Master of Science Program in Food Biotechnology
Thesis Requirements

5.1 Independent Study

5.1.1 Brief Description of Task
Independent study is designed to provide credit for field research. Doing a project is the application of analytical skills to meet the objectives of the independent study. Permission to undertake an independent study project is granted to students who have demonstrated their ability to work with little supervision. Students wishing to undertake the project must develop a written proposal and secure approval of the proposal from the advisor of the project. The Director for Graduate Studies will determine if the number of credits associated with the independent study proposal is consistent with the rigor of the course. Students produce a project paper after completion of the project.

5.1.2 Standard Learning Outcomes
(1) Students are able to develop skills in searching, analyzing, synthesizing and integrating knowledge, information and experiences associated with the field of Food Biotechnology.
(2) Students are able to identify problems, develop proposal, and plan the execution of the independent study.
(3) Students are able to write quality research paper from the independent study that meets national or international standard.

5.1.3 Scheduling
Second Semester, Second Year of Study

5.1.4 Number of Credits
6 Credits

5.1.5 Preparation
(1) Students discuss their topic with a faculty member with whom they would like to complete the independent study.
(2) The students write and propose their topic for independent study with guidance from the project advisor.
(3) The students prepare presentation and report for submission to project committee.

5.1.6 Evaluation Process
(1) Evaluation of project proposal is performed by project advisor.
(2) Evaluation of project progress is performed by project advisor.
(3) Evaluation of independent study is performed by examination committee consisting of advisor and two committee members.
(4) Evaluation of independent study report is performed by project advisor.
5.2 Thesis

5.2.1 Brief Description of Task
FB 8001 – 8004 Thesis and FB 8011 – 8014 Thesis are concerned with student’s research in a topic related to food biotechnology. The students are required to design their experiment, compile data, analyze and interpret result, write thesis and write research papers under the supervision of thesis advisors, including defending their thesis to the thesis examination committee.

5.2.2 Standard Learning Outcomes
(1) Students understand the research codes of ethics and law and regulations in conducting research and writing research paper.
(2) Students are able to perform literature review by searching information from various sources of data base using information technology.
(3) Students are able to design their experiment and statistical methods to analyze their data and interpret the results.
(4) Students are able to write the scientific research paper (from their thesis) for publication either nationally or internationally.

5.2.3 Scheduling
Plan A Type A1: Every Semester, Every year of Study
Plan A Type A2: First and Second Semesters, Second year of Study

5.2.4 Number of Credits
Plan A Type A1: 36 Credits
Plan A Type A2: 12 Credits

5.2.5 Preparation
(1) Students choose thesis advisor and co-advisor (if required).
(2) Students write the thesis proposal and submit to thesis advisor.
(3) Students conduct their research under the supervision of thesis advisor and report their progress every month.
(4) Students are required to write research paper for publication under the supervision of thesis advisor as the corresponding author.
(5) Thesis advisor provides advice in thesis writing.

5.2.6 Evaluation Process
(1) Evaluation of thesis proposal is performed by thesis advisor.
(2) Evaluation of research progress is performed by thesis advisor.
(3) Evaluation of thesis is performed by thesis examination committee consisting of thesis advisor and two committee members, at least one external member based on the criteria of OHEC.
(4) Evaluation of research paper is performed based on the requirement of the journal based on the criteria of OHEC.