

Course Title**Master of Science Program in Agricultural Biotechnology****Master Degree:** Master of Science Program in Agricultural Biotechnology**Academic Institution:** Faculty of Agriculture Natural Resources and Environment,
Naresuan University**Duration:** 2 years**Objectives:**

1. To offer master degree courses in Agricultural Biotechnology
2. To increase human development in Agricultural Biotechnology

Course Synopsis & Methodology:

This course is designed to provide advanced training in the use of recent technological developments in agricultural biotechnology. The major topics covered include crop breeding, bioinformatics, genetic engineering, plant cell and tissue culture, molecular mapping, high-throughput genetic analysis, bio-sensors, industrial fermentation, biofuel, and bioremediation. The course will train students with theoretical knowledge, communication, and management skills which in turn, allow them to become efficient researchers concerning over ethics of agricultural biotechnology.

Plan A Type A 1: Do the thesis not less than 36 credits subject (non credit) for 5 credits.

No	Description	Criteria of MOE
		Plan A Type A 1
1	Courses work	-
	1.1 Core course: 1.2 Elective course: not less than	- -
2	Thesis	36
3	Core course: non-credit	(5)
Total credits (minimum)		36

Course Content and Study Topic:

The Master of Science Program in Agricultural Biotechnology has both credit and non-credit courses which focus on two approaches, the first is plant biotechnology, and the second is industrial biotechnology. Student have to undertake basic, applied and adaptive research to generate appropriate technologies to support sustainable agriculture or to address current and future challenges of farming community and to provide technology options relevant to the agro-climatic situations.

Study Plan Plan A, Type A 1

<u>The thesis</u> (Plan A, Type A 1) is not lesser than	36	Credits
110591 Thesis I, Type A 1		9
110592 Thesis II, Type A 1		9
110593 Thesis III, Type A 1		9
110594 Thesis IV, Type A 1		9
<u>Core course:</u> (Non-Credit)	5	Credits
110501 Agricultural Biotechnology Seminar I		1(0-2-1)
110502 Agricultural Biotechnology Seminar II		1(0-2-1)
110511 Research Methodology in Science and Technology		3(3-0-6)
<u>First Year (First Semester)</u>	9	Credits
110511 Research Methodology in Science and Technology (non-credit)		3(3-0-6)
110591 Thesis I, Type A 1		9
<u>First Year (Second Semester)</u>	9	Credits
110501 Agricultural Biotechnology Seminar I (non-credit)		1(0-2-1)
110592 Thesis II, Type A 1		9
<u>Second Year (First Semester)</u>	9	Credits
110502 Agricultural Biotechnology Seminar II (non-credit)		1(0-2-1)
110593 Thesis III, Type A 1		
<u>Second Year (Second Semester)</u>	9	Credits
110594 Thesis IV, Type A 1		9

Course Description

110501 Agricultural Biotechnology Seminar I	1(0-2-1)
The first interpretation, presentation and discussion on research topics in agricultural biotechnology, industrial biotechnology, and current know – ledges in agricultural biotechnology	

- 110502 Agricultural Biotechnology Seminar II 1(0-2-1)
 The second interpretation, presentation and discussion on research topics in agricultural biotechnology, industrial biotechnology, and current knowledges in agricultural biotechnology
- 110511 Research Methodology in Science and Technology 3(3-0-6)
 Research definition, characteristic and goal, type and research process, research problem determination, variables and hypothesis, data collection, data analysis, proposal and research report writing, research evaluation, research application, ethics of researchers and research techniques in science and technology
- 110591 Thesis I, Type A 1 9 Credits
 The basic overview of the thesis and its educational objectives, structure and formatting of master degree's thesis, suggesting thesis proposal elements, Identify a thesis theme
- 110592 Thesis II, Type A 1 9 Credits
 Performing a thorough review of the literature in the area of thesis theme and presentation, developing in research methodology including a description of research design, the type of data to be collected, the method of collection, and how the data will be evaluated, presenting a thesis proposal to thesis advisor and committee
- 110593 Thesis III, Type A 1 9 Credits
 Conducting thesis research to demonstrate mastery of a body of knowledge in agricultural biotechnology, preparation of a scientific manuscript for publication, writing the master thesis document following the thesis guidelines
- 110594 Thesis IV, Type A 1 9 Credits
 Presenting the master thesis to the colloquium which either approved, rejected, or conditionally approved with recommendations for improvement, rectifying the work and submitting it to the graduate school

Qualification:

Applicants to the program must be holding a bachelor's degree in agricultural science, biology, biochemistry, microbiology, genetics or related fields from an accredited college or university. Special consideration is given to applicants with work experience. The program admissions committee makes all admission recommendations on case-by-case basis.

Document Required:

Graduate with a bachelor's degree or equivalent in the field of Science or related field. Other qualifications are in accordance with the Naresuan University graduate studies requirement.

1. Postgraduate Application Form
2. A recent photograph.
3. Copy of degree certificate or letter of recommendation for degree pending.
4. Copy of academic transcript.
5. Copy of national or official identification card or passport.

Closing date for Nominations: May 31, 2018

Late or incomplete applications/document will not be considered.