Statistics: Biostatistics, Ph.D.

Requirements

Minimum Graduate School Requirements

Review the Graduate School minimum academic progress and degree requirements ([http://guide.wisc.edu/graduate/#policiesandrequirementstext](http://guide.wisc.edu/graduate/#policiesandrequirementstext)), in addition to the program requirements listed below.

Named Option Requirements

Mode of Instruction

<table>
<thead>
<tr>
<th>Face to Face</th>
<th>Evening/Weekend</th>
<th>Online</th>
<th>Hybrid</th>
<th>Accelerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

Curricular Requirements

Requirement Detail

Minimum Credit Requirement

Minimum 51 credits

Minimum Residence Credit Requirement

Minimum 32 credits

Minimum Graduate Coursework Requirement

Half of degree coursework (26 credits out of 51 total credits) must be completed graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university’s Course Guide ([http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle](http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle)).

Overall Graduate GPA Requirement

3.00 GPA required.

Other Grade Requirements

A grade of B or better must be received in any course used to fulfill the required and elective course requirements.

Assessments and Examinations

Students must pass the Ph.D. qualifying examination, an oral preliminary examination on a topic selected with the approval of the student’s advisor, and a dissertation defense.

Language Requirements

No language requirements.

Doctoral Minor/Breadth Requirements

For BDO students, the breadth requirement is satisfied by:

(1) the biological sciences course and
(2) the collaborative research experience.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT/B M I 641</td>
<td>Statistical Methods for Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>STAT/MATH 709</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>STAT/MATH 710</td>
<td>Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>STAT/MATH 733</td>
<td>Theory of Probability I</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 771</td>
<td>Statistical Computing</td>
<td></td>
</tr>
<tr>
<td>STAT 849</td>
<td>Theory and Application of Regression and Analysis of Variance I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 850</td>
<td>Theory and Application of Regression and Analysis of Variance II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 998</td>
<td>Statistical Consulting</td>
<td>3</td>
</tr>
</tbody>
</table>

Additionally four elective courses (12 credits) numbered 642 or higher must be taken, EXCLUDING above and STAT 609, STAT 610, STAT 699, and STAT 990:

The chosen electives must contain AT LEAST two of three Biostatistics specialized courses:

- STAT/B M I 642 Statistical Methods for Epidemiology
- STAT/B M I 741 Survival Analysis Theory and Methods
- STAT/B M I 877 Statistical Methods for Molecular Biology

A twelfth course is required (3 credits) from an approved list of Biological Sciences courses.

- GENETICS 466 Principles of Genetics
- ZOOLOGY 570 Cell Biology
- POP HLTH 795 Principles of Population Health Sciences

Approval of other biological sciences courses is at the discretion of the BDO Committee.

STAT 992 may only be used once for the same topic

Sufficient credits from any UW Madison courses including STAT 990 to reach the 51-credit minimum

Total Credits

51
COLLABORATIVE RESEARCH EXPERIENCE:
This unique aspect of the BDO program provides the student with experience in interdisciplinary collaborative research under the supervision of a faculty trainer. Students can accomplish this requirement by rotating through directed study/research credits with various faculty trainers.

- Lab rotations should be completed during the first three years of the program
- Lab rotations need to be established at the beginning of the semester, plan accordingly!
- Students must give a presentation of their research at the end of the same semester