# Outline of Master program in Shimane University

#### 1. Basic Information

		1			
Graduate School	Graduate School of Natural Science and Technology				
(URL of the information for applicants	rechnology				
to JICA Development Studies Program in Shimane Univ.)	https://www.natural.shimane-u.ac.jp/jica/				
	The English – Medium Program for International				
Program Name	Students				
Degrees	Master of Life and Environmental Sciences				
Credits and years needed	30 credits, 2 years (Graduate School Student)				
for graduation					
Classes taught in English	Class: All classes are taught in English				
	Shimane University's Charter (Shimane				
	University's goals are:)				
	1. To foster the development of individuals with				
	initiative who possess a high degree of expertise				
	and human compassion.				
Message for Applicants	2. To promote a high international standard of				
	research based on unique, local issues.				
	3. To promote social service programs that can				
	solve local problems.				
	4. To promote international exchange with Asian				
	and other foreign countries.				
	5. To respect academic freedom and human				
	rights and promote public trust in the university.				
Additional Information		Note			
Japanese Language					
Necessity of Japanese language		Level: Beginner's level			
		Student can attend Japanese			
	Necessary in everyday	language class.			
		※ No prior knowledge of			
	life	Japanese is required, but			
		participants are expected to study			
		Japanese after coming to Japan.			
Foreign Students		218 international students from			
China, Vietnam, Myanmer,					

		Bangladesh, Afghanistan, Tunisia, Benin, Nigeria etc
Facility Information		
(1) Dormitory	Available	The rooms are limited. If our dormitory is full, students will live in a private apartment.
(2) Prayers room or Mosque		There is a Mosque near university and Muslim community in town.
(3) Halal food available in cafeteria	Available	
Others		
(1) Tutor system	Available	Tutor will support foreign students to start their study and everyday life in Shimane University.
(2) English counseling	Available	

### 2. Features of University

Shimane University was founded in 1949 as a national university with two faculties: the Faculty of Literature and Science which was made up of Matsue Higher School (originally founded in 1920), and the Faculty of Education which was made up of Shimane General School



(originally founded in 1875), Shimane General School for Youth (originally founded in 1933). Shimane and Shimane Medical Universities amalgamated on October 1st, 2003. The new Shimane University has two main campuses, and consists of six faculties. Law and Literature, Education, Human Sciences, Life and Environmental Science, and the Interdisciplinary Faculty of Science and Engineering are housed at the Matsue campus, and the Faculty of Medicine is based at the Izumo campus. The combined Shimane University now has 2,041 staffs and 5,901 students, including some 218 international students as of May 1st, 2019.

Shimane University now has five graduate schools (Humanities and Social Science, Education, Medicine, Science and Engineering, and Natural Science and Technology), and three doctorate graduate schools (Medicine, the Interdisciplinary Faculty of Science and Engineering, and the United Graduate School of Agricultural Science). In addition, the university also operates several other research centers, facilities and hospitals.

In addition to undergraduate, graduate, and postgraduate students, there are several other categories of students comprising auditors, special auditors, and research students.

Since its establishment, Shimane University has endeavored to cultivate persons of ability who will contribute to the development of society. With this in mind and its historical

background, the university aspires to be an international university opened to the South-East Asia and Pacific Rim regions. Shimane University has Academic Exchange Agreements with 78 universities in 24 countries.

#### 3. Features of the Program and Curriculum in each Field of Study

Master course students will select one course out of the following 3 courses listed below depending on their study themes / consultation with academic supervisor. Besides, students will belong to the laboratory of the supervisor and conduct a research to write a thesis.

Environmental Science and Technology course

Biological Science and Biotechnology course

Agriculture and Forest Science course

#### List of Class Subjects and Instructors

(Student can select any subjects for the selective ones)

Class subject	Credit	Teacher
Compulsory subjects	Oreun	Teacher
Thesis Seminar I	1	Supervisors
Thesis Seminar II	1	Supervisors
Thesis Seminar III	1	Supervisors
Thesis Seminar IV	1	Supervisors
Thesis Research I	2	Supervisors
Thesis Research II	2	Supervisors
Thesis Research III	2	Supervisors
Thesis Research IV	2	Supervisors
	2	omnibus
Fundementals of Ntural Science and Technology	Z	Ommbus
Selective subjects	0	Drof LIZito
Advanced Water Resources Use System Engineering	2	Prof. I.Kita
Advanced Nonpoint Sources and Hydrology		Prof. I.Takeda
Modeling Approaches for Advanced Watershed Management	2	Prof.H.Yajima
Fluid Dynamics on Land Surface and in Soil	2	Assis. Prof. H.Sato
Advanced Structural Analysis and Design	2	Assoc.Prof. M.Ishii
Electricity and Magnetism in Biological Systems	2	Prof. A.Yano
Soil Microbiology	2	Prof. Kazuhito Itoh
Advanced Forest Ecology	2	Assoc. Prof. H.Kawaguchi,
		Assoc. Prof. M.Kubo,
		Assis. R.Fujimaki
Advanced Plant Pathology	2	Prof. M.Ueno
Environmental Microbiology	2	Assis. Prof. S.Hayashi
Insect Ecology	2	Prof. R.Miyanaga,
		Assoc.Prof. Y.Izumi
Advanced Environmental Technology and Engineering	2	Assis. Prof. A.Hashiguchi
Fish Ecology	2	Assoc.Prof. M.Horinouchi
Marine Ecology	2	Assoc.Prof. K.Kurata
Soil Science	2	Prof. T.Masunaga, Assos.
		Prof. K.Sato
Soil Ecological Engineering	2	Prof. T.Masunaga, Assos.
		Prof. K.Sato
Aquatic Ecological Engineering	2	Prof. K.Yamaguchi
Advanced Environmental Eco-Engineering	2	Assoc.Prof. T.Kuwabara

Biology of Skin	2	Prof. T.Matsuzaki
Theoretical Ecology	2	Assoc. Prof. A.Mougi
Biodiversity of Plants	2	Prof. SJ.Lin,
	-	Assis.Prof.K.Sugai
Methodology of Plant Transformation	2	Prof. K.Akama
Hepatic Phylogenesis - Diversity and Evolution	2	
Developmental Biology	2	Prof. A.Nishikawa,
Developmental blology	2	Assis.Prof. Y.Yamaguchi
Biology of Endosymbiosis	2	Prof. K.Akama
Behavioral Ecology	2	Assis. Prof. A.Mougi
Biology of Reproduction	2	Prof. N.Hirohashi
	2	Prof. M.Kawamukai
Genetic Engineering		
Advanced Molecular Biology	2	Assoc. Prof. T.Kaino
Advanced Plant Molecular Genetics	2	Prof. T.Nakagawa,
		Assis.Prof. T.Hachiya
Advanced Biophysical Chemistry	2	Prof. T.Yamamoto
Molecular Cell Biology and Biochemistry for Food and Health	2	Assoc.Prof. M.Jisaka
Science	_	
Pathophysiology	2	Assoc.Prof. H.Shimizu
Plant Molecular Physiology	2	Prof. T. Ishikawa
Plant Stress Biology	2	Assoc.Prof. T.Maruta
Molecular Recognition	2	Assoc.Prof. K.Yoshikiyo
Advance Organic Synthesis	2	
Methodological Principle of Molecular Biology	2	Assoc.Prof. T.Akihiro,
		Assoc.Prof. Y.Matsuo,
		Assoc.Prof. K.Nishimura
Marine Ecogenetics	2	Prof. F.Aranishi
Production of Vegetables Grown in Hydroponics	2	Prof. T.Asao
Functional Morphology in Rice	2	Assoc.Prof. K.Kobayasi
Advanced Plant Breeding	2	Prof. N.Kobayashi
Conservation and Management of Plant Genetic Resources	2	Prof. T.Matsumoto
Biochemistry of Soil Fertility	2	Prof. S.Matsumoto
Plant Molecular Breeding	2	Assoc.Prof. A.Nakatsuka
Advanced Livestock Production	2	Prof. T.Ichinohe,
	-	Assis.Prof.S-H. Song
Horticultural Crop Physiology	2	Assoc. Prof. T. Esumi
Advanced Technology for Protected Horticulture	2	Assis. Prof. H. Tanaka
Plant Production Physiology	2	Assoc. Prof. M. Kadowaki
Thank Troduction Thysiology	2	Assis. Prof. S. Shiro
Advanced Forest Policy and Utilization	2	Prof. K. Ito,
Advanced Forest Forey and Otinzation	2	Assis. Prof. E. Takahashi
Agricutural and Regional Economics	2	Prof. N. Inoue,
Agricultural and Regional Economics	2	Assoc. Prof. N. Yasunaga
Advanced Rural Planning	2	Assoc. Prof. K. Akazawa,
Advanced Rural Planning	2	Assoc. Prof. Y. Mori
Advanced Development Ferremice	2	A3300. FIUL I. MULL
Advanced Development Economics	2	
Total credit required : 30		

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During the period of research students, the students will study fundamental subjects, research backgrounds and laboratory skills necessary as preparation for Master course study.

## 4. Academic Schedule

Entrance exam for Graduate school (fall): June (in some special case, it may be in Dec.- Jan.)

The Commencement for fall entrance students: October

(arrival to Japan will in the end of September)

The midterm presentation: about a year after the entrance

The thesis submission and final defense presentation:

January to February in the 2<sup>nd</sup> year for October entrance students.



Inside the Campus

Practical work on the farm

\*Matue City is well known as the Lake Shinji and Horikawa River, by which the city has developed for a long time.

