

Department of Computer Science

THE UNIVERSITY OF IOWA

UNDERGRADUATE PROGRAM IN INFORMATICS

Effective Fall 2009

The Bachelor of Arts in informatics requires a minimum of 120 s.h., including at least 43-50 s.h. of work for the major. The Bachelor of Science in informatics requires a minimum of 120 s.h., including at least 53-55 s.h. of work for the major. Both majors combine informatics course work that provides a strong foundation in computing with course work in a cognate discipline. Required credit for the major depends on the choice of cognate area.

The Bachelor of Arts major offers the cognate areas of fine and applied arts (art, music), human-computer interaction, health sciences, linguistics, social sciences (economics, geography, sociology), and individualized cognates.

The Bachelor of Science major offers the cognate areas of bioinformatics and individualized cognates.

All informatics students complete the informatics core, one (B.A.) or two (B.S.) electives, a statistics course, and a set of courses in their chosen cognate area. Students also must complete the College of Liberal Arts and Sciences General Education Program.

Note that all informatics students are expected to possess appropriate high-school-level mathematical background. This requirement is formalized in the co-requisite for the second course in the informatics core, 22C:080.

DEGREE REQUIREMENTS

To fulfill Informatics major requirements, students combine informatics coursework that provides a strong foundation in computing with coursework in one of several cognate disciplines. This enables a wide variety of multidimensional programs well-suited to the educational and economic needs of the 21st century.)

INFORMATICS CORE

The informatics core consists of six required computing courses (at least 18 s.h.) that emphasize data manipulation, databases, and networking. It provides more applications-oriented content than the traditional computer science curriculum yet is designed to offer students a sound basis in underlying computer sciences themes and techniques.

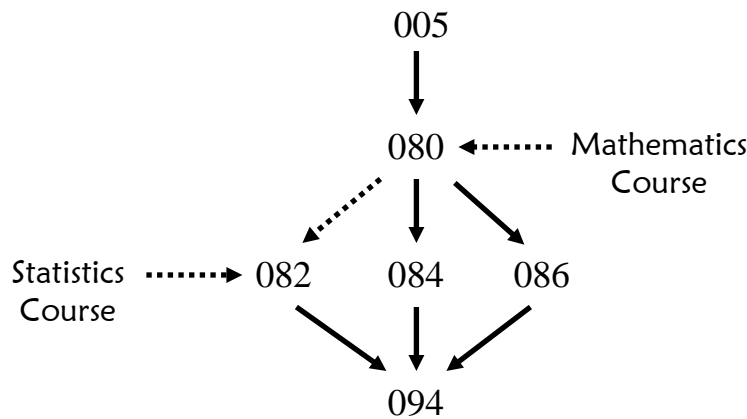
One of these:

22C:080 Programming for Informatics	4 s.h.
22C:104 Introduction to Informatics	3 s.h.
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	3-4 s.h.

All of these:

22C:005 Introduction to Computer Science	3 s.h.
22C:082 Human-Computer Interaction	3 s.h.
22C:084 Databases for Informatics	3 s.h.
22C:086 Networking and Security for Informatics	3 s.h.
22C:094 Informatics Project	3 s.h.
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	15 s.h.

INFORMATICS COURSE SEQUENCE



Note: A solid arrow indicates a clear prerequisite course that must be taken before the next course; a dotted arrow indicates a course that must be taken before or with the other course.

Special substitution courses

For 2009-10, students may receive credit for 22C:080 by taking 22C:104 in Fall 2009. Students may use 6K:182 or 6K:186 to satisfy the 22C:084 requirement.

Informatics Electives

B.A. students must complete at least one course (3 s.h.) and B.S. students must complete at least two (6 s.h.) from a list of approved computing informatics electives. In addition to the courses listed below, students may have additional choices from the Department of Electrical and Computer Engineering, the Department of Management Sciences, and the School of Library and Information Science; consult the informatics program director for additional choices.

22C:096 Topics in Computer Science (section approved by advisor)	3 s.h.
22C:109 Programming Languages and Tools (section approved by advisor)	3 s.h.
A computer science course numbered above 22C:110	3 s.h.
	<hr/> 3-6 s.h.

Statistics Requirement

B.A. and B.S. students must complete one introductory statistics course. Some cognates require a specific statistics course or an alternative statistics course not on this list (e.g., 034:010 Quantitative Data Analysis for the human-computer interaction and sociology cognates). Students should consult with their advisor to choose a statistics course appropriate for their cognate area.

One of these:

22S:008 Statistics for Business	4 s.h.
22S:025 Elementary Statistics and Inference	3 s.h.
22S:030 Statistical Methods and Computing	3 s.h.
22S:039 Probability and Statistics for the Engineering and Physical Sciences	3 s.h.
22S:101 Biostatistics	3 s.h.
22S:102 Introduction to Statistical Methods	3 s.h.
22S:120 Probability and Statistics	4 s.h.
	<hr/> 3-4 s.h.

Cognates Requirements

Requirements for cognate areas are specified in separate documents.