BIOMEDICAL AND MOLECULAR SCIENCES - MASTER OF SCIENCE

Pattern I: Master of Science (M.Sc.) in Biomedical and Molecular Sciences

The Master of Science (M.Sc.) in Biomedical and Molecular Sciences consists of course work, seminars, research project and thesis (with oral defense).

Applicants are accepted under the general regulations of the School of Graduate Studies.

Admission requirement: minimum second class standing in an honours bachelor’s degree.

The M.Sc. in Biomedical and Molecular Sciences, requires, at minimum, the completion of 12 credit units at the graduate level. BMED 860 Fundamentals of research and BMED 897 Research Seminars are mandatory courses. Additional required credit units are specified by some of the Field Specialization (see below). Students may take no more than one 3 credit unit dual-numbered undergraduate course towards their total additional required credits.

Specific Field Course Requirements
(in addition to the 6 mandatory credit units described above)

Biochemistry and Cell Biology
M.Sc. students in this field can choose from any BMED graduate courses to complete the remaining 6 credit units of coursework in consultation with the supervisor. It is highly recommended that students take at least one graduate course offered by the Biochemistry and Cell biology field: BMED 820, BMED 821, BMED 823, or BMED 842. Graduate courses offered through other departments may also be taken if approved by the Graduate coordinator in consultation with the supervisor.

Experimental Medicine
M.Sc. students in this field can choose from any BMED graduate courses to complete the remaining required 6 credit units of coursework in consultation with the supervisor. Graduate courses offered through other departments may also be taken if approved by the Graduate Coordinator in consultation with the supervisor.

Microbes, Immunity, and Inflammation
M.Sc. students in this field can choose from any BMED graduate courses to complete the remaining required 6 credit units of coursework in consultation with the supervisor. Graduate courses offered through other departments may also be taken if approved by the Graduate Coordinator in consultation with the supervisor.

Reproduction and Developmental Sciences
M.Sc. students in this field can choose from any BMED graduate courses covering reproduction and development, or if appropriate other BMED graduate courses to complete the remaining required 6 credit units of coursework. Graduate courses offered through other departments may also be taken if approved by the Graduate Coordinator in consultation with the supervisor.

Therapeutics, Drug Development, and Human Toxicology
M.Sc. Students in this field must complete an additional 3 credit units from the Methods Modules. In addition, students must complete 3 credit units from one of the following (the specific course will be determined in consultation with the supervisor):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BMED 813</td>
<td>Advances in Neuropharmacology</td>
<td>3.00</td>
</tr>
<tr>
<td>BMED 809</td>
<td>Principles of Drug Discovery and Development</td>
<td>3.00</td>
</tr>
<tr>
<td>BMED 815</td>
<td>Mechanistic Toxicology</td>
<td>3.00</td>
</tr>
<tr>
<td>BMED 853</td>
<td>Cellular and Molecular Cardiovascular Sciences</td>
<td>3.00</td>
</tr>
<tr>
<td>BMED 854</td>
<td>Cardiovascular Sciences</td>
<td>3.00</td>
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</table>

In cases where students do not have the necessary background in core pharmacology, BMED 840 Principles of General Pharmacology I and BMED 849 Principles of General Pharmacology II may also be required.