Institute of Molecular Biosciences

Admission Requirements

A candidate must:

1. Hold a Bachelor's (B.Sc.) of Science degree in the following fields: Chemistry, Biochemistry, Biological, Microbiology, Biotechnology, Genetics, Medical Technology, Pharmacy, Veterinary, Medicine, or other related field.
2. Have a grade point average of at least 2.5;
3. Have a TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5 or MU GRAD TEST score of 60.

Exemptions from the above conditions may be granted by the Programme Committee under exceptional circumstances.

Curriculum Structure

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td>15</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>9</td>
</tr>
<tr>
<td>Thesis</td>
<td>12</td>
</tr>
</tbody>
</table>

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBMG 501</td>
<td>Genetic Engineering</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>MBMG 502</td>
<td>Molecular Genetics</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>MBMG 511</td>
<td>Techniques in Molecular Genetics and Genetic Engineering</td>
<td>3(0-9-3)</td>
</tr>
<tr>
<td>MBMG 521</td>
<td>Molecular Genetics and Genetic Engineering Seminar I</td>
<td>1(1-0-2)</td>
</tr>
<tr>
<td>MBMG 522</td>
<td>Molecular Genetics and Genetic Engineering Seminar II</td>
<td>1(1-0-2)</td>
</tr>
<tr>
<td>MBMG 602</td>
<td>Computer Applications in Molecular Biology</td>
<td>2(1-2-3)</td>
</tr>
<tr>
<td>MBMG 603</td>
<td>Instrumentation in Molecular Biology</td>
<td>2(2-0-4)</td>
</tr>
</tbody>
</table>

**Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBMG 601</td>
<td>Current Topics in Molecular Biology</td>
<td>1(1-0-2)</td>
</tr>
<tr>
<td>MBMG 606</td>
<td>Protein Structures</td>
<td>2(2-0-4)</td>
</tr>
<tr>
<td>MBMG 613</td>
<td>Advanced Research Project in Molecular Genetics and Genetic Engineering</td>
<td>3(0-9-3)</td>
</tr>
<tr>
<td>SCID 500</td>
<td>Cell and Molecular Biology</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 506</td>
<td>Concept of Molecular Bioscience</td>
<td>2(2-0-4)</td>
</tr>
</tbody>
</table>

**Thesis**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBMG 698</td>
<td>Thesis</td>
<td>12(0-36-0)</td>
</tr>
</tbody>
</table>

* These May Change in Cases Where There are Suggestions for The Improvement of The Curriculum
Additional advantages of the programme
Our programme is one of the leading programmes in Molecular Genetics and Genetic Engineering in Thailand. The programme provides research opportunities in several areas of current interest, and is among the most productive programme in terms of research output. We also have efficient evaluation process to ensure minimum period of study in our programme.

Details of Scholarships
1. Scholarship of the 60th Year of the Supreme Reign of His Majesty King Bhumibol Adulyadej.
2. MGGE Scholarships.

Application Process
Application is only available via online application at www.grad.mahidol.ac.th

Required Documents
Prepare the following required documents to submit via online admission system or post:
1. Completed an Online Application at www.grad.mahidol.ac.th which comprised with
   - Form A: Application Form
   - Form B: Background and Proposed Field of Study
   - Form C: Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photos (Passport size)
5. Two copies of Passport
6. Two copies of English certificate (TOEFL/ IELTS/ MU-Grad Test)
   - (For Doctoral Program)
   - TOEFL ITP score of at least 500, TOEFL Internet-based score of 61, or IELTS score of 5
   - (For Master’s Program)
   - TOEFL ITP score of at least 480, TOEFL Internet-based score of 54, IELTS score of 5 or MU GRAD TEST score of 60.

Notes
- Only accept TOEFL ITP score from examination center arranged by Faculty of Graduate Studies, Mahidol University.
- TOEFL ITP taken from other domestic and overseas institutes are invalid.
- The test date must be within previous 2 years before application date
- Applicant who obtained a valid English score must submit an official score certificate along with your application. Otherwise, your English score will not be considered.

7. Two copies of Curriculum Vitae
8. Two copies of Statement of Purposes and Career Goals
9. Two copies of Current bank statement / Scholarship letter (if any)
10. Two copies of Concept paper / research proposal (recommended for all applicants)
11. Two copies of additional documents may be requested by each program (such as letter of work experience / professional license/ related certificates and awards)

Submitting documents via online admission system.
- All documents must be in pdf format (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)

Job option after graduation
Researcher with expertise in Molecular Genetics and Genetic Engineering.

Further information may be obtained from the Director of Graduate Studies, Molecular Genetics and Genetic Engineering:

1. Assoc. Prof. Dr. Panadda Boonserm  (E-mail: panadda.boo@mahidol.ac.th)
   Institute of Molecular Biosciences Building, floor 4,
   Institute of Molecular Biosciences, Mahidol University, Salaya, Nakhonpathom.
   Tel: 0 2441 9003-7 Ext. 1466  Fax: 0 2441 9906
2. Assoc. Prof. Dr. Apinunt Udomkit (E-mail: apinunt.udo@mahidol.ac.th)
   Institute of Molecular Biosciences Building, floor 2,
   Institute of Molecular Biosciences, Mahidol University, Salaya, Nakhonpathom.
   Tel: 0 2441 9003-7 Ext. 1236   Fax: 0 2441 9906

Program Coordinator

   Mrs. Arpa Eamkum (E-mail: arpa.eam@mahidol.ac.th)
   Institute of Molecular Biosciences Building, floor 3,
   Institute of Molecular Biosciences, Mahidol University, Salaya, Nakhonpathom.
   Tel: 0 2441 9003-7 Ext. 1328   Fax: 0 2441 9906

Notes
1. The programme of Molecular Genetics and Genetic Engineering requires students to study the pre-requisite course:
   - SCID 500 Cell and Molecular Biology 3 Credits
   - SCID 506 Concept of Molecular Bioscience 3 Credits
2. For more education information: www.grad.mahidol.ac.th

For more information please contact The Student Admission Section.
Tel: 0 2441 4125 ext. 208-210, 0 2441 9129. E-mail: gradinter@mahidol.ac.th