Minor in Computer Science
Department of Computer and Information Sciences
Indiana University South Bend

Minor in Computer Science

This minor consists of six courses (20 credits) and will provide the student with the knowledge and understanding of computer hardware and software components and how they operate. At least 12 of the 20 credits must be taken at IUSB. The student must complete the following courses with a grade of C- or better.

C101 Computer Programming I (4 cr.)
C151 Multi-user Operating Systems (2 cr.)
C201 Computer Programming II (4 cr.)
C243 Elementary Data Structures (4 cr.)

ELECTIVES: (6 credits from the following)

CSCI-C 251 Foundations of Digital Computing (3 cr.)
CSCI-C 308 System Analysis & Design (4 cr.)
CSCI-C 311 Organization of Programming Languages (3 cr.)
CSCI-C 335 Computer Structures (4 cr.)
CSCI-C 435 Operating Systems & Computer Architecture (4 cr.)
CSCI-C 455 Analysis of Algorithms (3 cr.)
CSCI-B 424 Parallel and distributed programming (3 cr.)
CSCI-C 442 Database systems (3 cr.)
CSCI-C 463 Artificial intelligence (3 cr.)
CSCI-B 438 Computer networks (3 cr.)
CSCI-C 481 Computer Graphics (3 cr.)
CSCI-C 490 Special topics such as security, biomorphic computing, computer vision, advanced Java.

The goal of this minor is to provide the necessary technical expertise to those student who are preparing themselves for the new knowledge economy. Potential students who benefit from this minor may be found in many disciplines, including health care, science and engineering, government, business and education.

What can I do with this minor?

The minor in computer applications is designed to provide the student with proficiency in various aspects of computer applications. This minor is specifically designed to serve students who are not computer science majors.

The minor is specially suited for **Bachelor of Science majors** at IU South Bend. It will complement their primary discipline and will allow them to graduate college with a solid background and working knowledge of computer science.

Computer Science at IUSB?

◆ As the premier public institution of higher education in the region, our mission is to provide the highest quality education in the most enjoyable and friendly atmosphere possible. In pursuing this mission we work hard to attract the best and most qualified faculty and staff to our program. We also work hard to build and maintain up-to-date computer laboratories which are crucial to our program. Through our internship program for students, faculty consulting and volunteering, we interact regularly with our local industry so that we continually exchange ideas to the mutual benefit of both the business community and the university. Our goal is to bridge the gap between theories and concepts presented in the classroom and real life business and industry needs and practices.

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. Furthermore, according to predictions by the *Bureau of Labor Statistics* during the period between 1998 to 2008, fields within the computer science discipline will experience 73 to 108% growth.

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 CS graduates in the region is approximately $40,000 to $52,000.

Contact Information:

◆ Department of Computer and Information Sciences
Indiana University South Bend
P.O. Box 7111
South Bend, IN 46634
◆ www.cs.iusb.edu
◆ 574-520-5521