COMBINED PROGRAM MD AND PHD (BIOCHEMISTRY WITH SPECIALIZATION IN HUMAN AND MOLECULAR GENETICS OPTION)

Undergraduate Medical Education (MD Program)

The program leading to the Doctor of Medicine degree includes 147 weeks of instruction (72 weeks of which are devoted to clinical work) scheduled over four calendar years.

Preclerkship is devoted to the teaching and learning of biomedical sciences, whereas Clerkship is devoted to clinical work. During medical studies, students should demonstrate the intelligence, the integrity, and the personal and emotional characteristics deemed necessary for competent physicians. Their behaviour must be consistent with an acceptable code of professional ethics, such as stated in the Faculty’s Standards of Ethical and Professional Behaviour.

This program is offered in English and in French.

Program Contact Information

Undergraduate Medical Education (https://med.uottawa.ca/undergraduate/)

451 Smyth Road, Room 2046
Ottawa, ON K1H 8M5
Tel.: 613-562-5800 ext. 8551
Toll free: 1-877-868-8292 ext. 5215
Email: medaca@uottawa.ca

Doctorate in Philosophy Biochemistry Specialization in Human and Molecular Genetics

The programs prepare candidates for a variety of careers in teaching and research both within and outside of academia.

Graduate students are actively involved in laboratory research, course work, and presentation of research seminars. Thus, they acquire autonomy in conducting research and in preparing publications.

The programs create a stimulating and challenging environment which will allow students to achieve excellence in research.

Graduates of the programs must demonstrate research skills and credibility as professionals in their area of research.

The Faculty of Medicine offers a collaborative program in Human and Molecular Genetics at the master's and doctoral levels. The primary graduate programs in Biochemistry (BCH), Cellular and Molecular Medicine (CMM) and Neuroscience (NSC) collaborate in offering the specialization. The degree awarded specifies the primary program and indicates ’specialization in Human and Molecular Genetics.’

Program Contact Information

Graduate Studies Office, Faculty of Medicine (https://med.uottawa.ca/graduate-postdoctoral/)

451 Smyth Road, Room 2016
Ottawa, ON, K1H 8N5
Tel.: 613-562-5215
Toll free: 1-877-868-8292 ext. 5215
Email: grad.med@uottawa.ca

Twitter | Faculty of Medicine (https://twitter.com/uOttawaMed/)
Youtube | Faculty of Medicine (https://www.youtube.com/channel/UCP2nDlrjFEeyfMI0mle2HA/)
Flickr | Faculty of Medicine (https://www.flickr.com/photos/uottawamed/)

Program Requirements

Requirements for this program have been modified. Please consult the 2019-2020 calendars (http://catalogue.uottawa.ca/en/archives/) for the previous requirements.

Undergraduate Medical Education (MD Program)

Compulsory courses at the 1000 level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 1900</td>
<td>Clinical Placement - Non Mandatory Elective - First Year</td>
</tr>
<tr>
<td>MED 1107</td>
<td>Community Week</td>
</tr>
<tr>
<td>MED 1200</td>
<td>Introduction Unit to the Profession</td>
</tr>
<tr>
<td>MED 1201</td>
<td>Foundations Unit</td>
</tr>
<tr>
<td>MED 1202</td>
<td>Unit I</td>
</tr>
<tr>
<td>MED 1302</td>
<td>Physician Skills Development (Part 1)</td>
</tr>
</tbody>
</table>

Compulsory courses at the 2000 level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CLI 2101</td>
<td>Transition to Clerkship Part 1</td>
</tr>
<tr>
<td>ELE 2900</td>
<td>Clinical Placement - Non Mandatory Elective - Second Year</td>
</tr>
<tr>
<td>MED 2109</td>
<td>Mandatory Clinical Week</td>
</tr>
<tr>
<td>MED 2201</td>
<td>Unit II</td>
</tr>
<tr>
<td>MED 2202</td>
<td>Unit III</td>
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<tr>
<td>MED 2203</td>
<td>Unit IV</td>
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<tr>
<td>MED 2302</td>
<td>Physician Skills Development (Part 2)</td>
</tr>
</tbody>
</table>

Compulsory courses at the 3000 level

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CLI 3301</td>
<td>Transition to Clerkship Part 2</td>
</tr>
<tr>
<td>CLI 3102</td>
<td>Surgery</td>
</tr>
<tr>
<td>CLI 3103</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>CLI 3104</td>
<td>Mandatory Selectives</td>
</tr>
<tr>
<td>CLI 3106</td>
<td>Obstetrics and Gynecology</td>
</tr>
<tr>
<td>CLI 3107</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>CLI 3108</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>CLI 3109</td>
<td>Family Medicine</td>
</tr>
<tr>
<td>CLI 3110</td>
<td>Acute Care Medicine</td>
</tr>
</tbody>
</table>
### Compulsory courses at the 4000 level

- CLI 3111  
  Objective Structured Clinical Examination (OSCE)

### Electives

- CLI 4104  
  Electives
- CLI 4105  
  Back to Basics
- CLI 4106  
  Selective in Ambulatory Medicine

- MED 4101  
  Eportfolio on Core Competencies (Part 1)
- MED 4102  
  Eportfolio on Core Competencies (Part 2)
- MED 4103  
  Eportfolio on Core Competencies (Part 3)
- MED 4104  
  Eportfolio on Core Competencies (Part 4)

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**Doctorate in Philosophy Biochemistry Specialization in Human and Molecular Genetics**

The Department may require students to take additional courses, depending on their backgrounds.

Students must meet the following requirements for the doctorate with collaborative specialization:

#### Compulsory Courses (BCH):

- MED 8166  
  Professionalism and Professional Skills

- 3 optional course units in biochemistry (BCH) at the 8000 level  
  3 Units

#### Compulsory Courses (HMG):

- 3 course units from:  
  3 Units
  - HMG 8103  
    Advanced Topics in the Molecular Biology of Human Diseases I
  - HMG 8105  
    Advanced Topics in the Molecular Biology of Human Diseases II
  - HMG 8600  
    Special Topics in Human and Molecular Genetics

#### Seminar:

- BCH 8366  
  PhD Seminar  
  3 Units

#### Comprehensive Examination:

- BCH 9998  
  Comprehensive-Examination (PhD)

#### Thesis:

- THD 9999  
  Doctoral Thesis  
  4 Units

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**Note(s)**

1. The optional course units may be selected from other approved graduate courses in related disciplines approved by the Department.
2. Course selection is subject to the approval of the HMG program director.
3. This requirement involves the presentation of a seminar and regular attendance at the departmental seminars.
4. Successful presentation and defence of a thesis on a topic in human and molecular genetics based on original research carried out under the direct supervision of a member of the collaborative program.
5. Students are responsible for ensuring they have met all of the thesis requirements (http://www.uottawa.ca/graduate-studies/students/theses/).

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**Minimum Requirements (Doctorate)**

The passing grade in all courses is C+.

Students who fail 6 units, the thesis proposal, or the comprehensive exam or whose research progress is deemed unsatisfactory must withdraw from the program.

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