Joint International Master's Programme in Sustainable Development (Hiroshima University - Leipzig University)

Master's Course, Graduate School of Advanced Science and Engineering, Hiroshima University ${\rm AY2020~Self\text{-}inspection~and~Annual~Report}$

efforts	and timetables, guidance for new students, education for students on learning,
	employment and research ethics, and other matters related to support for students
	on academic affairs and student life.

Area 2: Criteria for internal quality assurance

Criterion 2-1: Internal quality assurance is functioning effectively.

Analysis item 2-1-1	Initiatives to systematically and continuously collect and analyze the information
	necessary for self-inspection/evaluation are implemented in the school or the program,
	and verification is conducted on whether such initiatives are functioning effectively.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Number of meetings held by the Self-inspection and Evaluation Committee: 5
[Remarks]	The Self-inspection and Evaluation Committee conducts inspections and evaluation of
Grounds and reasons for	educational activities, etc. and accumulates the results of class improvement
evaluation	questionnaire for each term as evidence. It also has a functioning feedback system,
Supplementary explanation	returning faculty members' comments in response to students' evaluation in the class
of evidence	improvement questionnaire.
Distinctive activities and	
efforts	

Analysis item 2-1-2	The opinions of students, alumni and other parties concerned are collected and analyzed
	systematically and continuously, and efforts for utilizing such opinions are made.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Results of the class improvement questionnaire by MOMIJI
	Completion Schedule (Master's Courses)
[Remarks]	Each laboratory has established a communication system between the faculty and
Grounds and reasons for	students. Interviews are held as necessary to share issues related to educational and
evaluation	research activities and student life. In addition, faculty members in charge of class
Supplementary explanation	subjects reflect on the results of the class improvement questionnaire by MOMIJI and
of evidence	prepare improvement plans. Furthermore, the Academic Affairs Committee has begun
Distinctive activities and	to develop a questionnaire to be conducted at the time of course completion and has
efforts	decided to conduct it in AY2022.
	There is a functioning system to share and inspect issues and progress in educational
	and research activities through interviews between students and supervisors each
	time when the students submit "Notification of the Research Title" and "Outline of
	Research Plan" and conduct interim presentations based on the "Completion Schedule
	(Master's Courses)."

Criterion 2-2: The quality of the faculty and those who support or assist educational and research activities is ensured through an organization-wide initiative, and efforts are made to maintain and improve it.

Analysis item 2-2-1	Information on grading and student guidance is shared at the program committee, etc.
	for improvement.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable

	Admission information for the Joint Degree Programme Hiroshima - Leipzig "Joint
	International Master's Programme in Sustainable Development"
	https://www.jointdegree.eu/de/sustainable-development/
	Student Handbook
[Remarks]	The Admission Policy, Curriculum Policy and Diploma Policy are all published on the
Grounds and reasons for	website and the brochure of the Graduate School. The Admission Policy is also published
evaluation	in various application guidelines, and the Curriculum Policy and Diploma Policy are also
Supplementary explanation	published in the Student Handbook.
of evidence	
Distinctive activities and	
efforts	

Area 4: Criteria for facilities/equipment and student support

Criterion 4-1: Facilities and equipment suitable for the educational research organization and curriculum have been established and effectively used.

Analysis item 4-1-1	Self-study rooms, group discussion rooms, information equipment rooms, classrooms and
	educational facilities are available outside of class hours, thus an independent learning
	environment is well prepared and effectively used.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Floor map of the Graduate School for International Development and Cooperation
	building
[Remarks]	Each laboratory has graduate student rooms and seminar rooms. Other facilities
Grounds and reasons for	prepared include an information processing education room, open-stack reading area,
evaluation	employment information material area, and an open space for free discussion. In
Supplementary explanation	addition, there is a plan to establish a new research space for students by renovating
of evidence	the book stacks in AY2021.
Distinctive activities and	
efforts	

Criterion 4-2: Counseling, advice and support are provided to students in terms of their daily lives, career paths, financial assistance, etc.

Analysis item 4-2-1	Appropriate support is provided to students in terms of course guidance, learning, daily
	lives, financial matters, etc.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Completion Schedule (Master's Courses)
	"Notification of the Research Title" "Outline of Research Plan" (Student Handbook)
	Admission information for the Joint Degree Programme Hiroshima - Leipzig
	Joint International Master's Programme in Sustainable Development
	https://static.uni-graz.at/fileadmin/projekte/jointdegree/SD/SD_Application_
	Selection/Program_Information_for_Entrance_HU_20210113.pdf

[Remarks]	Each laboratory has established a communication system between the faculty and
Grounds and reasons for	students. Interviews are held as necessary to share issues related to educational and
evaluation	research activities and student life.
Supplementary explanation	There is a functioning system to share and inspect issues and progress in educational
of evidence	and research activities through interviews between students and supervisors each
Distinctive activities and	time when the students submit "Notification of the Research Title" and "Outline of
efforts	Research Plan" and conduct interim presentations based on the "Completion Schedule
	(Master's Courses)." In addition, a scholarship system unique to the program has been
	established to provide financial support to students whose entrance university is
	Hiroshima University.

Analysis item 4-2-2	A system has been established and implemented to provide daily life support, etc. to
	students with disabilities, international students, and other students who require
	special support.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Application guidelines for the Joint International Master's Programme in Sustainable
	Development
	https://www.hiroshima-u.ac.jp/adse/news/62631
	Website of Hiroshima University Accessibility Center
	https://www.achu.hiroshima-u.ac.jp/
	Orientation for new students at the Graduate School of Advanced Science and
	Engineering
	https://www.hiroshima-u.ac.jp/adse/ssorientationj_october2020
	Supporter briefing documents 1-5
[Remarks]	Special consideration is given to students with disabilities, etc. in taking exams and
Grounds and reasons for	studying in cooperation with their supervisors and the University's Accessibility
evaluation	Center. For international students, all parts of the Student Handbook are prepared in
Supplementary explanation	English, and the Supporters, supervisors and the Management Support Office work
of evidence	together to provide necessary support for their daily life and study.
Distinctive activities and	Instead of an orientation for new students at the entire Graduate School, a dedicated
efforts	page consolidating necessary information was set up on the website to ensure that
	information is provided to all students. In addition, English materials, such as the
	guidance on health and safety and the guidance on harassment, are available on the
	online learning support system Bb9, so that students can learn them at any time.

Area 5: Criteria for admission of students

Criterion 5-1: Students are properly admitted.

Analysis item 5-1-1	Admission process is carried out with an appropriate system in line with the admission
	policy.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable

Evidence	Number of meetings held by the Admissions Committee: 7
	Admission Policy of the Joint International Master's Programme in Sustainable
	Development (Hiroshima University - Leipzig University)
	https://www.hiroshima-u.ac.jp/adse/div_int
	Examination schedule for the Joint International Master's Programme in Sustainable
	Development (Hiroshima University - Leipzig University)
	https://www.hiroshima-u.ac.jp/adse/news/62631
[Remarks]	The Admissions Committee is responsible for the implementation plan and methods
Grounds and reasons for	of the admission process and the management of examination questions, etc., and
evaluation	conducts appropriate selection in accordance with the Admission Policy. The Admission
Supplementary explanation	Policy is clearly stated in the application guidelines and on the website. In cooperation
of evidence	with Leipzig University, an online management system has been established in
Distinctive activities and	consideration of the time difference, convenience of applicants and crisis management.
efforts	

Analysis item 5-1-2	Efforts are made to verify whether students are actually admitted in accordance with the
	admission policy, and the results are used to improve the admission process.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Admission information for the Joint International Master's Programme in Sustainable
	Development (Hiroshima University - Leipzig University)
	Information on student recruitment for the program
	https://www.hiroshima-u.ac.jp/adse/news/62631
[Remarks]	The Admission Policy is clearly stated in the application guidelines. A draft of the
Grounds and reasons for	admission criteria is prepared jointly with Leipzig University in accordance with the
evaluation	Admission Policy, and appropriate decisions are made at the admission decision
Supplementary explanation	meeting (Board of Representatives). A system has been established to share
of evidence	information with Leipzig University and make improvements in case problems should
Distinctive activities and	arise in the admission process.
efforts	

Criterion 5-2: The number of students enrolled is adequate for the admission quota.

Analysis item 5-2-1	The number of students enrolled does not significantly exceed or fall below the admission
	quota.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Number of students enrolled: 2; percentage of admission quota: 100%
[Remarks]	A system to manage the admission quota of the entire Graduate School has been
Grounds and reasons for	established in close cooperation with Leipzig University. Thus, in AY2020, two
evaluation	students (one student whose entrance university is Hiroshima University and one
Supplementary explanation	student whose entrance university is Leipzig University) were enrolled for the
of evidence	admission quota of two.

Distinctive activities and	
efforts	

Area 6: Criteria for curriculum and learning outcomes

Criterion 6-1: The organization of the curriculum and the content of class subjects are systematic and of an appropriate level in accordance with the diploma policy and the curriculum policy.

Analysis item 6-1-1	The organization of the curriculum and the content of class subjects are systematic and
	of a level appropriate for the degree to be awarded.
Self-inspection/evaluation	Joint International Master's Programme in Sustainable Development (Hiroshima
unit	University - Leipzig University), Graduate School of Advanced Science and Engineering
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Curriculum Policy and Diploma Policy of the Joint International Master's Programme
	in Sustainable Development (Hiroshima University - Leipzig University)
	https://www.hiroshima-u.ac.jp/adse/div_int
	Student Handbook "Class Subjects and Registration (Joint International Master's
	Programme in Sustainable Development (Hiroshima University and Leipzig
	University))," "Common Graduate Subjects," and other specified forms
[Remarks]	In cooperation with the Joint International Master's Programme in Sustainable
Grounds and reasons for	Development (Hiroshima University - University of Graz) at the Graduate School of
evaluation	Humanities and Social Sciences, Basic Subjects are offered, allowing students
Supplementary explanation of	majoring in science and engineering and those majoring in social sciences to study in
evidence	the same classroom and come into contact with different perspectives and ways of
Distinctive activities and	thinking, thereby promoting their understanding of multiple fields beyond the
efforts	conventional framework of expertise. In addition to this, in cooperation with Leipzig
	University, the program offers Specialization Subjects, Integration Subjects and
	Master Thesis Classes regarding the technologies necessary to realize
	environmentally sustainable development. The curriculum is systematically
	organized to foster students with an ability to conduct research and practical work
	based on the sustainable development principles in environmental studies and using
	scientific and engineering approaches in order to resolve the pressing regional and
	global issues related to the SDGs, and those who have excellent collaboration and
	communication skills to be exerted at universities, research institutions,
	governments, international organizations, private businesses, NGOs, etc., as well as
	competitive capability for employment (employability) in the international labor
	market. Furthermore, these class subjects are taught by faculty members with high
	expertise who have been screened for educational qualifications at the Graduate
	School, thus educational content of a level appropriate for the degree to be awarded
	has been ensured.

Criterion 6-2: Appropriate forms of classes and teaching methods are adopted in accordance with the diploma policy and the curriculum policy.

Analysis item 6-2-1	The curriculum is systematically organized based on the curriculum policy; forms of
	classes and teaching methods (guidance for research, thesis, etc.) appropriate for the
	education of the field are prepared; and the methods and content of the classes are
	clearly shown to students.
Self-inspection/evaluation	Joint International Master's Programme in Sustainable Development (Hiroshima
unit	University - Leipzig University), Graduate School of Advanced Science and Engineering
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Curriculum Policy
	https://www.hiroshima-u.ac.jp/adse/div_int
	Student Handbook "Class Subjects and Registration (Joint International Master's
	Programme in Sustainable Development (Hiroshima University and Leipzig
	University))"
[Remarks]	The curriculum for the program is organized and implemented based on the
Grounds and reasons for	following policy so that students are able to achieve the objectives stated in the
evaluation	Diploma Policy.
Supplementary explanation of	Basic Subjects (48 credits) are offered to allow students to develop capabilities
evidence	required for studies regarding sustainable development, such as the interdisciplinary
Distinctive activities and	thinking and the fundamental ability for exploring sustainable development from
efforts	various perspectives.
	Specialization Subjects (65 credits) are offered to deepen students' understanding of
	basic theories, techniques and application cases/methods regarding the technologies
	necessary for achieving environmentally sustainable development.
	Integration Subjects (46 credits) are offered to deepen students' understanding of
	sustainable development and enhance their practical skills by bringing together the
	various scientific approaches that they have studied, and to encourage them to
	explore their research fields more deeply, develop their career after completion, and
	enhance intellectual curiosity, etc.
	Master Thesis Classes (30 credits) are offered to promote students' independent
	research and help them acquire research capabilities and practical skills to achieve
	the SDGs based on energy engineering, resource management engineering,
	environmental studies, and urban engineering.

Criterion 6-3: Appropriate course guidance and support are provided in accordance with the diploma policy.

errorion o orrippropriate course Suranice and support are provided in accordance with the arbitima poincy.	
Analysis item 6-3-1	A system for course guidance and study counseling that can meet the needs of students is
	in place, and advice and support are provided.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Completion Schedule (Master's Courses) (Student Handbook)

[Remarks]	The timing for students to establish class registration plans and research plans is
Grounds and reasons for	incorporated in the Completion Schedule, and is shared by the students and the
evaluation	faculty. The faculty members provide appropriate support for course guidance and
Supplementary explanation	study consultation.
of evidence	
Distinctive activities and	
efforts	

Analysis item 6-3-2	Efforts are made to cultivate students' skills necessary for social and professional
	independence.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Student Handbook "Class Subjects and Registration (Joint International Master's
	Programme in Sustainable Development (Hiroshima University and Leipzig
	University))"
[Remarks]	As Common Graduate Subjects, Sustainable Development Subjects (four subjects
Grounds and reasons for	including "World Peace and Hiroshima") and Career Development and Data Literacy
evaluation	Subjects (seven subjects including "Career Management for Engineers" and
Supplementary explanation	"Introduction to MOT") are offered to foster students with an understanding of the
of evidence	SDGs, the ability to create science that leads to sustainable development, and the
Distinctive activities and	knowledge and skills to solve various problems in contemporary society. In addition, as
efforts	Common Subjects for the Graduate School, subjects on sociality (seven subjects
	including "MOT and Venture Business") are offered to increase students' motivation for
	social contribution and develop their communication skills necessary for
	interdisciplinary and collaborative work and the ability to apply these skills to the real
	world.
	Credits are recognized for Integration Subjects, which are designed to deepen
	students' understanding of sustainable development and enhance their practical skills
	by bringing together the various scientific approaches that they have studied, and to
	encourage them to explore their research fields more deeply, develop their career after
	completion, and enhance intellectual curiosity, etc.

Analysis item 6-3-3	A system has been established and implemented to provide learning support to
	students with disabilities, international students, and other students who require
	special support in studying.
Self-inspection/evaluation	Joint International Master's Programme in Sustainable Development (Hiroshima
unit	University - Leipzig University), Graduate School of Advanced Science and Engineering
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Admission information for the Joint International Master's Programme in Sustainable
	Development (Hiroshima University - Leipzig University)

https://www.hiroshima-u.ac.jp/adse/news/62631 Website of Hiroshima University Accessibility Center https://www.achu.hiroshima-u.ac.jp/

[Remarks]

Grounds and reasons for evaluation

 $\label{eq:Supplementary explanation of evidence} Supplementary explanation of evidence$

Distinctive activities and efforts

Special consideration is given to students with disabilities, etc. in taking exams and studying in cooperation with their supervisors and the University's Accessibility Center. For international students, the Supporters, supervisors and the Management Support Office work together to provide necessary support for their daily life and study.

Instead of an orientation for new students at the entire Graduate School, a dedicated page consolidating necessary information was set up on the website to

[Remarks]

Grounds and reasons for evaluation

 $\label{eq:Supplementary explanation} Supplementary \ explanation \\$ of evidence

Distinctive activities and efforts

The "Decision Criteria for Awarding Degrees and Evaluation Standards for Degree Theses" and the "Implementation Guidelines of the Master's Thesis Screening and Final Examination" have been established in cooperation with Leipzig University. The Completion Schedule is published in the Student Handbook and made known to students. It is prescribed that the Thesis Screening Committee consists of a chief referee and two or more sub-referees under approval from the Faculty Meeting, that at least one of the sub-referees shall

be selected from among the faculty members of other programs or other graduate schools, and that sub-referees can be selected from among researchers of other universities, research institutes, companies, etc. Thus, a system is in place to recognize completion of courses with more fairness and objectivity under an appropriate screening system.

Area 7: Criteria for the internationality of education

Criterion 7-1: Initiatives to internationalize the campus and develop global human resources are systematically implemented.

Analysis item 7-1-1	International students are admitted under an appropriate system at schools,
	departments, programs, etc.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Number of international students: 2 out of 2 (100%)
	Number of courses that can be completed in English: 1
	Orientation for new students (English version)
	https://www.hiroshima-u.ac.jp/adse/ssorientatione
	Student Handbook (English version)
	https://www.hiroshima-u.ac.jp/en/adse/student/handbook
[Remarks]	Two international students were admitted as the first cohort in October 2020. A
Grounds and reasons for	curriculum that can be completed in English is available. The Supporters provide
evaluation	assistance even before international students' enrollment by supporting their
Supplementary	course registration and preparing Student Handbook, orientation handouts, and
explanation of evidence	various submission forms in English, so that international students who cannot
Distinctive activities and	come to Japan can take classes online and in English. Assistance after enrollment
efforts	includes improving submission forms and materials on the bulletin board and
	providing daily life support.

Analysis item 7-1-2	Students are properly informed about study abroad programs, and receives
	appropriate support such as course guidance.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Student Handbook "Class Subjects and Registration (Joint International Master's
	Programme in Sustainable Development (Hiroshima University and Leipzig
	University))"
[Remarks]	A joint curriculum with Leipzig University is provided for the program, and
Grounds and reasons for	students spend their second and third semesters after enrollment at the partner
evaluation	university (Leipzig University or Hiroshima University). Students are guided
Supplementary	through an orientation for new students and course counseling by supervisors so
explanation of evidence	that they can proceed with their course plans until completion without problems.
Distinctive activities and	
efforts	

Area 8: Criteria for the promotion of recurrent education

Criterion 8-1: Initiatives to promote recurrent education, programs for working adults, cooperation with primary and secondary education, and lifelong learning are systematically implemented.

Analysis item 8-1-1	Programs that contribute to the promotion of recurrent education (short-term
	programs, certificate programs, etc.) are open to the public.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Admission information for the Joint Degree Programme Hiroshima - Leipzig
	https://www.jointdegree.eu/de/sustainable-development/
[Remarks]	The program places importance on practical work experience as a working adult,
Grounds and reasons for	which is confirmed at the stage of student selection. Upon completion, students
evaluation	are awarded a degree in international cooperation.
Supplementary	
explanation of evidence	
Distinctive activities and	
efforts	

Analysis item 8-1-2	Programs are developed based on the needs of society and an appropriate guidance
	system is established.
Self-evaluation	■ Fully applicable □ Applicable □ Slightly applicable
	□ Not very applicable □ Not applicable
Evidence	Student Handbook "Class Subjects and Registration (Joint International Master's
	Programme in Sustainable Development (Hiroshima University and Leipzig
	University))"
[Remarks]	As Common Graduate Subjects, Sustainable Development Subjects (four
Grounds and reasons for	subjects including "World Peace and Hiroshima") and Career Development and
evaluation	Data Literacy Subjects (seven subjects including "Career Management for
Supplementary	Engineers" and "Introduction to MOT") are offered. The curriculum is designed to
explanation of evidence	foster students with an understanding of the SDGs, the ability to create science
Distinctive activities and	that leads to sustainable development, and the knowledge and skills to solve
efforts	various problems in contemporary society, in line with the needs of society. In
	addition, as Common Subjects for the Graduate School, subjects on sociality
	(seven subjects including "MOT and Venture Business") are offered. The
	curriculum is designed to increase students' motivation for social contribution
	and develop their communication skills necessary for interdisciplinary and
	collaborative work and the ability to apply these skills to the real world.