

# Informatics, Graduate Certificate

## Requirements

The graduate Certificate in Informatics requires 19 s.h. of graduate credit. Students must earn a major program grade-point average of at least 3.00 in certificate coursework. The certificate program is designed for students enrolled in University of Iowa graduate degree programs who wish to study informatics as a complement to their degree program and for nondegree students who are interested in increasing their knowledge of informatics.

The Certificate in Informatics requires the following coursework.

## Required Courses

### Programming

Course #	Title	Hours
This course:		
CS:5110/IGPI:5110	Introduction to Informatics	3
One of these:		
CS:3010	Software Engineering Fundamentals in Java	3
CS:3210	Programming Languages and Tools	3
CS:3980	Topics in Computer Science I	3
SEES:3050/ IGPI:3050	Geospatial Programming	3

### Statistics

Course #	Title	Hours
One of these:		
BIOS:4120	Introduction to Biostatistics	3
STAT:4143/ PSQF:4143	Introduction to Statistical Methods	3

### Data Science

Course #	Title	Hours
One of these:		
BAIS:6480/ IGPI:6480	Knowledge Discovery	3
STAT:4540/ BAIS:4540/ DATA:4540/ IGPI:4540	Statistical Learning	3
An approved course (consult advisor)		3

### Databases

Course #	Title	Hours
One of these:		
CS:4400	Database Systems	3
SEES:4580/ IGPI:4581	Introduction to Geographic Databases	3

### Human Factors

Course #	Title	Hours
One of these:		
CS:4500	Research Methods in Human-Computer Interaction	3
CS:4510	Human-Computer Interaction for Computer Science	3
SEES:3540/ IGPI:3540	Geographic Visualization	3

### Ethics

Course #	Title	Hours
This course:		
CS:5980	Topics in Computer Science III (Responsible Conduct of Research)	1

For more information about certificate requirements, see the Interdisciplinary Graduate Program in Informatics website.

## Graduate Education

Graduate education prepares students with advanced knowledge and skills in specialized fields. At the University of Iowa, the Graduate College advocates for student-centered graduate education and supports equitable application of rules and policies across graduate programs.

## Academics

University of Iowa graduate credentials are regulated by policies and requirements found in the Graduate College Manual of Rules and Regulations. This includes minimum grade-point average (GPA) requirements for academic standing and degree conferral. The Graduate College sets the minimum requirement. Individual graduate programs may establish higher GPA requirements.

## Admissions

Graduate student applicants must meet admission requirements for both the Graduate College and the program to which they have applied. University of Iowa graduate admission requirements are published by the Graduate College and on the Graduate Admissions website.

## Financial Support

Graduate students might be eligible for financial support. Several contingencies apply, including degree program and award type, satisfactory progress toward degree, satisfactory completion of all duties related to an appointment, and availability of funding. Graduate students should inquire directly with their program for more information about funding availability. The Graduate Student Employment Standards govern the employment relationship between the University of Iowa and all graduate teaching and research assistants in all matters except wages, which are covered by an existing collective bargaining agreement or the conditions of an applicable federal grant.

## Admission

Certificate program applicants may be degree or nondegree graduate students. Applicants who are enrolled in a University

of Iowa graduate degree program must be in good academic standing in their program.

Applicants must meet the admission requirements of the Graduate College; see the Manual of Rules and Regulations on the Graduate College website.

b CS:4500 is typically offered only during fall semesters. Check MyUI for course availability since offerings are subject to change.

## 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
<b>Academic Career</b>		
<b>Any Semester</b>		
The graduate certificate in informatics requires 19 s.h. of graduate credit.		
<b>Hours</b>		<b>0</b>
<b>First Year</b>		
<b>Fall</b>		
CS:5110	Introduction to Informatics	3
<b>Hours</b>		<b>3</b>
<b>Spring</b>		
Certificate: programming elective course <sup>a</sup>		3
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
STAT:4143 or BIOS:4120	Introduction to Statistical Methods or Introduction to Biostatistics	3
<b>Hours</b>		<b>3</b>
<b>Spring</b>		
CS:4500 or SEES:3540 or CS:4510	Research Methods in Human- Computer Interaction <sup>b</sup> or Geographic Visualization or Human-Computer Interaction for Computer Science	3
<b>Hours</b>		<b>3</b>
<b>Third Year</b>		
<b>Fall</b>		
BAIS:6480 or STAT:4540	Knowledge Discovery or Statistical Learning	3
<b>Hours</b>		<b>3</b>
<b>Spring</b>		
CS:5980	Topics in Computer Science III	1
<b>Hours</b>		<b>1</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SEES:4580 or CS:4400	Introduction to Geographic Databases or Database Systems	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>19</b>

a Students must complete one course from CS:3010, CS:3210, CS:3980, SEES:3050.