Biostatistics, Graduate Certificate

Learning Outcomes

- Propose and defend good statistical design as a collaborator on a public health project.
- Promote the use of sound statistical methods to answer open questions in public health science.
- Interpret results of data analysis for public health research, policy, or practice.
- Develop computer programs for the management and analysis of datasets.

Requirements

The graduate Certificate in Biostatistics requires a minimum of 14 s.h. of graduate credit. Students must earn a grade of at least B-minus in each certificate course and must achieve a major program grade-point average of at least 3.00 in order to earn the certificate. The certificate is designed for students who would like to add a formal biostatistics emphasis to their graduate programs.

The program is open to students enrolled in a University of Iowa graduate degree program outside the Department of Biostatistics. It is also open to individuals who hold graduate degrees in science disciplines or professional degrees in the health sciences and are admitted to the Graduate College as nondegree students.

The certificate requires two core courses (6 s.h.) and three electives (minimum 8 s.h.). Students should work with an advisor to plan their coursework carefully because some certificate courses have prerequisites, require permission for enrollment, or are not offered every year. They must complete at least 5 s.h. of the required coursework after being admitted to the certificate program and may count a maximum of 5 s.h. of certificate credit toward a degree or another certificate earned at the university. At least 5 s.h. of the certificate plan of study must be exclusively applied to the certificate.

The Certificate in Biostatistics requires the following coursework.

Core Courses

Course #	Title	Hours
Both of these:		
BIOS:4120	Introduction to Biostatistics	3
BIOS:5120	Regression Modeling and ANOVA in the Health Sciences	3

Electives

Course #	Title	Hours
At least 8 s.h. from these:		
BIOS:4510	Data Science Foundations in R	2
BIOS:5130	Applied Categorical Data Analysis	3
BIOS:6210	Applied Survival Analysis	3
BIOS:6310	Introductory Longitudinal Data Analysis	3
BIOS:6420/ EPID:6420	Survey Design and Analysis	3
BIOS:6650/ EPID:6655	Causal Inference	3

Other courses may be approved as electives by the Department of Biostatistics director of graduate studies. See Certificate in Biostatistics on the College of Public Health website for more information.

Admission

Enrollment is limited; applicants who have completed at least one of the certificate's required courses and whose research will be advanced by biostatistics training are given priority for admission. Visit the Certificate in Biostatistics on the department's website for an application form.

Academic Plans

Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

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Course	Title	Hours
Academic Career		
Any Semester		
The graduate certificate in biostatistics requires in minimum of 14 s.h. of graduate credit.		
	Hours	**0**
First Year		
Fall		
BIOS:4120	Introduction to Biostatistics	3
	Hours	**3**
Spring		
BIOS:5120	Regression Modeling and ANOVA in the Health Sciences	3
	Hours	**3**
Second Year		
Fall		
Certificate: biostatistics elective course [a]		3
	Hours	**3**
Spring		
Certificate: biostatistics elective course [a]		3
	Hours	**3**
Third Year		
Fall		
Certificate: biostatistics elective course [a]		2 - 3
	Hours	**2-3**
	Total Hours	**14-15**

a Students must complete at least 8 s.h. of electives from BIOS:4510, BIOS:5130, BIOS:6210, BIOS:6310, BIOS:6420, BIOS:6650.