

Certificate in Applied Informatics

Department of Computer and Information Sciences

Indiana University South Bend

Requirements

This certificate consists of five courses (at least 17 credits) . These courses will provide an understanding of information technology and how it helps solve problems in the students' areas of interest. Students will take three lower level courses in informatics, one upper level course in informatics, and one upper level course from the list electives. The upper level courses must be chosen with the approval of the Director of Informatics and a faculty member from the student's area of interest. The student must complete the requirements for the certificate at IU South Bend with a grade of C or better.

Lower Level: (3 courses)

- 1) INFO I101 – Introduction to Informatics (4 credits)
- 2) Choose two courses from the following lower level list:
 - INFO I202 – Social Informatics (3 credits)
 - INFO I210 – Information Infrastructure I (4 credits)
 - INFO I211 – Information Infrastructure II (4 credits)

Upper Level: (1 courses)

- 3) One upper level course selected from:
 - INFO I300 – Human Computer Interaction (3 credits)
 - INFO I303 – Organizational Informatics (3 credits)

Upper Level Elective: (1 courses)

- 4) One upper level course selected from:
 - BIOL L311 GENETICS (3 cr.)
 - BUS K301 Enterprise Resource Planning (3)
 - BUS K321 Management Information Systems (3 cr.)
 - CHEM C371 Chemical Informatics I (3 cr.)
 - CSCI A340 Introduction to Web Programming (3 cr.)
 - CSCI C335 Computer Structures (3 cr.)
 - CSCI B424 Parallel and Distributed Programming (3 cr.)
 - CSCI C442 Database Systems (3 cr.)
 - CSCI C463 Artificial Intelligence (3 cr.)
 - CSCI B481 Interactive Computer Graphics (3 cr.)
 - CSCI B438 Computer Networks (3 cr.)
 - FINA PXXX Advanced Digital Production (3 cr.)
 - FINA P374 Computer Arts and Design II (3 cr.)
 - INFO I300 Human Computer Interaction (3 cr.)
 - INFO I303 Organization Informatics (3 cr.)
 - INFO I310 Multimedia Arts and Technology (3 cr.)
 - INFO I312 Information Representation (3 cr.) (Was I200)
 - INFO I320 Distributed Systems and Collaborative Computing (3 cr.)
 - INFO I400 Topics in Informatics (3 cr.)
 - INFO I400 Bioinformatics (3 cr.)
 - MATH M365 Probability and Statistics (3 cr.)
 - MATH MXXX Simulation
 - PHIL P338 Philosophy of Technology (3 cr.)
 - PHIL PXXX Computer Ethics (3 cr.)
 - PHYS P303 Digital Electronics (3 cr.)
 - PSY P335 Cognitive Psychology (3 cr.)
 - SOC S319 Sociology of Science (3 cr.)
 - SOC S451 Web Based Survey Techniques (3 cr.)

The use of technology and analytical methods has become increasingly important in our global society. Such massive use of technology has in turn created a growing demand for technically adept employees. This certificate is for those who already have a bachelor's degree from an accredited college or university. Students entering this certificate must have minimum math skills equivalent to basic algebra (e.g. MATH M014). The goal of this certificate is to provide these students the necessary technical expertise for the application of information technology to their respective field.

Informatics at IUSB?

- ◆ Informatics is the study of the science and application of information technology to various disciplines. This cross-disciplinary program is distinct from computer science and information systems. Those programs cover the theory of a particular discipline in depth. Informatics covers a breadth of issues in various disciplines including the social and ethical issues facing our information society.

Any student who wishes to major or minor in Informatics should contact the director of Informatics as soon as possible to arrange for academic advising.

What is the job outlook?

- ◆ There are excellent employment opportunities for our graduates. Almost every student and every alumnus of our program is gainfully employed. In our region, the average starting salary for our graduates is currently in the mid 40's. Nationally, salaries range from low 40's to upper 70's.

Why IUSB?

- ◆ IUSB is the only public institution in the region (60 miles radius) equipped to offer quality undergraduate and graduate programs in computing.
- ◆ Our class sizes average around 20 students, and almost never exceeding 30.
- ◆ We have 9 full time faculty with Ph.D. degrees in computer science or closely related areas.
- ◆ The typical salary for our new graduates in the region is approximately \$40,000 to \$52,000.

Contact Information:

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