

3. Cognate Courses
- ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more

(Must take other than Optional Courses. Optional Courses cannot be counted as the credits required for completion. Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses 12 Credits
   Elective Courses 12 Credits or more
   Cognate Courses 6 Credits or more
   Total **30 Credits or more**

2. Research Instruction
   Must receive the required research instruction

3. Master's Thesis
   Must pass a final examination and screening for master's thesis
   or
   Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE)

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum. (No registration is required.)

1st or 2nd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Life and Environmental Sciences (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	○Curriculum **1.** Required Courses ●Common Subjects in GSIS* 4 Credits ●Specialized Subjects in program 10 Credits **2.** Elective Courses ●Common Graduate Subjects Sustainable Development Subjects 1 Credit or more Career Development and Data Literacy Subjects 1 Credit or more ●Common Subjects in GSISL* 2 Credits or more ●Specialized Subjects in program 6 Credits or more **3.** Cognate Courses ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more (Must take other than Optional Courses. Optional Courses cannot be counted as the credits required for completion. Should register for the courses after discussion with the academic supervisors.) ○Requirements for Completion 1. Required Courses 14 Credits Elective Courses 10 Credits or more Cognate Courses 6 Credits or more **Total** **30 Credits or more** 2. Research Instruction Must receive the required research instruction 3. Master's Thesis Must pass a final examination and screening for master's thesis or Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE) *GSISL: The Graduate School of Integrated Sciences for Life	14 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Life and Environmental Sciences)		Seminar in Integrated Arts and Sciences	1st or 2nd	2	
			Exercises in Life and Environmental Sciences A	1st	2	
			Exercises in Life and Environmental Sciences B	1st	2	
			Research for Academic Degree Dissertation in Life and Environmental Sciences	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development-Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Life and Environmental Sciences)		Introduction to Integrated Arts and Sciences	1st or 2nd	2	6 credits or more
			Environmental and Materials Chemistry	1st or 2nd	2	
			Functional Biochemistry	1st or 2nd	2	
			Advanced Molecular and Cellular Neurobiology	1st or 2nd	2	
			Evolutional and Environmental Life Science	1st or 2nd	2	
			Atmospheric Hydrosphere Chemistry	1st or 2nd	2	
			Environmental Plant Sciences and Symbiotic Microbiology	1st or 2nd	2	
			Biodiversity Science (Basic Studies for Environmental Sciences)	1st or 2nd	2	
			Ecosystem Ecology	1st or 2nd	2	
			Plant Production Science I	1st or 2nd	2	
			Plant Production Science II	1st or 2nd	2	

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum.

1st or 2nd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Basic Biology (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	14 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Basic Biology)		Seminar for Advanced Research in Basic Biology A	1st	1	
			Seminar for Advanced Research in Basic Biology B	1st	1	
			Exercises in Basic Biology A	1st	2	
			Exercises in Basic Biology B	1st	2	
			Research for Academic Degree Dissertation in Basic Biology	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development-Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Basic Biology)		Cellular Life Science (※)	1st or 2nd	2	4 credits or more
			Cell Dynamics and Genomics (※)	1st or 2nd	2	
			Natural History Sciences (※)	1st or 2nd	2	
			Molecular Physiology (※)	1st or 2nd	2	
			Special Lecture on Basic Biology(※)	1st or 2nd	1(note)	
			Seminar for Advanced Research in Basic Biology C	2nd	1	6 credits or more
			Seminar for Advanced Research in Basic Biology D	2nd	1	

○Curriculum

1. Required Courses
- ●Common Subjects in GSISL* 4 Credits
- ●Specialized Subjects in program 10 Credits

2. Elective Courses
- ●Common Graduate Subjects
  - Sustainable Development Subjects 1 Credit or more
  - Career Development and Data Literacy Subjects 1 Credit or more
- ●Common Subjects in GSISL* 2 Credits or more
- ●Specialized Subjects in program 6 Credits or more

(Must take 4 or more credits from the subjects marked with ※.)

3. Cognate Courses
- ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more

(Must take other than Optional Courses. Optional Courses cannot be counted as the credits required for completion. Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses	14 Credits
Elective Courses	10 Credits or more
Cognate Courses	6 Credits or more
Total	**30 Credits or more**

2. Research Instruction
Must receive the required research instruction

3. Master's Thesis
Must pass a final examination and screening for master's thesis
or
Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE)

*GSISL: The Graduate School of Integrated Sciences for Life

NOTE: Up to 2 credits of "Special Lecture on Basic Biology" are accepted as Requirements for Completion of Specialized Subjects in program.

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum.

1st or 2nd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Mathematical and Life Sciences (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	12 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects in program (Mathematical and Life Sciences)		Introduction to Applied Mathematics and Computational Science	1st	2	
			Introduction to Life Science	1st	2	
			Research for Academic Degree Dissertation in Mathematical and Life Sciences	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts -Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Mathematical and Life Sciences)		Exercises in Applied Mathematics and Computational Science A	1st	2	4 credits
			Exercises in Applied Mathematics and Computational Science B	1st	2	
			Exercises in Life Science A	1st	2	
			Exercises in Life Science B	1st	2	
			Mathematical Modeling A	1st or 2nd	2	4 credits of more 8 credits or more
			Mathematical Modeling B	1st or 2nd	2	
			Mathematical Modeling C	1st or 2nd	2	
			Mathematical Modeling D	1st or 2nd	2	
			Computational Mathematics A	1st or 2nd	2	
			Computational Mathematics B	1st or 2nd	2	
			Mathematical Biology	1st or 2nd	2	
			Mathematical Analysis A	1st or 2nd	2	
			Mathematical Analysis B	1st or 2nd	2	
			High-Performance Computing and Data Science	1st or 2nd	2	
			Molecular Genetics	1st or 2nd	2	
			Molecular Plant Biology	1st or 2nd	2	
			Gene Chemistry	1st or 2nd	2	
			Molecular Biophysics	1st or 2nd	2	
			Proteomics	1st or 2nd	2	
			Theory and Experiment of Proteomics	1st or 2nd	2	
			Biological Chemistry A	1st or 2nd	2	
			Biological Chemistry B	1st or 2nd	2	
			Self-Organization in Chemistry A	1st or 2nd	2	
			Self-Organization in Chemistry B	1st or 2nd	2	
			Special Lecture on Mathematical and Life Sciences A	1st or 2nd	1(Note)	
			Special Lecture on Mathematical and Life Sciences B	1st or 2nd	1(Note)	
			Special Lecture on Mathematical and Life Sciences C	1st or 2nd	1(Note)	
			Special Lecture on Mathematical and Life Sciences D	1st or 2nd	1(Note)	
Optional	Specialized Subjects in program (Mathematical and Life Sciences)		Topical Seminar in Mathematical Science A	1st or 2nd	2	
			Topical Seminar in Mathematical Science B	1st or 2nd	2	
			Topical Seminar in Mathematical Science C	1st or 2nd	2	
			Topical Seminar in Mathematical Science D	1st or 2nd	2	
			Topical Seminar in Life Science A	1st or 2nd	2	
			Topical Seminar in Life Science B	1st or 2nd	2	
			Topical Seminar in Life Science C	1st or 2nd	2	
			Topical Seminar in Life Science D	1st or 2nd	2	

○Curriculum

1. Required Courses
- ●Common Subjects in GSISL* 4 Credits
- ●Specialized Subjects in program 8 Credits

2. Elective courses
- ●Common Graduate Subjects
  - Sustainable Development Subjects 1 Credit or more
  - Career Development and Data Literacy Subjects 1 Credit or more
- ●Common Subjects in GSISL* 2 Credits or more
- ●Specialized Subjects in program 8 Credits or more
  (Including either "Exercises in Applied Mathematics and Computational Science A&B" or "Exercises in Life Science A&B" (4 Credits))

3. Cognate Courses
- ●Specialized Subjects provided by other programs in GSISL* and/or other graduate schools 6 Credits or more
  (Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses	12 Credits
Elective courses	12 Credits or more
Cognate Courses	6 Credits or more
Total	**30 Credits or more**

2. Research Instruction
Must receive the required research instruction

3. Master's Thesis
Must pass a final examination and screening for master's thesis
or
Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE)

*GSISL: The Graduate School of Integrated Sciences for Life

NOTE: **Optional Courses** cannot be counted as the credits required for completion listed above. "Topical Seminar in Mathematical Science A-D" and "Topical Seminar in Life Science A-D" can be counted as the credits required for application of Specialized Teacher's Certificate.

(Note) For "Special Lectures on Mathematical Bioscience A- D", even if the credits are earned for the same subject, if the content of the lecture is different, the credits will be accepted as completion requirement credits.

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum.
1st or 2nd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Biomedical Science (Master's Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Common Subjects in GSISL*		Special Lectures in Integrated Sciences for Life	1st	2	13 credits
			Research Methods in Life Science	1st	2	
	Specialized Subjects	Basic Subjects	Biomedical Science Seminar A (note1)	1st	1	
		Practical Subjects	Exercises in Biomedical Science A	1st	2	
			Exercises in Biomedical Science B	1st	2	
			Research for Academic Degree Dissertation in Biomedial Science	1st - 2nd	4	
Elective	Common Graduate Subjects	Sustainable Development Subjects	World Peace and HIROSHIMA	1st or 2nd	1	1 credit or more
			Japanese Experience of Social Development- Economy, Infrastructure, and Peace	1st or 2nd	1	
			Japanese Experience of Human Development-Culture, Education, and Health	1st or 2nd	1	
			Academic Approach to SDGs - A	1st or 2nd	1	
			Academic Approach to SDGs - B	1st or 2nd	1	
			Understanding diversity and Inclusion	1st or 2nd	1	
			Practical Approach to SDGs	1st or 2nd	1	
			Considering "Peace" through Atomic Bomb Literature and Arts - Based on Experience of Atomic Bomb Survivors	1st or 2nd	1	
		Career Development and Data Literacy Subjects	Data Literacy	1st or 2nd	1	1 credit or more
			Data Literacy in Medicine	1st or 2nd	1	
			Career Management - Theory & Career Development	1st or 2nd	2	
			Career Management for Engineers	1st or 2nd	2	
			Stress Management	1st or 2nd	2	
			Introduction to MOT	1st or 2nd	1	
			Information security	1st or 2nd	1	
			Entrepreneurship	1st or 2nd	1	
			Introduction to Informatics I	1st or 2nd	1	
			Introduction to Informatics II	1st or 2nd	1	
			Introduction to Basic Science Researcher	1st or 2nd	1	
	Common Subjects in GSISL*		Societal Implementation of Life Science	1st	2	2 credits or more
			English Presentation Methods in Science and Technology	2nd	2	
			Lecture on Developing Communication Skill	1st	2	
			Overseas Academic Activities	1st or 2nd	2	
			Science Seminar A	1st or 2nd	2	
	Specialized Subjects in program (Biomedical Science)	Subjects of Life Science	Advanced Technologies for Life Science	1st	2	2 credits or more
			Introduction to Disease Models	1st	2	
			Biomedical Science Seminar B (note1)	2nd	1	
			Cellular Life Science	1st or 2nd	2	
			Cell Dynamics and Genomics	1st or 2nd	2	
			Advanced Molecular and Cellular Neurobiology	1st or 2nd	2	
			Cell Function Science A	1st or 2nd	2	
			Cell Function Science B	1st or 2nd	2	
			Mathematical Biology	1st or 2nd	2	
			Gene Chemistry	1st or 2nd	2	
			Nutrition and Food Functions I	1st or 2nd	2	
			Microbiology for Food Safety I	1st or 2nd	2	
			Animal Life Science I	1st or 2nd	2	
			Applied Molecular Cell Biology I	1st or 2nd	2	
			Animal Production Science I	1st or 2nd	2	
			Special Lecture on Biomedical Science	1st or 2nd	1(note2)	
		Subjects of Medical Science	Human Anatomy	1st	2	2 credits or more
			Physiology and Biological Chemistry	1st	2	
			Pathologic Basis of Diseases	1st	2	
			Seminar on Host Defense	1st	1	
			General Phrmacology	1st	1	
			Seminar on Health Policy & Global Health	1st	1	
			Advanced Lecture on Preventive Medicine for Evidence-based Health Guidance A	1st	1	
			Advanced Lecture on Preventive Medicine for Evidence-Based Health Guidance B	1st	1	
			Medicall Ethics A	1st	1	
			Basic Biostatistics and Basic Clinical Statistics	1st	1	

○Curriculum

1. Required Courses
- ●Common Subjects in GSISL* 4 Credits
- ●Specialized Subjects in program 9 Credits

2. Elective Courses
- ●Common Graduate Subjects
  - Sustainable Development Subjects 1 Credit or more
  - Career Development and Data Literacy Subjects 1 Credit or more
- ●Common Subjects in GSISL* 2 Credits or more
- ●Specialized Subjects in progrm
  - Life Science 2 Credits or more
  - Medical Science 2Credits or more

3. Cognate Courses

●Specialized Subjects provided by self/other programs in GSISL* and/or other graduate schools 9 Credits or more(Note 3)
(Must take other than Optional Courses.

Optional Courses cannot be counted as the credits required for completion.
Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses	13 Credits
Elective Courses	8 Credits or more
Cognate Courses	9 Credits or more
Total	**30 Credits or more**

2. Research Instruction
Must receive the required research instruction

3. Master's Thesis
Must pass a final examination and screening for master's thesis
or
Must pass the Evaluation of Research Results and the Final Examination as Prescribed Criteria or Qualifying Examination (QE)

*GSISL: The Graduate School of Integrated Sciences for Life

NOTE1: Students cannot take "Biomedical Science Seminar A" and "Biomedical Science Seminar B" in the

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 2nd: To be taken through all school years (standard period: 2 years) from the first year in the master's course, and to be completed before the completion of the master's curriculum.
1st or 2nd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

7. Important Points Regarding Class Registration (Master's Course)

(1) Overseas Academic Activities

Student may apply for recognition of credits when they engage in academic activities abroad according to their purposes or collaborative research conducted with overseas researchers.

(Purpose)

This course is designed to enable students to engage in academic activities abroad or conduct collaborative research with overseas researchers in order to develop a global perspective and enhance their global communication skills. The scope of overseas scholarly activities includes presentations delivered in a foreign language at international symposiums/conferences, short-term internship at overseas academic institutions or private companies, and collaborate research in a foreign language with overseas researchers.

Evaluation: Each Program makes an evaluation based on Application for Recognition of Credits.

Documents to be submitted:

1. Application for Recognition of Credits (Page 32 of Student Handbook)
2. Overseas Academic Activity Report
3. Summary of academic conference or any other reference materials

Implementation procedures:

1. A student, after consulting with his/her supervisor, delivers a presentation at an international conference, etc., engages in academic activities abroad, or conducts collaborative research with an overseas researcher(s) in Japan.
2. A student needs to carry out academic activities or research in such a way that will not affect his/her attendance to regular classes. In principle, the period for such an activity shall be two days or more.
3. A student needs to submit a report of his/her overseas scholarly activities. The report must include a schedule for international activities (participation in an academic conference, internship, research, etc.), the location(s), the name and affiliation of any collaborative researcher(s), evaluation by the supervisor (the content of presentations or discussions, the objective of academic activities/research, the achievement level, the results obtained, etc.).
4. If the student is judged objectively to have achieved a level that can contribute to internationalization, the supervisor/deputy supervisors, etc. shall make an achievement evaluation accordingly. The student's academic results shall be certified by the instructor in charge of the Overseas Academic Activities.

(2) Science Seminar A

"Science seminar" is a class subject of the Graduate School of Integrated Sciences for Life. Master's students are required to take Science Seminar A.

For details on attendance at Science Seminar, please refer to the following Guidelines for Implementing Science Seminar of the Graduate School of Integrated Sciences for Life. For auditing a Science Seminar, please follow the instructions of the supervisor and the guidance of each seminar.

Guidelines for Implementing Science Seminar of the Graduate School of Integrated Sciences for Life

1. Science seminars are organized and implemented by each of the seven Programs. Students are recommended to audit at least one seminar per Program.
2. The seminar's schedule and other information will be provided on bulletin boards and the Graduate School website.
3. After auditing a science seminar held by a Program, students need to obtain a stamp mark for their attendance on their seminar auditing slips, and submit the slips after auditing 15 or more science seminars, together with an Application for Recognition of Credits, to their supervisor.
4. For the recognition of credits (two units), students must audit at least 15 science seminars.
5. Science Seminar A shall be certified by the Academic Affairs Committee.
6. The auditing of a science seminar can be replaced with the auditing of a lecture meeting at an academic conference, etc. (including lectures and seminars by companies when special arrangements of education methods as specified in Article 10 of By-laws of the Graduate School are applied).

   In this case, the supervisor may decide how many science seminars are equivalent to such a lecture meeting at an academic conference. Students must submit the number of seminar auditing slips determined by their supervisor.

8. Master's Thesis Screening and Final Examination

Guidelines for Implementing the Master's Thesis Screening and Final Examination of the Graduate School of Integrated Sciences for Life, Hiroshima University

(Established on April 1, 2019)

(Notification of Master's Thesis Title)

Article 1: Students who plan to submit a master's thesis shall submit a Notification of Master's Thesis Title to the Dean of the Graduate School (Student Support Office responsible for the Program to which the students belong (e.g., the office responsible for the graduate course)) by the due date after obtaining approval from their supervisor. In principle, the due date for students who are expected to complete their course in March is set for October 15, and for students who are expected to complete their course in September, it is set for April 15.

(Submission of Master's Thesis)

Article 2: In principle, the thesis submission due date is set for January 25, 5:00 p.m. in the case of students who are expected to complete their course in March, and for July 25, 5:00 p.m. in the case of students who are expected to complete their course in September. However, if the due date falls on a Saturday or a holiday specified in the Act of National Holidays, it means the day preceding the day, and if it falls on a Sunday, it means the day two days before.

2. Students shall submit the same number of copies of their thesis as the number of the Thesis Screening Committee members.
3. Students shall submit their thesis to the Dean of the Graduate School (Student Support Office responsible for the Program to which the students belong (e.g., the office responsible for the graduate course)) after obtaining approval from their supervisor.
4. The Dean of the Graduate School shall refer the received thesis to the Thesis Screening Committee.

(Thesis Screening)

Article 3: The Thesis Screening Committee shall consist of two (2) or more faculty members recommended by the relevant supervisor and deputy supervisors and delivered and approved by the Graduate School Board of Representatives.

2. The Thesis Screening Committee shall give a grade (general comments) for the theses they have screened and decide whether to pass or fail them.

(Final Examination)

Article 4: As a final examination for students who have passed the thesis screening, an oral examination shall be administered, and the final examination shall end with the submission of a final version of their thesis.

2 The final examination shall be completed by February 22 for students who are expected to complete their course in March, and by August 22 for students who are expected to complete their course in September.

(Submission of Final Version of Thesis)

Article 5. In principle, the due date for the submission of a final version of the thesis is set for February 22, 5:00 p.m. in the case of students who are expected to complete their course in March, and for August 22, 5:00 p.m. in the case of students who are expected to complete their course in September. However, if the due date falls on a Saturday or a holiday specified in the Act of National Holidays, it means the day preceding the day, and if it falls on a Sunday, it means the day two days before.

2. Students shall submit one (1) copy of their thesis to the Dean of the Graduate School (Student Support Office responsible for the Program to which the students belong (e.g., the office responsible for the graduate course)) after obtaining approval from their supervisor.
3. All the theses (final version) submitted shall be kept in store by the Student Support Office responsible for the Program to which the students belong (e.g., the office responsible for the graduate course).

(Deposit of Master's Theses in the Institutional Repository)

Article 6: Students can deposit their master's thesis in the Hiroshima University Institutional Repository if they wish to do so.

2. Matters concerning the deposit of master's theses in the Institutional Repository shall be prescribed separately.

(Master's Thesis Oral Presentation)

Article 7: A master's thesis oral presentation shall be given openly to faculty members and students of the Graduate School. If the presentation concerns intellectual property, however, the presentation may be given behind closed doors based on a request from the relevant supervisor/deputy supervisors.

9. Master's Thesis Preparation and Submission Schedule and Procedures

With regard to the items marked with a black dot, students need to take necessary procedures. (Items with a white dot are handled by supervisors and/or the Student Support Office (e.g., the office responsible for the graduate course).

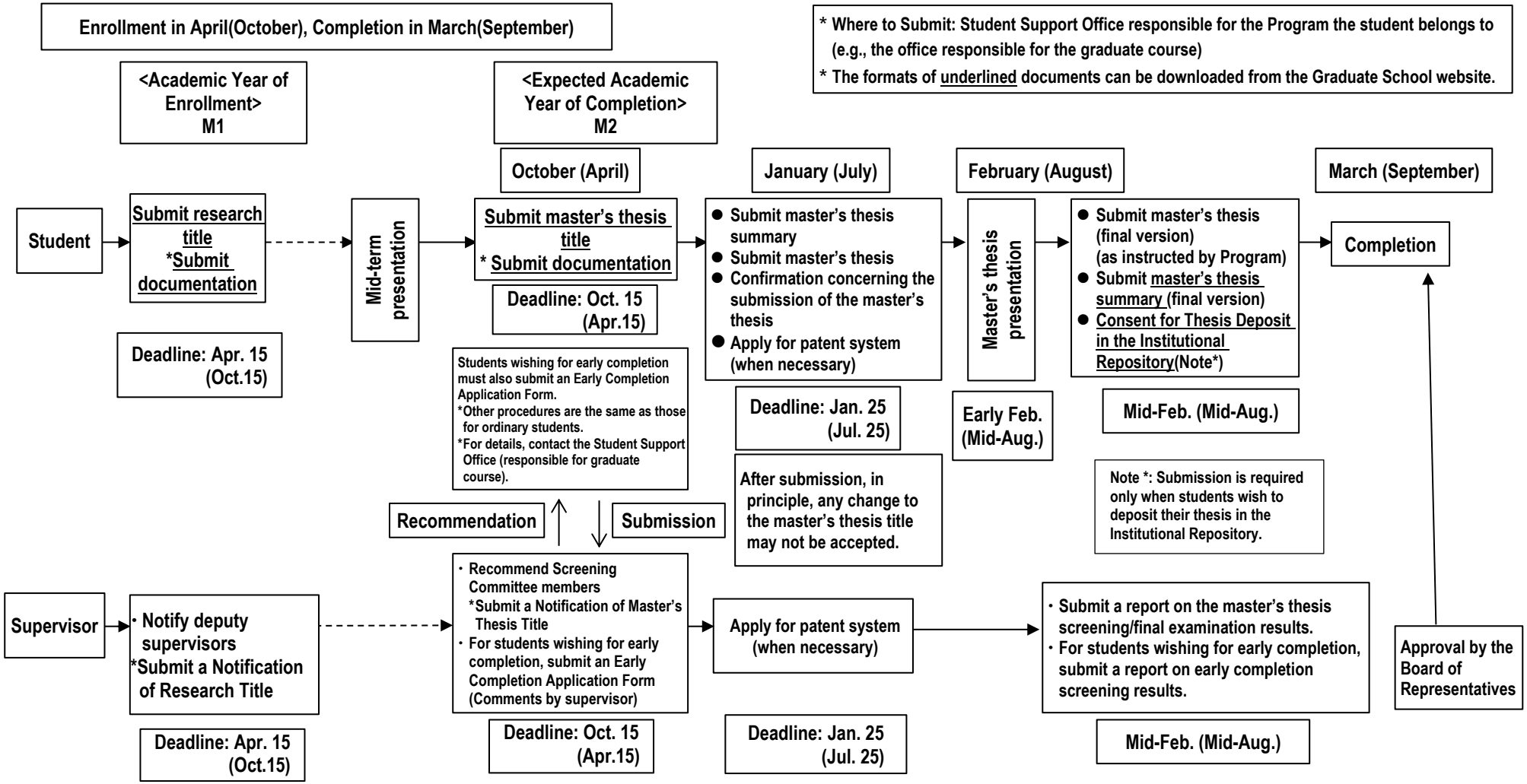
* **The submission deadlines are subject to change according to the academic year. Please be sure to check the deadlines on the Graduate School's website and bulletin boards (including *My Momiji* bulletin boards) in advance.**

Item	Where to Submit	Submission Deadline		Remarks
		Completion in Mar.	Completion in Sep.	
● **Submit title of master's thesis** (With regard to the recommendation of master's thesis screening committee members, enter the names of the candidates in consultation with your supervisor.)	**Support Office responsible for your Program (e.g., office responsible for graduate course)**	**Oct. 15**	**Apr. 15**	
○ Approval by Master's Thesis Screening Committee	Graduate School Board of Representatives	(Late Nov.)	(Late May)	
● **Submit summary of master's thesis** (Up to 2 sheets of A4 size paper) ● **Submit master's thesis (A copy for each Screening Committee member: temporarily bound)**	**Support Office responsible for your Program (e.g., office responsible for graduate course)**	**Jan. 25**	**Jul. 25**	**Distributed to the Screening Committee members after the Support Office's confirmation and approval seal**
● **Master's thesis presentation** ● **Final examination**		**(Mid-Feb.)**	**(Mid-Aug.)**	**The detailed schedule will be notified separately.**
● **Submit master's thesis and its summary (final version) (As instructed by Program)*1**	**Support Office responsible for your Program (e.g., office responsible for graduate course)**	**Mid-Feb.**	**Mid-Aug.**	
○ Submission of master's thesis screening/ final examination results	Support Office responsible for your Program (e.g., office responsible for graduate course)	Mid-Feb.	Mid-Aug.	
○ Determination of completion	Program Faculty Council	(Late Feb.)	(Late Aug.)	
	Graduate School Board of Representatives	(Early Mar.)	(Early Sep.)	

Notes:

1. The deadline specified herein shall be 5:00 p.m. on the designated date. If the day stipulated herein falls on a Saturday or a national holiday prescribed in the Act on National Holidays, the deadline shall be the previous day, and if the day falls on a Sunday, the day before the previous day.
2. The submission deadlines are subject to change.
3. A student eligible for early completion must submit an Early Completion Application Form, together with his/her master's thesis title.
4. *1: If you wish to deposit your thesis in the Hiroshima University Institutional Repository, you must submit a hard copy of your master's thesis, the electronic data of the thesis and its summary, and the "Consent for Thesis Deposit in the Institutional Repository."

Procedures for Master's Thesis



Submission of Master's Thesis, etc. (Preparation Procedures)

(Established on April 1, 2019)

1. Submission of Summary of Master's Thesis (paper for oral presentation of master's thesis)
   (1) Submitted by: January 25, 5:00 p.m. for completion in March
   July 25, 5:00 p.m. for completion in September
   (2) Submitted to: Student Support Office responsible for the Program to which you belong (e.g., office responsible for graduate course)
   (3) Number of copies: One (1) copy
   (4) Preparation procedures:
   ① Download the prescribed format (use up to 2 sheets of A4 size paper in vertical format and write horizontally) from the website of the Graduate School of Integrated Sciences for Life, and fill out the form electronically. (You may paste it.) (One-side printing; do not enter page numbers.)
   ② A summary may be written in a free style; the content of the summary shall be stipulated by each Program.
   ③ If you do not wish to make your summary public for patent or other purposes, you must apply for an embargo in advance.
   ④ The summary submitted will be printed as it is in a collection of summaries of master's theses. If you insert figures, they should be sharp enough for printing.
   * If there is a change to any item of the Notification of Research Title that you have submitted, be sure to report the change to the Student Support Office in charge.
   * If you submit your summary, together with your master's thesis (temporarily bound), to the Screening Committee, you must prepare one more copy, apart from the above. (In such a case, the summary may be printed double-sided.)

2. Submission of Master's Thesis (temporarily bound)
   (1) Submitted by: January 25, 5:00 p.m. for completion in March
   September: July 25, 5:00 p.m. for completion in September
   (2) Submitted to: Student Support Office responsible for the Program to which you belong (e.g., office responsible for graduate course)
   (3) Number of copies: One (1) copy per member of the screening committee
   (4) Preparation procedure:
   ① Use A4 size paper in vertical format and write horizontally.
   ② A cover sheet, title page, etc. shall be prepared in accordance with Attachments 1-1 and 1-2.

3. Submission of Master's Thesis (final version) (according the instruction of the Program)
   (1) Submitted by: Mid-February for completion in March
   Mid-August for completion in September
   (2) Submitted to: Student Support Office responsible for the Program to which you belong (e.g., office responsible for graduate course)
   (3) Number of copies: One (1) copy
   (4) Preparation procedures:
   Attach a cover sheet and title page to the thesis. Do not punch holes in the copy. Submit a hard copy, fastened with a binder clip, in a clear plastic sleeve, or bound in a Z file.

* If there is any change to the master's thesis submitted, it must be re-submitted together with a final version of the summary.

4. Submission of Document, etc. for Thesis Deposit in the Institutional Repository (For those who wish to deposit only)

(1) Submitted by: Mid-February for completion in March
Mid-August for completion in September

(2) Submitted to: Student Support Office responsible for the Program to which you belong (e.g., office responsible for graduate course)

(3) Items and number of copies to be submitted:

① Electronic data of master's thesis summary and thesis (final version)

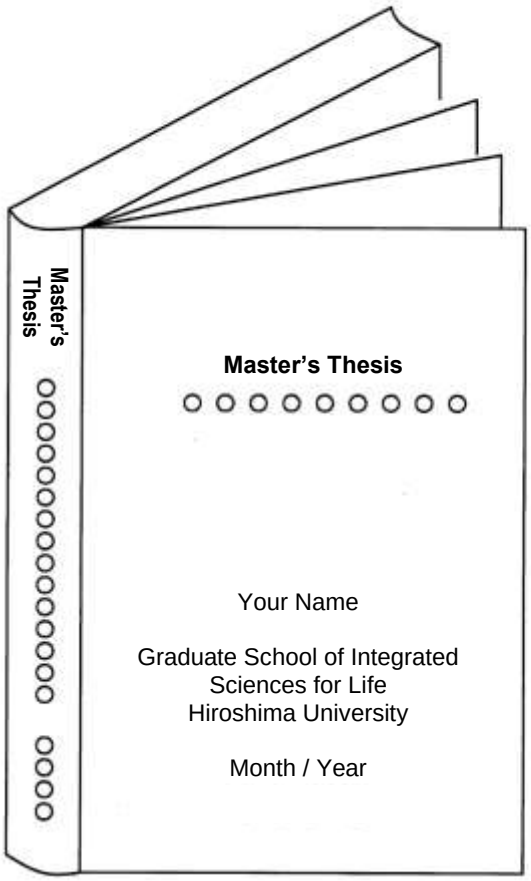
② Consent for Thesis Deposit in the Institutional Repository (approval seal of your supervisor is required): One

* The items above should be submitted only when you wish to deposit your thesis in the Hiroshima University Institutional Repository (open to the public online free of charge), and when approval is obtained from your supervisor.

Note: If the day stipulated herein falls on a Saturday or a national holiday prescribed in the Act on National Holidays, the deadline shall be the previous day, and if the day falls on a Sunday, the day before the previous day.

Attachment 1-1

(How to Prepare a Master's Thesis Cover Sheet and Title Page)



[Title page]
Fill in the same as for the cover sheet (Attachment 1-2). However, insert the name of the Program after the name of the Graduate School.

[Cover sheet]
Print out the master's thesis, the title of the thesis, the month and year, the name of the Graduate School, and your name as per Attachment 1-2.
If it is written in Japanese, print all the above in Japanese, and if it is written in English, print it all in English.
The English translation shall be "Master's Thesis."
The position of the title shall be in the upper third of the cover sheet.
The month and year shall be the date of completion of review of the master's thesis (March for completion in March; September for completion in September).
The month and year, the name of the Graduate School, and your name shall be filled in the lower third of the cover sheet.

Attachment 1-2

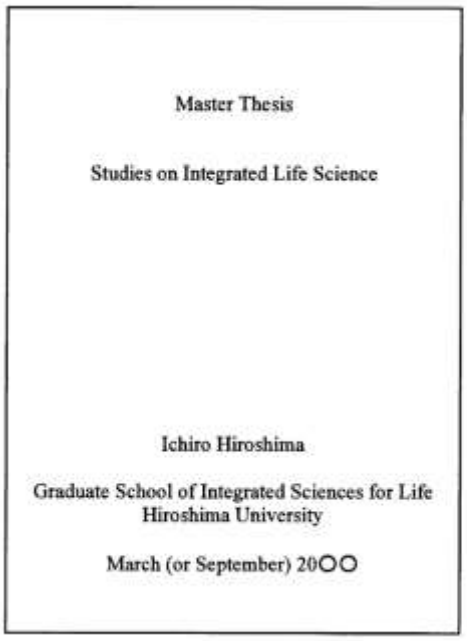
(1) When written in Japanese:

[Cover sheet]

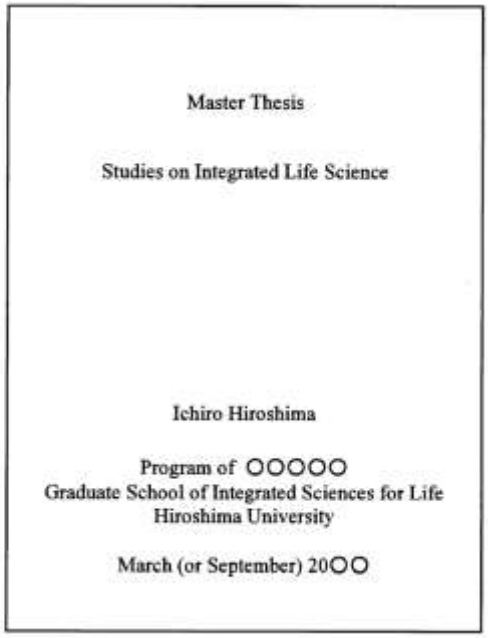
[Title page]

(2) When written in English:

[Cover sheet]



[Title page]



Formats

(Master's Course)

研　究　題　目　届（M）

Notification of the Research Title

Year　　Month　　Date
年　　月　　日　提出

学 生 番 号 Student ID Number	M	ふりがな 氏 名 Katakana Name	
プログラム名 Program	□ 生物工学　Biotechnology □ 食品生命科学　Food and AgriLife Science □ 生物資源科学　Bioresource Science □ 生命環境総合科学　Life and Environmental Sciences □ 基礎生物学　Basic Biology □ 数理生命科学　Mathematical and Life Sciences □ 生命医科学　Biomedical Science		
研 究 題 目 （外国語の場合は，和訳を付すこと。） Research Title (Japanese Title)			
取得済み教員免許状			
取得予定の教員免許状			

＜以下は主指導教員が記入＞ The followings are written by supervisor.

指　導　教　員　氏　名			
主指導教員 氏　　名		確認印 又は サイン	研究指導計画を策定し 副指導教員と共有して 学生に明示 □
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		

指導教員は，本学の教授，准教授又は講師を２名以上含めること。
副指導教員は，所属プログラムを担当する教員 1 名以上と，所属プログラムと異なるプログラムを担当する教員を１名以上含むこと。他研究科・他大学所属の場合は，職名を明記すること。
指導教員に，博士課程前期学生募集要項の主指導教員一覧表に記載されている教員が 3 名以上含まれない場合は，プログラム長の所見を要する（任意様式）。
研究指導計画書は，依頼があれば直ちに提出すること。

提出先：所属するプログラムを担当する支援室（大学院課程担当等）

提出〆切：４月入学の場合／４月１５日，１０月入学の場合／１０月１５日

単位認定申請書
Application for Recognition of Credits

年　　月　　日
Date: (Year)　(Month)　(Day)

大学院統合生命科学研究科長　　殿
To: The Dean of the Graduate School of Integrated Sciences for Life

統合生命科学研究科　　プログラム
Graduate School of Integrated Sciences for Life
Program of
学生番号
Student Number
氏　　名
Name

認定科目の単位等の認定を受けたいので，報告書等を添付のうえ，申請します。
I hereby apply for the recognition of the credits for designated courses, with reports or other required documents attached hereto.

該当科目に○ Put a circle in the appropriate box.	認　定　科　目 Course	備　　考 Remarks
	海外学術活動演習 Exercises in International Academic Studies	博士課程前期 Master's Course
	海外学術研究 Academic Research Overseas	博士課程後期 Doctoral Course
	生物・生命系長期インターンシップ Long-term Internship	〃

主指導教員氏名 Name of Academic Supervisor		Seal or Signature	
〈単位認定にあたっての意見〉(Comments regarding certification of credits)			
主指導教員評価 Evaluation by Academic Supervisor	秀　優　良　可 Excellent, Very Good, Good, Fair	学務委員会認定 Certification of Academic Affairs Committee	

プログラム共同セミナー単位認定申請書
Application for Recognition of Credit for “Science Seminar”

年　　月　　日
Date: (Year) (Month) (Day)

大学院統合生命科学研究科長　　殿
To: The Dean of the Graduate School of Integrated Sciences for Life

統合生命科学研究科　　プログラム
Graduate School of Integrated Sciences for Life
Program of
学生番号 / Student ID
氏　　名 / Name　　Seal or Signature

プログラム共同セミナーの単位認定を受けたいので，聴講届を添付のうえ，申請します。
I hereby apply for the recognition of the credits for Science Seminar, with Participation Certificate or other required documents attached hereto.

回数 Number	日付(年月日) Date (YY/MM/DD)	講師名 Lecturer’s Name	世話プログラム Facilitated Program（適切な番号に○をつける. Put a circle appropriate number.）
1			１・２・３・４・５・６・７・８
2			１・２・３・４・５・６・７・８
3			１・２・３・４・５・６・７・８
4			１・２・３・４・５・６・７・８
5			１・２・３・４・５・６・７・８
6			１・２・３・４・５・６・７・８
7			１・２・３・４・５・６・７・８
8			１・２・３・４・５・６・７・８
9			１・２・３・４・５・６・７・８
10			１・２・３・４・５・６・７・８
11			１・２・３・４・５・６・７・８
12			１・２・３・４・５・６・７・８
13			１・２・３・４・５・６・７・８
14			１・２・３・４・５・６・７・８
15			１・２・３・４・５・６・７・８

１:生物工学(Biotechnology)，２:食品生命科学(Food and AgriLife Science)，３:生物資源(Bioresource Science)，４:生命環境総合科学(Life and Environmental Sciences)，５:基礎生物学(Basic Biology)，６:数理生命科学(Mathematical and Life Sciences)，７:生命医科学(Biomedical Science)，８:その他(Others)
注意：１～７のセミナーは最低一つずつ含んでいることが望ましい。
Note: at least one seminar from each program (1-7) is required.

主指導教員氏名 Name of Academic Supervisor	学務委員会認定 Certification of Academic Affairs Committee
Seal or Signature	

修 士 論 文 題 目 届

Notification of the Master's Thesis Title

Year 年　Month 月　Date 日　提出

学生番号 Student ID Number	M	ふりがな 氏 名 Katakana Name	

プログラム名　Program		学位の種類 Degree	
□ 生物工学	Biotechnology	□ 修士（工学） Master of Engineering	□ 修士（学術） Master of Philosophy
□ 食品生命科学 □ 生物資源科学 □ 生命環境総合科学	Food and AgriLife Science Bioresource Science Life and Environmental Sciences	□ 修士（農学） Master of Agriculture	
□ 基礎生物学 □ 数理生命科学 □ 生命医科学	Basic Biology Mathematical and Life Sciences Biomedical Science	□ 修士（理学） Master of Science	

日本語題目 Japanese Title	
英語題目 English Title	

＜以下は主指導教員が記入＞ The followings are written by supervisor.

修 士 論 文 審 査 委 員 の 推 薦

下記のとおり推薦します。　主指導教員
主査　氏名　　確認印
又は
サイン

委　員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]

注）論文審査委員会は，主指導教員及び主指導教員に推薦された教員２名以上（うち１名以上は所属プログラムと異なるプログラムを担当する教員）によって構成されます。

提出〆切は（９月修了の場合：４月１５日まで，３月修了の場合：１０月１５日まで）

修　士　論　文　要　旨
（Summary of Master Thesis）

学 生 番 号 Student ID Number	M	氏　　名 Name	
プログラム Program	Program of プログラム	主指導教員 Supervisor	
日本語題目 Japanese Title	□※		
英語題目 English Title	□※		

修　士　論　文　要　旨
(Summary of Master Thesis)

学 生 番 号 Student ID Number	M	氏　　名 Name	
プログラム Program	Program of プログラム	主指導教員 Supervisor	
日本語題目 Japanese Title			□※
英語題目 English Title			□※

※論文題目が，修士論文題目届で提出したものと異なる場合は，□ を ■にすること。
※If title is different from the one submitted in "Notification of the Master's Thesis Title", change □ to ■.

修士論文要旨は、Abstract・Key words を含めて2 枚以内。フォントサイズは，10.5 ポイント。
最初に英文Abstract を200 語程度で記載する。続いて，Key word を英語で3～5 語記載する。
図表を入れる場合は，白黒表記。

Summary of Master Thesis should be accompanied by an abstract (about 200 words) and key words (3-5 words) in English.
Summary of Master Thesis including abstract is 2 pages. The font size is 10～11 points.
If figures or tables are included, they should be in black and white.

（記入例/*Example*）
<Abstract> in English

<Key words> Please provide 3 to 5 key words in English.

【目的/Introduction】

【方法/Methods】

【結果/Results】

【考察/Discussion】

Month/Day/Year

To: Dean of the Graduate School of Integrated Sciences for Life

Student ID:

Program :

Name : Seal/signature

Application for Early Completion

I hereby apply for the recognition of early completion of the master's course in accordance with the Article 43 of the Hiroshima University Graduate School Regulations.

I plan to complete in: Month/Year

Application for Early Completion / Comments by Supervisor

Month/Day/Year

Student ID	M	Name	
Program			
Desired Completion Time	Month/Year	Supervisor	Seal/signature

Date:_____/_____/_____
Month / Day / Year

Master's Thesis Submission Confirmation

To the President of Hiroshima University

Graduate School:_____

Department:_____

Grade:_____ Student ID number:_____

Name:_____

In submitting the Master's Thesis, I confirm that the statements below are all true.

Title of the thesis:_____

Check the appropriate box.

☐ The author took the required educational program on research ethics, and sufficiently understood the principles and expectations for ethical research.

☐ The author did not commit any misconduct in the research such as fabrication, falsification, or plagiarism.

☐ The author did not infringe upon copyright. (Works were cited in an appropriate manner as described in A – D below, or copyright clearance was obtained to use the work in writing the thesis.)

A Quotation is from a work already made public.

B Quotation is used in a manner compatible with fair practice.
* Quotation is used only when deemed necessary.
* Quotation is clearly indicated by devices such as quotation marks.

C Quoting from a work is permissible to the extent justified by the purpose of the quotation.
* The subordinate-superior relationship between quoted parts and other passages in the text is clear.
* Quotation is not used more than is absolutely necessary.

D Sources are clearly indicated.

☐ There are no human research subjects who require privacy protection, or the privacy of the research subject is protected (the subject agreed to participate in the study, and also agreed on the manner of publication).

Signature:_____

I, the main advisor, hereby confirm the above.

Main Advisor

Status:_____

Name(signature):_____

Date Confirmed:_____/_____/_____
Month / Day / Year

☐ The advisor has confirmed that there is no plagiarism or theft in this thesis by following methods:
(1) Use of the plagiarism checking software iThenticate
(2) Confirmation that citations have been made in an appropriate manner
* Please attach a copy of the screenshot of the iThenticate results (where the similarity rate (%) is displayed).

Doctoral Course

D

D

10. Courses and Requirements for Completion

Attached Table

Program of Biotechnology (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subject in program (Biotechnology)		Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	12 credits
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	
	Specialized Subjects in program (Biotechnology)		Current Topics in Advanced Biotechnology A	1st, 2nd, or 3rd	1	2 credits or more
			Current Topics in Advanced Biotechnology B	1st, 2nd, or 3rd	1	
			Current Topics in Advanced Biotechnology C	1st, 2nd, or 3rd	1	
			Current Topics in Advanced Biotechnology D	1st, 2nd, or 3rd	1	

○Curriculum

1. Required Course
●Specialized Subject in program 12 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credit or more
Career Development and Data Literacy Subjects
1 Credit or more
●Common Subjects in GSISL* 4 Credits or more
●Specialized Subjects in program
2 Credits or more

○Requirements for Completion

1. Required Courses 12 Credits
Elective Courses 8 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Food and AgriLife Science (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subject in program (Food and AgriLife Science)		Interdisciplinary Seminar B	1st, 2nd, or 3rd	2	14 credits
			Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	

○Curriculum

1. Required Courses
●Specialized Subjects in program 14 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credits or more
Career Development and Data Literacy Subjects
1 Credits or more
●Common Subjects in GSISL* 4 Credits or more

○Requirements for Completion

1. Required Courses 14 Credits
Elective Courses 6 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Bioresource Science (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subjects in program (Bioresource Science)		Interdisciplinary Seminar B	1st, 2nd, or 3rd	2	14 credits
			Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	

○Curriculum

1. Required Courses
●Specialized Subjects in program 14 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credit or more
Career Development and Data Literacy Subjects
1 Credit or more
●Common Subjects in GSISL* 4 Credits or more

○Requirements for Completion

1. Required Courses 14 Credits
Elective Courses 6 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Life and Environmental Sciences (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subjects in program (Life and Environmental Sciences)		Exercises in Integrated Life Sciences	1st, 2nd, or 3rd	2	○**Curriculum** **1. Required Courses** ●Specialized Subjects in program 14 Credits **2. Elective Courses** ●Common Graduate Subjects Sustainable Development Subjects 1 Credit or more Career Development and Data Literacy Subjects 1 Credit or more ●Common Subjects in GSISL* 4 Credits or more ○**Requirements for Completion** 1. Required Courses 14 Credits Elective Courses 6 Credits or more **Total** **20 Credits or more** 2. Research Instruction Must receive the required research instruction. 3. Doctoral Dissertation Must pass a final examination and screening for a dissertation. *GSISL: The Graduate School of Integrated Sciences for Life
			Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	14 credits
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	

○School Year : Designated school year to be taken the course

1st: To take it in the 1st year.

1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.

1st, 2nd, or 3rd: Every student can take the course regardless of the school year.

○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Basic Biology (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subjects in program (Basic Biology)		Seminar for Advanced Research in Basic Biology E	1st or 2nd	1	14 credits
			Seminar for Advanced Research in Basic Biology F	1st or 2nd	1	
			Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	

○Curriculum

1. Required Courses
●Specialized Subjects in program 14 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credit or more
Career Development and Data Literacy Subjects
1 Credit or more
●Common Subjects in GSISL* 4 Credits or more

○Requirements for Completion

1. Required Courses 14 Credits
Elective Courses 6 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Mathematical and Life Sciences (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subject in program (Mathematical and Life Sciences)		Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	12 credits
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	
	Specialized Subjects in program (Mathematical and Life Sciences)		Special Lecture on Mathematical and Life Sciences E	1st, 2nd, or 3rd	1	2 credits or more
			Special Lecture on Mathematical and Life Sciences F	1st, 2nd, or 3rd	1	
			Special Lecture on Mathematical and Life Sciences G	1st, 2nd, or 3rd	1	
			Special Lecture on Mathematical and Life Sciences H	1st, 2nd, or 3rd	1	

○Curriculum

1. Required Courses
●Specialized Subjects in program 12 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credit or more
Career Development and Data Literacy Subjects
1 Credis or more
●Common Subjects in GSISL* 4 Credits or more
●Specialized Subjects in program
2 Credits or more

○Requirements for Completion

1. Required Courses 12 Credits
Elective Courses 8 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○ MEXT special program students should also refer to the course list (curriculum) specified separately.

Program of Biomedical Science (Doctoral Course)

Category			Course	School Year	Credits	Curriculum and Requirements for Completion
Required	Specialized Subjects in program (Biomedical Science)		Biomedical Science Seminar C(note)	1st	1	13 credits
			Research for Academic Degree Dissertation in Integrated Life Sciences	1st - 3rd	12	
Elective	Common Graduate Subjects	Sustainable Development Subjects	SDGs Ideas Mining Seminar for Specialists	1st, 2nd, or 3rd	1	1credit or more
			Regional development seminar from the viewpoint of the SDGs	1st, 2nd, or 3rd	1	
			Seeking Universal Peace	1st, 2nd, or 3rd	1	
			Atomic Bomb Literature, War Literature and Peace -Based on Experience of Atomic Bomb Survivors and Concentration Camps' Prisoners	1st, 2nd, or 3rd	1	
		Career Development and Data Literacy Subjects	Data Science	1st, 2nd, or 3rd	2	1credit or more
			Pattern Recognition and Machine Learning	1st, 2nd, or 3rd	2	
			Pathway to becoming a Data Scientist	1st, 2nd, or 3rd	1	
			Utilization of Data Literacy in Medicine	1st, 2nd, or 3rd	1	
			Skills and Arts of Leadership	1st, 2nd, or 3rd	1	
			Career Management for Highly Skilled Innovat	1st, 2nd, or 3rd	1	
			Innovation Practice	1st, 2nd, or 3rd	2	
			Long-term internship	1st, 2nd, or 3rd	2	
			Introduction to business creation	1st, 2nd, or 3rd	1	
	Common Subjects in GSISL*		Research Plans in Life Science	1st	2	4 credits or more
			Academic Research Overseas	1st, 2nd, or 3rd	2	
			Carrier Development for Life Science	1st	2	
			Long-Term Internship for Integrated Sciences for Life	1st, 2nd, or 3rd	2	
			Science Seminar B	1st, 2nd, or 3rd	2	
Optional	Specialized Subject in program (Biomedical Science)		Biomedical Science Seminar D(note)	2nd	1	
			Biomedical Science Seminar E(note)	3rd	1	

○Curriculum

1. Required Courses
●Specialized Subjects in program 13 Credits

2. Elective Courses
●Common Graduate Subjects
Sustainable Development Subjects
1 Credit or more
Career Development and Data Literacy Subjects
1 Credit or more
●Common Subjects in GSISL* 4 Credits or more

3. Cognate Courses
●Specialized Subjects provided by other programs in GSISL and/or other graduate schools
1 Credits or more
(Should register for the courses after discussion with the academic supervisors.)

○Requirements for Completion

1. Required Courses 13 Credits
Elective Courses 6 Credits or more
Cognate Courses 1 Credits or more
Total **20 Credits or more**

2. Research Instruction
Must receive the required research instruction.

3. Doctoral Dissertation
Must pass a final examination and screening for a dissertation.

*GSISL: The Graduate School of Integrated Sciences for Life

NOTE: Students cannot take "Biomedical Science Seminar C" ,"Biomedical Science Seminar D"and "Biomedical Science Seminar E" in the same year.

○School Year : Designated school year to be taken the course
1st: To take it in the 1st year.
1st - 3rd: To be taken through all school years (standard period: 3 years) from the first year in the doctoral course, and to be completed before the completion of the doctoral curriculum.
1st, 2nd, or 3rd: Every student can take the course regardless of the school year.
○ MEXT special program students should also refer to the course list (curriculum) specified separately.

11. Important Points Regarding Class Registration (Doctoral Course)

(1) Academic research overseas

Students may apply for recognition of credits when they conduct academic research abroad according to their purposes.

(Purpose)

With the aim of developing human resources equipped with the ability, as an international leader, to conduct advanced and integrated research in the field of biology, this course sends students to relevant institutions abroad. Students are expected to enhance their English communication skills required for research activities in their areas of specialization in biology and life science, and to better understand the importance of international networks in pursuing their own research activities from a broad perspective, by conducting collaborative research, engaging in discussions with faculty members and other students, and making oral presentations in seminars.

Evaluation:

After an Application for Recognition of Credits is accepted from the students, a report meeting in English (open to the participation of general students ad audience) is held. In the meeting, students make a report on their research activities overseas, based on which their performance is evaluated.

Documents to be submitted:

1. Application for Recognition of Credits (Page 60 of Student Handbook)
2. Report of Academic Research Overseas
3. Evaluation report from an accepting institution abroad
4. Other reference materials

Implementation procedures:

1. Students determine the overseas institution where they will conduct academic research in consultation with their supervisor. At this point of time, it is necessary to fully understand the terms and conditions set with the accepting institution regarding their research activities there.
2. Students need to carry out academic research in such a way that will not affect their attendance to regular classes. The period for academic research overseas shall, in principle, be two weeks or longer.
3. Students must submit an evaluation report issued by their accepting institution, together with the completed Report of Academic Research Overseas (purpose, schedule, achievement level of the purpose, results obtained, and future challenges), to their supervisor.

(2) Long-term Internship for Integrated Sciences for Life

Students may apply for recognition of credits when they complete internship abroad according to their purposes.

(Purpose)

To enhance students' awareness of the relationship between research in their area of specialization and the real world and to help them become a researcher or highly specialized professional who can play an active role in creating a sustainable society, it is important for them to understand how research in biology and life science has been conducted and how development is conducted to implement such research results in society. This course offers long-term internships at academic institutions and companies in Japan and abroad to help students learn how to conduct research as a professional, enhance their communication skills through discussions with business people and others, and develop socializing skills as a professional.

Evaluation:

After an Application for Recognition of Credits is accepted from the students, an internship report meeting (open to the participation of general students as audience) is held with the attendance of the Evaluation Committee members. In the meeting, students make a report on their activities, based on which their performance is evaluated.

Documents to be submitted:

1. Application for Recognition of Credits (Page 60 of Student Handbook)
2. Report of Internship
3. Evaluation report from an accepting institution/company
4. Other reference materials

Implementation procedures:

1. Students determine the accepting institution for their internship in consultation with their supervisor. At this point of time, it is necessary to fully understand the terms and conditions set with the accepting institution regarding their internship there.
2. Students need to participate in an internship in such a way that it will not affect their attendance to regular classes. The internship period shall, in principle, be two weeks or longer.
3. Students must submit an evaluation report issued by their accepting institution, together with the completed Report of Internship (purpose, schedule, achievement level of the purpose, results obtained, and future challenges), to their supervisor.

(3) Science Seminar B

"Science seminar" is a class subject of the Graduate School of Integrated Sciences for Life. Master's students are required to take Science Seminar B.

For details on attendance at Science Seminar, please refer to the following Guidelines for Implementing Science Seminar of the Graduate School of Integrated Sciences for Life. For auditing a Science Seminar, please follow the instructions of the supervisor and the guidance of each seminar.

Guidelines for Implementing Science Seminar of the Graduate School of Integrated Sciences for Life

1. Science seminars are organized and implemented by each of the seven Programs. Students are recommended to audit at least one seminar per Program.
2. The seminar's schedule and other information will be provided on bulletin boards and the Graduate School website.
3. After auditing a science seminar held by a Program, students need to obtain a stamp mark for their attendance on their seminar auditing slips, and submit the slips after auditing 15 or more science seminars, together with an Application for Recognition of Credits, to their supervisor.
4. For the recognition of credits (two units), students must audit at least 15 science seminars.
5. Science Seminar B shall be certified by the Academic Affairs Committee.
6. The auditing of a science seminar can be replaced with the auditing of a lecture meeting at an academic conference, etc. (including lectures and seminars by companies when special arrangements of education methods as specified in Article 10 of By-laws of the Graduate School are applied).

   In this case, the supervisor may decide how many science seminars are equivalent to such a lecture meeting at an academic conference. Students must submit the number of seminar auditing slips determined by their supervisor.

12. Degree Regulations (Internal Regulations of the Graduate School)

○ Internal Regulations of the Graduate School of Integrated Sciences for Life Based on the Hiroshima University Degree Regulations

Approved by the Dean of the Graduate School
on April 1, 2019

Table of Contents

Chapter 1: General Provisions

(Purpose)

Article 1: These Internal Regulations prescribe the necessary matters regarding the conferral of academic degrees at the Graduate School of Integrated Sciences for Life of Hiroshima University (the "Graduate School") based on Article 17 of the Hiroshima University Degree Regulations (Regulations No. 8 of April 1, 2004; the "Regulations").

Chapter 2: Degree Screening to Recognize the Completion of the Doctoral Courses of the Graduate School of Integrated Sciences for Life

(Qualification for Submitting Theses and Timing)

Article 2: Those who can submit a degree thesis (the "Thesis") based on Article 2 (2) of the Regulations are those who have earned the credits prescribed in Article 15 of the By-laws of the Graduate School of Integrated Sciences for Life, Hiroshima University (approved by the Dean of the Graduate School on April 1, 2019) (the "designated Credits"), or those who will surely have earned the designated Credits by the end of the term when they submit the Thesis and who have received guidance for the Thesis preparation and others (the "Research Guidance").

2. Students shall submit the Thesis by the due date designated by their diploma program. In principle, the due date for students who are expected to complete their course at the end of March is set for January 25 of the academic year when they are expected to complete their course, while the due date for students who are expected to complete their course at the end of September is set for July 15 of the academic year when they are expected to complete their course. However, those who have been enrolled in their course for three years or longer can carry out the degree application procedure as needed.
3. Notwithstanding the provisions of the preceding paragraph, if the Thesis due date falls on either of the following items, the due date shall be replaced with the first weekday following that day.
   (1) Sunday or Saturday
   (2) National holiday prescribed by the Act on National Holidays (Act No. 178, 1948)

(Procedures for Submitting the Thesis)

Article 3: If those to whom Article 2-1 applies submit their Thesis, they shall submit the following documents to the Dean of the Graduate School under the approval of their supervisor.

(1) Application for Review of Thesis: one (1) copy
(2) Thesis: one (1) copy
(3) List of Publications: one (1) copy
(4) Summary of Thesis: one (1) copy
(5) Resume: one (1) copy
(6) Reference Papers, if any: one (1) copy

(Acceptance of the Thesis)

Article 4: When the Thesis is submitted based on the provisions of the preceding article, the

Dean of the Graduate School shall consult the Faculty Meeting of the Graduate School of Integrated Sciences for Life of Hiroshima University (the "Faculty Meeting") regarding whether or not to accept it.

(Screening Committee)

Article 5: If it has been decided to accept the Thesis based on the provisions of the preceding article, the Dean of the Graduate School shall refer the Thesis to the Faculty Meeting.

2. The Faculty Meeting shall immediately establish a Screening Committee based on the reference described in the preceding paragraph.
3. The Screening Committee shall consist of three (3) or more professors of Hiroshima University (the "University") selected from a field closely related to the theme of the Thesis. However, it is allowed to include faculty members of the University or faculty members from other graduate schools, research institutes, etc. if it is deemed necessary by the Faculty Meeting.
4. The chief referee shall be selected from among the faculty members of the Graduate School.

(Thesis Screening Session)

Article 6: The Screening Committee shall hold an open Thesis screening session.

(Date of Academic Degree Conferral)

Article 7: Doctoral degrees shall be conferred on the following date to those who have passed the Thesis screening and the final examination.

(1) In the case of those who have passed within the standard completion period: Date of the diploma awarding ceremony
However, this can be replaced with the date of passing if there are any special circumstances deemed legitimate by the Dean of the Graduate School after discussion with the Faculty Meeting.

(2) In the case of those other than the above: Date of passing

Chapter 3: Degree Screening through the Submitted Thesis

(Qualification for Applying for Degree Conferral)

Article 8: Those to whom any of the following apply can apply for the conferral of a doctoral degree by submitting the Thesis based on Article 2 (3) of the Regulations.

(1) A person who was enrolled in his/her doctoral course of the Graduate School for three (3) years or longer, earned the designated Credits, and received the Research Guidance before withdrawing from the University
(2) A person who has completed his/her master's course and has gained research experience of four (4) years or longer
(3) A person who has graduated from the University and has gained research experience of six (6) years or longer
(4) Any person, except for those listed in the preceding three items, who is deemed by the Faculty Meeting to have achieved outstanding research results.

(Procedure for Submitting the Thesis)

Article 9: If those to whom any of the items in the preceding article apply submit the Thesis, they shall submit the following documents to the President of Hiroshima University through the Dean of the Graduate School.

(1) Degree Application: one (1) copy
(2) Thesis: one (1) copy
(3) List of Publications: one (1) copy
(4) Summary of the Thesis: one (1) copy
(5) Resume: one (1) copy
(6) Reference Papers, if any: one (1) copy
(7) Certificate of graduation from the last school (Certificate of completion of a graduate school program): one (1) copy
(8) Certificate issued by the supervisor or an equivalent person who can verify the research period: one (1) copy

2. Notwithstanding the provisions of the preceding paragraph, those who have graduated from the University and those who have completed the Graduate School do not have to

submit the documents prescribed in (7) and (8) if their research experience is limited only to the University.

(Acceptance of the Thesis)

Article 10: With regard to the acceptance of the Thesis, the provisions of Article 4 shall apply mutatis mutandis.

(Screening Committee and Interview Committee)

Article 11: With regard to the Screening Committee, the provisions of Article 5 shall apply mutatis mutandis.

2. The Interview Committee shall consist of three or more faculty members of the University selected from a field closely related to the theme of the Thesis. However, it is allowed to include faculty members of the University or faculty members from other graduate schools, research institutes, etc. if it is deemed necessary by the Faculty Meeting.
3. The Interview Committee shall include a chief referee selected from the faculty members of the Graduate School.

(Contents of the Examination or Interview and Eligible Period)

Article 12: The number of foreign languages used for the interview based on Article 6 (3) of the Regulations shall be one (1) at the Graduate School.

2. The eligible period based on Article 6 (4) of the Regulations shall be three (3) years at the Graduate School.

Article 13: The date when a doctoral degree is conferred on a student who has passed the thesis screening and interview or the examination shall be the date of passing.

(Thesis Screening Committee)

Article 14: The Screening Committee shall hold an open Thesis screening session.

Chapter 4: Miscellaneous Provisions

(Document Formats)

Article 15: The formats of related documents shall be from Appended Format No. 1 to Appended Format No. 7.

(Other)

Article 16: In addition to the matters prescribed in these Internal Regulations, necessary matters concerning the conferral of academic degrees shall be determined following deliberations by the Faculty Meeting.

Supplementary Provisions

The present internal regulations shall come into force on April 1, 2019.

13.Degree Examination Schedule and Procedures for Students Enrolled in Their Course for Three Years or Longer and for Degree Conferral by Submitting a Thesis

With regard to the items marked with a black dot, applicants for the awarding of a degree need to take the necessary procedures.
(Items with a white dot are handled by supervisors and/or the Student Support Office (e.g., the office responsible for the graduate course).

Item	Where to Submit	Submission Deadlines		Remarks
		Conferral in Mar.	Conferral in Sep.	
●**Submit of Doctoral Thesis Title** (Must be prepared in consultation with the supervisor)	Student Support Office responsible for the Program the students belong to	Oct. 15	Apr. 15	* Required documents must be submitted to the Student Support Office. * The Preliminary Review Committee shall consist of the supervisor and two or more faculty members recommended by the supervisor. (At least three professors of the University must be included.)
○Approval by Preliminary Review Committee	Graduate School Board of Representatives	Mid-Nov.	Mid-May	
●**Submit summary of Thesis** ●**Submit draft Thesis**	Student Support Office responsible for the Program the students belong to	Mid-Nov.	Mid-May	
○ Completion of review/report of results	Student Support Office responsible for the Program the students belong to	Jan. 10	Jul. 20	
●**Submit of application documents, etc.** Thesis screening application One (1) copy List of publications One (1) copy Thesis summary One (1) copy Doctoral Thesis submission and publication confirmation (application form) One (1) copy Curriculum Vitae One (1) copy Reference papers, if any One (1) copy Letter of consent One (1) copy *Apart from the above, applicants must personally submit the necessary documents from among a list of publications, the Thesis summary, the resume and reference papers, together with their Thesis, to individual screening committee members.	Student Support Office responsible for the Program the students belong to (e.g., the office responsible for the graduate course)	Mid-Jan. Notification of acceptance of submitted paper (Deadlines will be announced in April each year.)	Early Jul. Notification of acceptance of submitted paper (Deadlines will be announced in April each year.)	*Reference papers (relevant papers) must include at least one paper published as the first author in a peer-reviewed journal.
○Recommendation of screening committee members (At least three professors of the University)	Student Support Office responsible for the Program the students belong to	Early Jan.	Mid-Jul.	
Acceptance of Thesis Approval by Screening Committee	Graduate School Board of Representatives	Mid- Jan.	Mid- Jul.	
●**Submit Thesis** (Tentatively bound, may be submitted by e-mail)	Screening Committee	At least one week before the day of Thesis screening		Upon completion of the preliminary review, the Thesis, together with the required documents, must be submitted to each screening committee member at least one week before the full-scale Thesis screening.
●**Thesis presentation**		After approval of the Graduate School Board of Representatives		The schedule shall be adjusted separately.
○Completion of Thesis screening and final examination / Report of results Summary of Thesis screening results One (1) copy Summary of examination results One (1) copy Doctoral Dissertation Plagiarism Checking Confirmation One (1) copy	Student Support Office responsible for the Program the students belong to	Mid- Feb.	Mid- Aug.	
●**Submit of electronic data (PDF) on Thesis, etc**. (Thesis and Summary(Abstract))	Student Support Office responsible for the Program the students belong to	Mid-Feb.	Mid -Aug.	
Date of final examination/degree conferral	Graduate School Board of Representatives	Early Mar.	Early Sep.	

Notes:
1. The deadline specified herein shall be 5:00 p.m. on the designated date. If the day stipulated herein falls on a Saturday or a national holiday prescribed in the Act on National Holidays, the deadline shall be the previous day, and if the day falls on a Sunday, the day before the previous day.
2. The submission deadlines are subject to change.
3. If a notification of acceptance of a submitted paper is received after the deadline specified herein, applicants must submit application documents, etc. for the degree conferral in the following term. (In such a case, applicants shall be exempted from the submission of a Thesis title notification and preliminary review.)

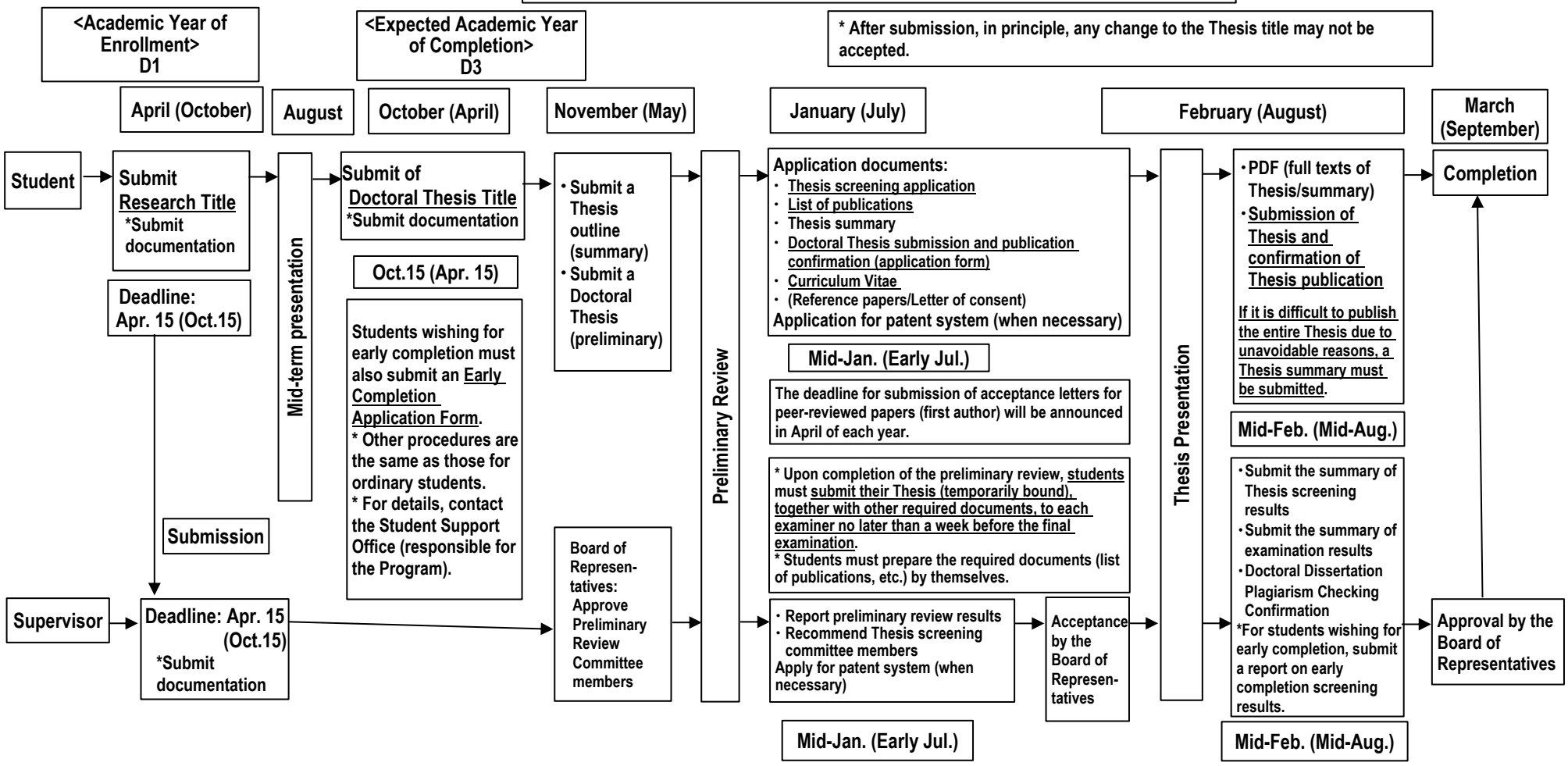
Procedures for Doctoral Thesis

* The formats of underlined documents can be downloaded on the Graduate School website.

<< Enrollment in April (October), Completion in March (September) >>

Where to Submit (except for a temporarily bound Thesis): Student Support Office responsible for the Program the students belong to (e.g., the office responsible for the graduate course)

Where to Submit for Thesis (temporarily bound): Thesis Screening Committee (Students must submit their Thesis by themselves.)



Formats

(Doctoral Course)

D

D

研　究　題　目　届（D）

Notification of the Research Title

Year　　Month　　Date
年　　月　　日　提出

学生番号 Student ID Number	D	ふりがな 氏名 Katakana Name	
プログラム名 Program	□ 生物工学　Biotechnology □ 食品生命科学　Food and AgriLife Science □ 生物資源科学　Bioresource Science □ 生命環境総合科学　Life and Environmental Sciences □ 基礎生物学　Basic Biology □ 数理生命科学　Mathematical and Life Sciences □ 生命医科学　Biomedical Science		
研究題目 （外国語の場合は，和訳を付すこと。） Research Title (Japanese Title)			

＜以下は主指導教員が記入＞ The followings are written by supervisor.

指導教員氏名			
主指導教員 氏　　名		確認印又はサイン	研究指導計画を策定し副指導教員と共有して学生に明示 □
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		
副指導教員 所属プログラム	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　　　)]		

指導教員は，本学の教授，准教授又は講師を２名以上含めること。
副指導教員は，所属プログラムを担当する教員１ 名以上と，所属プログラムと異なるプログラムを担当する教員を１名以上含むこと。他研究科・他大学所属の場合は，職名を明記すること。
指導教員に，博士課程後期学生募集要項の主指導教員一覧表に記載されている教員が 3 名以上含まれない場合は，プログラム長の所見を要する（任意様式）。
研究指導計画書は，依頼があれば直ちに提出すること。

提出先：所属するプログラムを担当する支援室（大学院課程担当等）

提出〆切：４月入学の場合／４月１５日，１０月入学の場合／１０月１５日

単位認定申請書
Application for Recognition of Credits

年　　月　　日
Date: (Year)　(Month)　(Day)

大学院統合生命科学研究科長　　殿
To: The Dean of the Graduate School of Integrated Sciences for Life

統合生命科学研究科　　プログラム
Graduate School of Integrated Sciences for Life
Program of
学生番号
Student Number
氏　　名
Name

認定科目の単位等の認定を受けたいので，報告書等を添付のうえ，申請します。
I hereby apply for the recognition of the credits for designated courses, with reports or other required documents attached hereto.

該当科目に○ Put a circle in the appropriate box.	認　定　科　目 Course	備　　考 Remarks
	海外学術活動演習 Exercises in International Academic Studies	博士課程前期 Master's Course
	海外学術研究 Academic Research Overseas	博士課程後期 Doctoral Course
	生物・生命系長期インターンシップ Long-term Internship	〃

主指導教員氏名 Name of Academic Supervisor		Seal or Signature	
〈単位認定にあたっての意見〉(Comments regarding certification of credits)			
主指導教員評価 Evaluation by Academic Supervisor	秀　優　良　可 Excellent, Very Good, Good, Fair	学務委員会認定 Certification of Academic Affairs Committee	

プログラム共同セミナー単位認定申請書
Application for Recognition of Credit for “Science Seminar”

年　　月　　日
Date: (Year) (Month) (Day)

大学院統合生命科学研究科長　　殿
To: The Dean of the Graduate School of Integrated Sciences for Life

統合生命科学研究科　　プログラム
Graduate School of Integrated Sciences for Life
Program of
学生番号 / Student ID
氏　　名 / Name　　Seal or Signature

プログラム共同セミナーの単位認定を受けたいので，聴講届を添付のうえ，申請します。
I hereby apply for the recognition of the credits for Science Seminar, with Participation Certificate or other required documents attached hereto.

回数 Number	日付(年月日) Date (YY/MM/DD)	講師名 Lecturer’s Name	世話プログラム Facilitated Program（適切な番号に○をつける. Put a circle appropriate number.）
1			１・２・３・４・５・６・７・８
2			１・２・３・４・５・６・７・８
3			１・２・３・４・５・６・７・８
4			１・２・３・４・５・６・７・８
5			１・２・３・４・５・６・７・８
6			１・２・３・４・５・６・７・８
7			１・２・３・４・５・６・７・８
8			１・２・３・４・５・６・７・８
9			１・２・３・４・５・６・７・８
10			１・２・３・４・５・６・７・８
11			１・２・３・４・５・６・７・８
12			１・２・３・４・５・６・７・８
13			１・２・３・４・５・６・７・８
14			１・２・３・４・５・６・７・８
15			１・２・３・４・５・６・７・８

１:生物工学(Biotechnology)，２:食品生命科学(Food and AgriLife Science)，３:生物資源(Bioresource Science)，４:生命環境総合科学(Life and Environmental Sciences)，５:基礎生物学(Basic Biology)，６:数理生命科学(Mathematical and Life Sciences)，７:生命医科学(Biomedical Science)，８:その他(Others)
注意：１～７のセミナーは最低一つずつ含んでいることが望ましい。
Note: at least one seminar from each program (1-7) is required.

主指導教員氏名 Name of Academic Supervisor	学務委員会認定 Certification of Academic Affairs Committee
Seal or Signature	

博 士 論 文 題 目 届
Notification of the Doctoral Thesis Title

Year 年　Month 月　Date 日　提出

学生番号 Student ID Number	D	ふりがな 氏 名 Katakana Name	
プログラム名　Program		希望する学位の種類 Tentative Degree Name	
□ 生物工学　Biotechnology		□ 博士（工学） Doctor of Philosophy in Engineering □ 博士（理学） Doctor of Philosophy in Science	□ 博士（学術） Doctor of Philosophy
□ 食品生命科学　Food and AgriLife Science □ 生物資源科学　Bioresource Science □ 生命環境総合科学　Life and Environmental Sciences		□ 博士（農学） Doctor of Philosophy in Agriculture	
□ 基礎生物学　Basic Biology □ 数理生命科学　Mathematical and Life Sciences □ 生命医科学　Biomedical Science		□ 博士（理学） Doctor of Philosophy in Science	
日本語題目 Japanese Title			
英語題目 English Title			

＜以下は主指導教員が記入＞ The followings are written by supervisor.

予 備 検 討 委 員 の 推 薦

下記のとおり推薦します。　主指導教員 氏　名　　確認印 又は サイン

主　査	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]
委　員	[教授・准教授・講師・助教] [生工・食生・生資・生環・基生・数生・生医・他研・他大(　　)]

注）予備検討委員は審査委員会が本学の教員（※教育資格 I）3 人以上の審査委員をもって組織することを考慮のうえ，推薦してください。

提出〆切は（９月修了の場合：４月１５日，３月修了の場合：１０月１５日）

Month/Day/Year

To: Dean of the Graduate School of Integrated Sciences for Life

Student ID:

Program :

Name : Seal/signature

Application for Early Completion

I hereby apply for the recognition of early completion of the doctoral course in accordance with the Article 43 of the Hiroshima University Graduate School Regulations.

I plan to complete in: Month/Year

Application for Early Completion / Comments by Supervisor

Month/Day/Year

Student ID	D	Name	
Program			
Desired Completion Time	Month/Year	Supervisor	Seal/signature

別記第1号様式

Attached Form 1

年　　月　　日
Date: (Year) (Month) (Day)

広島大学大学院統合生命科学研究科長　殿
To: Dean of Graduate School of Integrated Sciences for Life
Hiroshima University

年　　月　　日　入学・進学
Enrollment Date: (Year) (Month) (Day)

広島大学大学院統合生命科学研究科
Graduate School of Integrated Sciences for Life,
Hiroshima University

博士課程後期　　プログラム
Doctoral Course　　Program

氏　　名（自署）
Name (Signature)

学位論文審査願
Application for Review of Dissertation

広島大学大学院統合生命科学研究科博士課程後期修了の認定を受けるため，広島大学学位規則第4条第1項の規定に基づき，下記関係書類を提出いたしますから，審査くださるようお願いします。

In order to receive approval for completion of the doctoral course of the Graduate School of Integrated Sciences for Life, Hiroshima University, I submit the related documents listed below for review based on the provisions of Article 4 (1) of the Hiroshima University Degree Regulations.

記

論　　文 Dissertation	1通 1 copy
論 文 目 録 List of Publications	1通 1 copy
論文の要旨 Summary of Dissertation	1通 1 copy
履　歴　書 Resume	1通 1 copy

別記第3号様式

論　　文　　目　　録

氏　　名（自署）

学　位　論　文

公 表 の 方 法

参　考　論　文（学位要件論文）

関　係　論　文

備考

1　学位論文及び参考論文については，論文題目，公表の方法，公表年月日及び冊数を記載すること。

2　論文題目が日本語の場合は，英訳を付けて，日本語，外国語の順序で列記し，外国語は（　）内に記載すること。

　論文題目が外国語の場合は，和訳を付けて，外国語，日本語の順序で列記し，日本語は（　）内に記載すること。

3　参考論文が2編以上ある場合は，列記すること。

4　論文をまだ公表していないときは，公表の方法及び時期の予定を記載すること。

5　引用している特許及び特許出願が公開されているものは，参考論文に記載することができる。

6　論文の要旨は，4000字以内とすること。なお，英文の場合は，1500ワード以内とする。

7　用紙の規格はA4とし，縦にして左横書とすること。

＜Example＞

論　　文　　目　　録

氏　　名　　(Seal or Signature)
(Name)

学 位 論 文　○○○○○○○○○○○○○○○○
(Title of Dissertation)　（○○○○○○○Japanese○○○○○○○○○）
(Note: Describe Japanese translation between parenthesis if the Dissertation is written in English.)

公表の方法　　広島大学学術情報リポジトリに全文又は要旨を公表するほか, 次のとおり公表する。
(Publication Method)　The entire doctoral dissertation or the abstract/summary of the dissertation is published in the Hiroshima University Institutional Repository, and the contents are published as shown below.

Chapter 2	参考論文の 1
Chapter 3	To be submitted to an academic journal
Chapter 4	参考論文の 2

参 考 論 文　（学位要件論文）
＜Example＞
1 Author(s), Title of Publication, Name of Journal, Volume (or No.), Pages (the first and the last pages. Same for all below), Published year
2 Author(s), Title of Publication, Name of Journal, (Under Printing: Accepted year-month-date)
3 Author(s), Title of Book, Title of Theme/chapter, Name of Publishing company, Pages, published year.
4 Patentees(s) or Inventor(s), Title of Invention, Patent Number (*Note 2)
5 Patent Applicant(s) or Inventor(s), Title of Invention, Publication Number of Patent Application (*Note 2)

関 連 論 文
*Note 1 Reference papers (Related Publications) mean publications and patents (including accepted or in press) which concern the Doctoral Dissertation directly. The publications which quote as only references or have no direct relation shall be not described. In cases of there being a coauthor, the coauthor has submitted the certificate of consent “I agree to declare this thesis as your academic dissertation” to avoid submission of an academic dissertation with the same contents by the coauthor.
*Note 2 Patents and published applications for patents which directly concern the Doctoral Dissertation can be described.
*Note 3 A related paper is a paper whose content is related to the dissertation and for which the applicant is an author (including co-authors), but not a reference paper. If not, delete "関連論文".

別紙４

The shaded parts should not be changed.

学　位　論　文　の　要　旨

(Summary of the Dissertation)

論文題目　　○○○○○○○○○○○○○○○

(Title of Dissertation)（注）　題目（副題を含む。）は，提出論文のとおり記載すること。

英文のときは和訳を(　)内に併記すること。

(Note: Fill out the title (including the subtitle) as described in the dissertation. Describe Japanese translation between parenthesis if the Dissertation is written in English.)

広島大学大学院統合生命科学研究科

○○○○○　プログラム　(Program name)

学生番号　D・・・・・・・　(Student ID number)

氏　　名　○○○○　(Name)

（注）論文の要旨は，Ａ４判用紙を使用し，４０００字以内とする。

なお，英文の場合は１５００ワード以内とする。

(Note: Summary of the dissertation shall be written on A4 size paper, and shall not exceed 4,000 characters,　In case it is written in English, do not exceed 1,500 words.)

学 位 論 文 の 要 旨

論文題目　　○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

広島大学大学院統合生命科学研究科
○ ○ ○ ○ ○　プログラム
学生番号　D・・・・・・
氏　　名　○　○　○　○

The shaded parts should not be changed.

履　　歴　　書

ふ　り　が　な
氏　　名

生　年　月　日

本籍（都道府県名）

現　住　所

学　　歴　＜Example＞

April 1, yyyy　Faculty of Biosphere Science, Hiroshima University
Admission

March 23, yyyy　Faculty of of Biosphere Science, Hiroshima University
Graduation

April 1, yyyy　Department of ○○○○, Graduate School of Biosphere Science (Master's course), Hiroshima University
Admission

:::::::::::::::::::::::::::::::::::::::

March 23, yyyy　Department of ○○○○, Graduate School of Integrated Sciences for Life (Doctor's course), Hiroshima University
Expected　completion

職　　歴　＜Example＞

mmm dd, yyyy - mmm dd, yyyy　TA, RA, etc.

研　究　歴

賞　　罰

上記のとおり相違ありません。
(I affirm the above to be true and correct in every particular.)

年　　月　　日

氏　　名(自署)

Notes:

1. Academic background and working and research career shall be written in chronological order after high school.
2. If you completed a doctoral curriculum offered by a graduate school of Hiroshima University before withdrawing from the graduate school, you must attach a transcript of credits.
3. Use A4-size paper, in vertical format, and write horizontally.

Reference

For official information, please consult the Japanese version of the guidebook.

履　　歴　　書
Curriculum Vitae

ふ　り　が　な
氏　　名
Name

生　年　月　日
Date of Birth

本籍（都道府県名）
Home Address

現　　住　　所
Current Address

学　　歴
Academic Background
　　年　　月　　日
　Year / Month / Day

職　　歴
Working Career
　　年　　月　　日
　Year / Month / Day

研　　究　　歴
Research Career
　　年　　月　　日
　Year / Month / Day

賞　　罰
Rewards and Penalties

上記のとおり相違ありません。
I hereby certify that the above information is correct in every detail.
　　年　　月　　日
　Year /　Month　/　Day

氏　　名
Name　　Signature

履　　歴　　書

ふ　り　が　な
氏　　名

生　年　月　日

本籍（都道府県名）

現　　住　　所

学　　歴
　年　　月　　日

職　　歴
　年　　月　　日

研　　究　　歴
　年　　月　　日

賞　　罰

上記のとおり相違ありません。

年　　月　　日

氏　名（自署）

Attachment 2

LETTER OF CONSENT

I hereby agree that the contents of our joint academic paper below can be incorporated into the Doctoral Dissertation of Mr. / Ms. ○○○○. Additionally, I agree that the data of his / her Doctoral Dissertation can be deposited into the Hiroshima University Institution Repository, and that they can be released through the Internet for free.

1 Authors' Names

2 Title of Academic Paper

3 Journal Name

4 Volume, Page, Year

(dd/mm/yyyy)

Name(signature)

Note: Paper size shall be A4 size.

Doctoral Dissertation Submission and Publication Confirmation (Application Form)

Based on Articles 8 and 9 of the Degree Regulations (Ordinance of the Ministry of Education, Culture, Sports, Science and Technology No.9 of April 1, 1953) and on Articles 13 and 14 of the Hiroshima University Degree Regulations (No.8 of April 1, 2004) those who will receive a doctoral degree from Hiroshima University shall use the Hiroshima University Institutional Repository for the publication of the abstract of the dissertation content, the summary of the results of the dissertation screening and the entire dissertation.

When you submit a doctoral dissertation, please confirm the following requirements regarding application for a doctoral degree and publication in the Hiroshima University Institutional Repository then fill out the following form:

Applicant's Name:	
Graduate School where the Dissertation is to be Submitted:	
Title of the Dissertation:	

Inquiries :

① On the Institutional Repository and Copyright:

Hiroshima University Library Information Planning Group (Information Planning)
Tel : 082-424-6228 (Extension: Higashi-Hiroshima 6228)
Fax: 082-424-6211 (Extension: Higashi-Hiroshima 6211)
E-Mail: tosho-kikaku-jyoho @office.hiroshima-u.ac.jp
Hiroshima University Institutional Repository（HiR）Top page:
http://ir.lib.hiroshima-u.ac.jp/

② On the Confirmation (application form), electronic files, thesis reviews

Contact your support office (Student Support Section).

③ On Patent issues etc.

Contact your doctoral advisor or
Office of Research and Academia-Government-Community Collaboration
(Department of Intellectual Property)
Tel: 082-424-5597 Fax: 082-424-6133
E-Mail: chizai@hiroshima-u.ac.jp

1．Items to verify concerning the writing of the dissertation		
	☐	The author took the required educational program on research ethics, and sufficiently understood the principles and expectations for ethical research.
	☐	The author did not commit any misconduct in the research such as fabrication, falsification, or plagiarism.
	☐	The author did not infringe upon copyright. (Works were cited in an appropriate manner as described in A – D below, or copyright clearance was obtained to use the work in writing the thesis.) A Quotation is from a work already made public. B Quotation is used in a manner compatible with fair practice. * Quotation is used only when deemed necessary. * Quotation is clearly indicated by devices such as quotation marks. C Quoting from a work is permissible to the extent justified by the purpose of the quotation. * The subordinate-superior relationship between quoted parts and other passages in the text is clear. * Quotation is not used more than is absolutely necessary. D Sources are clearly indicated.
	☐	There are no human research subjects who require privacy protection, or the privacy of the research subject is protected (the subject agreed to participate in the study, and also agreed on the manner of publication).

※For official use only

学位記番号	甲 乙　第　　号	学位授与年月日	年　　月　　日

(Please fill in the following pages with the necessary information.)

2. Items to verify concerning the application of dissertation

☐	In cases of there being a coauthor, the coauthor has submitted the certificate of consent "I agree to declare this thesis as your academic dissertation" to avoid submission of an academic dissertation with the same contents by the coauthor. Alternatively, the dissertation is written by a single author.
☐	The electronic data of the entire dissertation and the abstract of the dissertation content will be submitted. In cases of unavoidable circumstances as described in the Hiroshima University Degree Regulations, article 14.2, the electronic data of the summary of the dissertation content will also be submitted. The data file format of the doctoral dissertation is PDF (PDF/A(ISO 19005 recommended).

3. Items to verify concerning publication in the Hiroshima University Institutional Repository

<Note>

1. Hiroshima University conducts internet publication of the entire dissertation or its abstract in the Hiroshima University Institutional Repository (hereinafter referred to as "Repository"). Note that by submitting this form "Doctoral Dissertation Submission and Publication Confirmation (Application Form)", you agree to matters concerning reproduction right and right of public transmission, both of which are part of copyright.
2. By publishing the data in the Repository, we manifest that data replication (print or download etc.) is strictly limited to purposes of investigative research, education, and study.
3. Note that the abstract of the dissertation content and the summary of the results of the dissertation screening will be published in the Repository within 3 months after the day the degree is awarded and the entire dissertation or the summary of the dissertation content within 1 year after the day the degree is awarded. Please note that we will post the information about publication on the home page of the Repository.

☐	When publishing the entire dissertation, the degree applicant has personally confirmed any applicable rights/copyrights.
☐	The applicant has no unavoidable circumstance as described in the Degree Regulation of the Hiroshima University, Article 14.2. (as described below A – H) . (Please check any box that applies below. If none of the following options apply, check the box on this option.)

【Unavoidable circumstances as described in the Hiroshima University Degree Regulations, Article 14.2】 (only choose appropriate entries)

A☐	Publication in the internet is virtually impossible because the thesis contains stereoscopic figures etc.
B☐	Text, charts or pictures etc. in the dissertation are not regarded as quotation according to the Copyright Law Article 32 and they are used with permission according to Article 63 of the same law, and publication in the Repository is beyond the sphere of permitted use and conditions. Additionally, publication in the Repository hasn't been permitted.
C☐	There is a coauthor and permission from him/her for publication in the Repository has not yet been obtained.
D☐	Copyrights have been granted, and permission from the copyright holder (publishing company or academic society) has not yet been obtained.
E☐	The dissertation is already submitted/published or planned to be submitted/published and permission from the magazine or publishing company has not yet been obtained.
F☐	There is private information or secrets concerning the object of research which are not allowed to be published.
G☐	The dissertation is planned to be submitted/published and publication of the whole text would create obvious disadvantages to the applicant.
H☐	The applicant has a plan to apply for patent or new design for practical use etc., and publication of the whole text would create obvious disadvantages to the applicant.

To the President of Hiroshima University:

For the reason stated above

(Details : _____) I wish to publish a summary of my doctoral dissertation instead of the whole text.

As soon as the unavoidable circumstances mentioned above are resolved, I will immediately resubmit this form to _____ and have the whole text of my dissertation published in the Repository.

【Assumed date of publication : Year 20____ , Month _____ , Day _____ 】

(☐ not yet determined)

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4. Signatures of the applicant and the doctoral advisor

Signature of the Applicant for a Doctoral Degree (sign manually)		Year 20____ , Month _____ , Day _____
Signature of the Main Doctoral Advisor (sign manually)		Year 20____ , Month _____ , Day _____

☐ The advisor has confirmed that there is no plagiarism or theft in this dissertation by following methods:
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Inquiries・Submission addresses

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for the fields of Science (AdSM)
1-3-1, Kagamiyama, Higashi-Hiroshima,
739-8530
TEL: (082) 424-7008, 7009
E-mail: sentan-gaku-sien@office.hiroshima-u.ac.jp</td></tr>
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