Biomathematics (PhD)

Degree Requirements

Students may choose from the degree tracks below to complete coursework within a focus area.

Degrees earned will be distributed as: "Doctor of Philosophy in Biomathematics" without track specifications.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>BMA 771</td>
<td>Biomathematics I</td>
<td></td>
</tr>
<tr>
<td>BMA 772</td>
<td>Biomathematics II</td>
<td></td>
</tr>
<tr>
<td>BMA 773</td>
<td>Stochastic Modeling</td>
<td></td>
</tr>
<tr>
<td>BMA 774</td>
<td>Partial Differential Equation Modeling in Biology</td>
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</tr>
<tr>
<td>BMA 801</td>
<td>Seminar *</td>
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</table>

**Biological Sciences Courses**

"Biological Science Courses" will be approved in conjunction with the academic committee.

**Statistics Courses**

Required "Statistics Courses" will be approved in conjunction with the academic committee – see "Statistic Course Options" listed below.

**Mathematical Science Courses**

"Mathematical Science Courses" will be approved in conjunction with the academic committee.

**Focus Area Track**

See "Focus Area Tracks".

Total Hours: 51-54

1  BMA 801 Seminar needs to be repeated three times to meet the three credit hour requirement.
2  Must represent at least two different perspectives.
3  Must include at least one 700 level course.

**Statistic Course Options**

**Option 1**

**Code**  | **Title**                                                                 | **Hours** |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ST 511</td>
<td>Statistical Methods For Researchers I</td>
<td>3</td>
</tr>
<tr>
<td>ST 512</td>
<td>Statistical Methods For Researchers II</td>
<td>3</td>
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<td>Total Hours</td>
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**Option 2**

**Code**  | **Title**                                                                 | **Hours** |
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<tbody>
<tr>
<td>Option Two</td>
<td>Statistical Methods For Researchers II (R)</td>
<td>3</td>
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</table>

| Total Hours | 3 |

**Focus Track Areas**

**Biological Sciences**

Select five courses, minimum of one form each of the following: 15

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Cellular and Molecular Biology</td>
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</table>

**Mathematical Methods**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Select five courses in the following or co-major:</td>
<td>15</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>Statistics</td>
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<td></td>
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<tr>
<td>Operations Research</td>
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<tr>
<td>Computer Studies</td>
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</table>

**Faculty**

**Full Professors**

Kevin Gross
Mansoor Abbas Haider
Carol K. Hall
Jason M. Haugh
George R. Hess
Alun L. Lloyd
Sharon R. Lubkin
Spencer V. Muse
Mette Olufsen
Brian J. Reich
Seth M. Sullivant
Jeffrey L. Thorne
Hien Trong Tran
Zhaobang Zeng

**Associate Professors**

Randall Brian Langerhans
Charles Eugene Smith
Rosangela Sozzani

**Assistant Professors**

Belinda Sena Akpa
Kevin Bryant Flores
David Alan Rasmussen
Emeritus Faculty
William Reid Atchley
John William Bishir
Marlene L. Hauck
Gail G. McRae
Kenneth Hugh Pollock
Jim E. Riviere
Henry E. Schaffer
James Francis Selgrade
Ronald Edwin Stinner

Adjunct Faculty
John Edward Banks
Georgiy Bobashev
James W. Gilliam
Nicholas M. Haddad
Julia S. Kimbell
W. Owen McMillan III
Johnny T. Ottesen
Eric A. Stone