

**Course Detail**  
**Master of Science Program in Biomedical Sciences**

**Course Title:** Master of Science Program in Biomedical Sciences

**Master Degree:** Master of Science (Biomedical Sciences)

**Academic Institution:** Faculty of Allied Health Sciences,  
Naresuan University

**Duration:** 2 years (June 2024 – May 2026)

**Background and Rational:**

-By focusing on basic research, clinical research, and development research to create innovation, a course focuses on creating a Master's degree with knowledge and expertise in Biomedical Sciences.

-An interdisciplinary health sciences and medical research program that focuses on combining medical, health, and other sciences knowledge.

-By preparing to be an academic or researcher, the course's teaching and learning method emphasizes expertise of conducting research, presenting, and publishing research findings in public venues.

-Graduates of this degree will be qualified individuals in the medical and health sciences and will be able to conduct cutting-edge research, innovate, translate, distribute, and exchange academic information both nationally and worldwide.

- Faculty of Allied Health Sciences provide teaching and learning approach, and laboratory practice are supported by professional staffs and facilities.

**Objectives:**

To provide a Master's degree with the following qualifications

- The ability to think, analyze, and synthesize data in a scientific ways in order to conduct research or develop new ideas.

- The ability to use what has been learned to conduct study or develop new ideas.

- Proficiency in English and technological development for studying and presenting academic knowledge at a national or worldwide.

- Ability to work as part of a team to conduct research and disseminate research findings while conforming to research ethics and morals.

**Course Synopsis and Methodology:**

**1. Study plan**

**Program structure**

items	Study plan	
	Plan A	
	Type A 1	Type A 2
1. <b>Course work</b> (not less than)	-	24
1.1 Core Course (not less than)	-	6
1.2 Elective Course (not less than)	-	18
2. <b>Thesis</b> (not less than)	36	12
3. <b>Core Course non-credit</b> (not less than)	6	6
<b>Total (not less than)</b>	<b>36</b>	<b>36</b>

## Course for Study Plan A Type A 1

<b>Course</b>	
<b>Thesis</b>	<b>Total 36 credits</b>
Thesis 1, Type A 1	
Thesis 2, Type A 1	
Thesis 3, Type A 1	
Thesis 4, Type A 1	

<b>Core Course non-credit</b>	<b>Total 6 credits</b>
Research Methodology in Health Sciences (Non- credit)	
Writing Scientific Paper (Non- credit)	
Seminar 1 (Non- credit)	
Seminar 2 (Non- credit)	

## Course for Study Plan A Type A 2

<b>Course work</b>	<b>not less than 24 credits</b>
<b>Core Course</b>	<b>Total 6 credits</b>
Current Topic in Biomedical Sciences	
Fundamental of Cell Biology and Cell Biochemistry	
or	
Biostatistics in Biomedical Sciences	

<b>Thesis</b>	<b>Total 12 credits</b>
Thesis 1, Type A 2	
Thesis 2, Type A 2	
Thesis 3, Type A 2	

<b>Core Course non-credit</b>	<b>Total 6 credits</b>
Research Methodology in Health Sciences (Non- credit)	
Writing Scientific Paper (Non- credit)	
Seminar 1 (Non- credit)	
Seminar 2 (Non- credit)	

<b>Elective Course</b>	<b>Total 18 credits</b>
<b>Specific Knowledge Major</b>	
Bioinformatics and Cybertools for Research	
Cellular and Molecular Physiology of Cardiovascular System	
Cellular and Molecular Radiation Biology	
Molecular and Cellular Biology of Cancer	
Drug Action	
Human Biomedical System	
Molecular Epidemiology	
Anatomy and Physiology of the Eye and Visual System	
Ocular Drug Delivery	
Overview of Ocular Pharmacology	

<b>Research Techniques Major</b>	
Research Techniques in Immunology	
Biomedical Science Research Instruments	
Biomedical Sciences Research Laboratory	
Research Techniques in Cardiovascular System	
Gene and Recombinant DNA Technology in Biomedical Sciences	
Cell Culture Techniques for Biomedical Research	
Separation Techniques for Biomedical Research	



## **Applied Knowledge Major**

Laboratory Animal and Applications for Biomedical Research  
Applied Microscopy for Biomedical Research  
Applied Vision Science Research  
Innovation in Biomedical Sciences

### **Graduation Conditions:**

Naresuan University's Rules and Regulations for Graduate Studies 2016 in item 28.

### **Applicant Qualifications**

Naresuan University's Rules and Regulations for Graduate Studies 2016 in item 5.

English Proficiency Test:

Applicant must hold a minimum score of English proficiency from either TOEFL (paper based or internet based; not TOEFL ITP) or IELTS as shown in the followings:

- Paper-based TOEFL 417, 453 (International Program)
- Internet-based TOEFL 35, 46 (International Program)
- IELTS 5.0, 5.5 (International Program)

### **Document Required**

- TIPP application form (Download at: <https://tica-thaigov.mfa.go.th/en/page/75500-tipp-application-form?menu=605b13dbb6f1b76ed31778b3>)

- Medical Report (If candidates had submitted other health certificates without the TICA medical report form, their application will not be accepted for consideration)

- Transcript of Bachelor's degree (to show the courses that you have learnt throughout Bachelor's degree) with at least GPA. 2.75

- Certificate of Bachelor's degree

- English test score (e.g. TOEFL (Paper based 417 , 453) (Internet based 35 , 46) or IELTS (5.0 , 5.5 ))

- Recommendation Letter (At least 3 people)

- Curriculum Vitae

- Publication as a full paper in an International Journal

### **Contact:**

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### **For more information:**

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\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.