

**Master of Science in Medical Science**  
**Faculty of Associated Medical Sciences, Khon Kaen University, Thailand**

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<b>Program overview:</b>	The program provides the advanced knowledge on medical sciences and technologies as well as research practice and the relevant ethical considerations.
<b>Aims:</b>	<ul style="list-style-type: none"> <li>- To develop students' skills in conducting research, critical thinking and problem solving.</li> <li>- To develop and/or increase awareness of professional and research ethics.</li> <li>- To develop and/or improve the ability to communicate and share experience with other health professionals.</li> </ul>
<b>Credit:</b>	36 credits
<b>Duration:</b>	2 years
<b>Applicant qualifications:</b>	Applicants require a bachelor's degree in a field of a science or related discipline or a degree in medicine or dentistry or others subject to the approval of the program's executive committee.
<b>Scholarships:</b>	Scholarships are available for students from both Thailand and ASEAN countries. Sources of funding include Khon Kaen University, Centre for Research and Development of Medical Diagnostic Laboratories (CMDL), Faculty of Associated Medical Sciences, and other organizations and agencies.
<b>Programs:</b>	<p>There are two types; course work and non-course work programs.</p> <ol style="list-style-type: none"> <li><b>1. Course work program</b> <ul style="list-style-type: none"> <li>- Students need to complete 12 credits compulsory course, 4 credits elective course and 20 credits thesis.</li> </ul> </li> <li><b>2. Non-course work program</b> <ul style="list-style-type: none"> <li>- In addition to 36 credits of thesis, students are requested to attend the seminar forum related to their research topic.</li> <li>- Students may take some course works without credits on his/her own requirement or as requested by the advisory committee.</li> </ul> </li> </ol>

**List of courses**

**1. Compulsory course:**

MD567 712	Cells and Molecular Biology	3(3-0-6)
AM427 501	Research Methodology in Medical Sciences and Applications	2(2-0-4)
AM427 502	Clinical Biochemistry and Medical Molecular Biology	2(2-0-4)
AM427 503	Molecular Biology Techniques in Medical Sciences	3(2-3-5)
AM428 891	Seminar I	1(1-0-3)
AM428 892	Seminar II	1(1-0-3)

## 2. Elective course (Example)

AM427504	Critical Appraisal of Medical Sciences Research Articles	2(2-0-4)
AM427302	Integration of Laboratory Results for Thalassemia Diagnosis	1(1-0-3)
AM427301	Molecular Pathogenesis and Analysis of Thalassemia	2(1-3-4)
AM137206	Molecular Bacterial Genetics	2(2-0-4)
AM427420	Molecular Genetics of Major Histocompatibility Complex	2(2-0-4)

Note: In addition to the above mentioned elective courses, students may enroll other courses approved by thesis advisor.

## 3. Thesis

Each student selects a major advisor to conduct a research in a field of medical science according to his/her interests. A formal thesis committee is appointed to assist the student in planning and conducting the research. The student's progress will be evaluated by the committee every semester.

### Study plan

		Credits	
		Non-course work	Course work
<b>Year 1/Semester 1</b>			
MD567 712	Cells and Molecular Biology	-	3
AM427 501	Research Methodology in Medical Sciences and Applications		2
AM427 502	Clinical Biochemistry and Medical Molecular Biology	-	2
AM427 898	Thesis	9	-
XXX XXX	Elective Courses	-	2
Total credits registered		9	9
Cumulative credits		9	9
<b>Year 1/Semester 2</b>			
AM427 503	Molecular Biology Techniques in Medical Sciences	-	3
AM427 898	Thesis	9	-
AM427 899	Thesis	-	4
XXX XXX	Elective Courses	-	2
Total credits registered		9	9
Cumulative credits		18	18
<b>Year 2/Semester 1</b>			
AM428 891	Seminar 1	-	1
AM427 898	Thesis	9	-
AM427 899	Thesis	-	8
Total credits registered		9	9
Cumulative credits		27	27
<b>Year 2/Semester 2</b>			
AM428 892	Seminar 2	-	1
AM427 898	Thesis	9	-
AM427 899	Thesis	-	8
Total credits registered		9	9
Cumulative credits		36	36

**Contact Person:**

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