Life Sciences and Biochemistry
<table>
<thead>
<tr>
<th>Biochemistry</th>
<th>Life Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Within the Faculty of Arts and Science</td>
<td></td>
</tr>
<tr>
<td>• Opportunity for direct entry</td>
<td></td>
</tr>
<tr>
<td>• Research-focused disciplines</td>
<td></td>
</tr>
<tr>
<td>• Internship and exchange opportunities</td>
<td></td>
</tr>
<tr>
<td>• Combined BSc/MSc program</td>
<td></td>
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<tr>
<td>• 1&lt;sup&gt;st&lt;/sup&gt; year Castle programming</td>
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</tbody>
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Biochemistry

Learn about cellular machinery that govern:

- Shape
- Movement
- Functional importance

Emphasis on these aspects in health and disease
Life Sciences

Learn about the following fields in the biomedical sciences:

– Biochemistry
– Cellular and Tissue Physiology
– Anatomy and Reproduction
– Drug Discovery and Human Toxicology
– Microbiology and Immunology
– Cancer Biology and Pathology
– Neurosciences
Program Size

• 1st year Life Sciences and Biochemistry – Direct entry from high school - 275 students

• 2nd year entry: 125 students
WHAT WILL MY CORE DEGREE PLAN BE?
Biochemistry Major

1st year
• Chemistry
• Biology
• Physics
• Calculus

2nd year
• Molecular Biology
• Organic Chemistry
• Inorganic Chemistry
• Statistics

3rd year
• Physical Biochemistry
• Proteins, Enzymes, Metabolism
• Biochemistry Laboratory

4th year
• Current Topics in Biochemistry
• Advanced Molecular Biology
• Protein Structure and Function
• Molecular Basis of Cell Function

GPA greater than 2.5 (automatic GPA ≥ 2.9)
Pass in 1st year Chemistry
No less than 27 unit load
WHAT WILL MY CORE DEGREE PLAN BE?

Biochemistry Specialization

**1st year**
- Chemistry
- Biology
- Physics
- Calculus

**2nd year**
- Molecular Biology
- Organic Chemistry
- Inorganic Chemistry
- Statistics

**3rd year**
- Physical Biochemistry
- Proteins, Enzymes, Metabolism
- Biochemistry Laboratory

**4th year**
- Current Topics in Biochemistry
- Advanced Molecular Biology
- Protein Structure and Function
- Molecular Basis of Cell Function
- Research project
WHAT WILL MY CORE DEGREE PLAN BE?

Life Sciences Major

**1st year**
- Chemistry
- Biology
- Physics
- Calculus

**2nd year**
- Molecular Biology
- Organic Chemistry
- Microbiology
- Physiology

**3rd year**
- No Core Courses

**4th year**
- No Core Courses

GPA greater than 2.0 (automatic if GPA ≥ 3.2)
Pass in 1st year Chemistry
No less than 27.0 unit (9 course) load
WHAT WILL MY CORE DEGREE PLAN BE?

Life Sciences Specialization

1st year
- Chemistry
- Biology
- Physics
- Calculus

2nd year
- Anatomy
- Molecular Biology
- Organic Chemistry
- Microbiology
- Physiology
- Statistics

3rd year
- Biochemistry
- Immunology
- Pharmacology

4th year
- No Core Courses
- Topic-specialized courses with research opportunity*

*Specialization Plans include: Cancer Biology, Cardiorespiratory, Drug Development and Human Toxicology, Neurosciences, Biomedical Discovery/Sciences
Combined BSc/MSc

• Apply in the 2\textsuperscript{nd} term of 3\textsuperscript{rd} year

• Take up to 6 units of graduate courses during 4\textsuperscript{th} year

• Continue 4\textsuperscript{th} year research project
Career Opportunities

- Medicine
- Biomedical Research
- Law
- Healthcare Policy
- Healthcare Administration
- Industry
- Pharmacy
- Veterinary Medicine
- Education
- Physiotherapy
- Occupational Therapy
- Dentistry
Contact Us

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