Master of Science Program in Anatomy and Structural Biology (International Program) Revised Program in 2022

1. Curriculum Name

Thai : หลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาวิชากายวิภาคศาสตร์และชีววิทยาโครงสร้าง

(หลักสูตรนานาชาติ)

English: Master of Science Program in Anatomy and Structural Biology

(International Program)

2. Name of Degree and Major

Full Title Thai : วิทยาศาสตรมหาบัณฑิต (กายวิภาคศาสตร์และชีววิทยาโครงสร้าง)

Abbreviation Thai : วท.ม. (กายวิภาคศาสตร์และชีววิทยาโครงสร้าง)

Full Title English: Master of Science (Anatomy and Structural Biology)

Abbreviation English: M.Sc. (Anatomy and Structural Biology)

3. Philosophy, Justification, and Objectives of the Curriculum

3.1 Philosophy and Justification of the Curriculum

The Master of Science Program aims at producing graduates who have up to date knowledge in the field of Anatomy and Structural Biology, and develop capability to systematically conduct scientific research in the field and positively that impact the scholarly community and the country, with a moral and ethical responsibility in the work.

3.2 Objectives of the Program

At the end of the program, a graduate will have characteristics in compliance with the Office of the Higher Education Commission's standard criteria for graduate program as follows:

- (1) Having moral standards, discipline, and professional ethics for academic researches
- (2) Having detailed knowledge and critical understanding of theories, key concepts, principles and research in Anatomy and Structural Biology
- (3) Having the ability to analyze problems in Anatomy and Structural Biology, effectively conduct research and critically apply or integrate the knowledge to solve anatomy and structural biology related problems

- (4) Having teamwork skills, good interpersonal, co-operator, leaderships, and responsibility
- (5) Having essential skills in mathematics and statistics for research analyses, effective verbal and written English communication skills, and using appropriate information technology for self-directed learning and effective presentation

3.3 Program Learning Outcomes (PLOs)

- (1) Be honest, discipline, and punctual behaviors complying with regulations of the organizations; and maintain ethical standards in academic and research contexts
- (2) Acquire up-to-date knowledge and thorough understanding of the principles and theoretical aspects of Anatomy and Structural Biology
- (3) Effectively utilize research methods in the field of Anatomy and Structural Biology
- (4) Search, analyze, criticize research problem in a systematic and theoretical context; design and conduct research in a well-organized format; and critically apply new knowledge in Anatomy and Structural Biology
- (5) Have responsibility for themselves, group work and society, have good interpersonal relationships, and clear team roles as a team leader and member
- (6) Have numerical and statistical skills for data analysis and use appropriate information technologies for self-directed learning and present research data effectively
 - (7) Have good verbal and written English communication skills

4. Curriculum Implementation

4.1 Qualifications of Prospective Students

- (1) Hold a Bachelor's degree in Science or other relevant life science, biomedical, bioengineering, or any biological science, Bachelor of Nursing, or other related medical science which universities or institutes are accredited by the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation
 - (2) Have cumulative GPA not less than 2.50.
- (3) Have an English Proficiency Examination score as the requirement of Faculty of Graduate Studies, Mahidol University
- (4) Applicant who does not meet the required criterion in items (2) and (3) may be considered for admission by the Program executive committees and the Dean of Faculty of Graduate Studies.

5. Curriculum Structure

5.1 Number of credits (not less than) 36 credits

5.2 Curriculum Structure

The curriculum structure is set in compliance with Announcement of Ministry of Education on the subject of Criteria and Standards of Graduate Studies 2015, Master's Degree, Plan A2 as below:

Required courses
Elective courses not less than
Thesis
Credits
Total not less than
credits
credits
credits

6. Graduation Requirement

- (1) The duration of the study is in accordance with the study plan;
- 2) Students must complete all courses as stated in the curriculum at least 24 credits of the courses and 12 credits of thesis for a total of 36 credits with a minimum cumulative GPA of 3.00;
- (3) English proficiency score must meet the standard criteria according to the announcement of the Faculty of Graduate Studies;
- (4) Students must participate and pass in skill development activities according to the announcement of the Faculty of Graduate Studies;
- (5) Students must submit thesis and pass the thesis defence examination by following Regulations of Mahidol University on Graduate Studies. The thesis examination must be an examination open to a general audience.;
- (6) Thesis or a part of thesis must have presented at an academic conference and published in the conference proceedings according to the announcement of the Faculty of Graduate Studies and Office of the Higher Education Commission or published or accepted for publication in a national or international peer-reviewed journal.

7. Work of Graduates

Graduates who hold M.Sc. in Anatomy and Structural Biology are able to work as the following careers;

(1) Academic instructor in Anatomy and Structural Biology

- (2) Researcher in Biomedical Science, and scientists in government and private institutions, International and non-governmental organizations
 - (3) Specialist/consultant in Anatomy and Structural Biology