#### **Master of Science**

### **Biological Science (International Program)**

1. Degree Program	: Master of Science Program in Biological Science (International Program)
2. Degree offered	: Master of Science (Biological Science)
	: M.Sc. (Biological Science)

#### **3. OBJECTIVES**

To produce M.Sc. graduate with the following qualifications.

- 1. Having knowledge and understanding of important principles and theories in the area of biological science, and high capability to apply the knowledge for doing research or work.
- Having initiative, and capable of doing research or academic project to discover new knowledge or working procedure in biological science.
- Capable of systematic analysis and synthesis, solving problem by using scientific process, and having independent opinion and decision.
- 4. Having leadership and doing efficient collaborative work.
- 5. Capable of using computer and modern information technology to gain knowledge and for communication.
- Having ethics, morality and good conscience to use scientific knowledge for development of society at the level of Country, ASEAN and the World, with conservation of environment and biological resources.

#### 4. DURATION

2 academic years

## 5. Program of Study

Type A 1				
	Courses	Credits		
Required courses :	302 891, 302 892	2 (non-credit)		
Thesis :	302 898	36		
	Total			
Type A 2				
	Courses	Credits		
Required courses :	302 701, 302 891, 302 892, 302 894	7		
Elective courses :	311 702, 311 711, 311 720, 311 784, 317 724, 317	9		
	736, 318 731, 318 735, 319 701			
Thesis :	302 899	20		
	Total	36		

- Type A1: The thesis work or its part must be published or accepted for publishing in a national or international scientific journal, or presented at international academic conference (or symposium) that has proceeding.
- Type A2: The thesis work or its part must be published or accepted for publishing in a national or international scientific journal, or presented at national or international academic conference (or symposium) that has proceeding.

# 6. COURSE DESCRIPTIONS

302 701	Integrated Biological Science	3 (3-0-6)
302 891	Seminar in Biological Science I	1 (1-0-2)
302 892	Seminar in Biological Science II	1 (1-0-2)
302 894	Research Methodology in Biological Science	2 (0-6-4)
302 898	Thesis	36
302 899	Thesis	20
311 702	Bioinformatics and Information Technology	3 (2-3-6)

311 711	Plant Metabolism	3 (3-0-6)
311 720	Modern Methods in Plant Taxonomy	3 (2-3-6)
311 784	Biology of Amphibians	3 (2-3-6)
317 724	Prokaryotic Molecular Genetics	2 (2-0-4)
317 736	Applied Microbiology and Biotechnology	2 (2-0-4)
731 318	PCR Technology	2 (2-0-4)
7 31835	Biochemistry and Biology of Cancer	3 (6-0-3)
319 701	Ecological Principles and Natural Resource Conservation	2)2-0-4(

#### 7. Admission Requirements

1) Holding a Bachelor Degree in Biology, Biochemistry, Microbiology, Environmental Science, or Bachelor of Agriculture, or Bachelor of Science in Biological Science and Biotechnology, or equivalent in related programs such as Bachelor of Education with satisfy basic knowledge. For Type A 1, applicant must have GPA of at least 3.00 from the maximum of 4.00, or a published scientific paper in national journal, or at least three years work experience in research, or approval depended upon the consent of the curriculum administrative committee; and

2) Applicants from a country where English is not the first language must enclose English Proficiency test result. The result must not be more than two years. The following English proficiency tests are accepted for graduate admission, and a minimum score should be as follows:

TOEFL	(Paper Based)	475	or
TOEFL	(Computer Based)	152	or
TOEFL	(Internet Based)	53	or
IELTS	(Academic Module)	5.0	or
TU-GET	(1000)	500	or
CU-TEP	(120)	60	or

Other English language test institute with equivalent standards depends upon the consent of the curriculum administrative committee.