

# Certificate in Computer Applications

## Department of Computer and Information Sciences

### Indiana University South Bend

#### Goal:

Students who successfully complete the certificate will have full command and the necessary technical expertise to make extensive use of computer technology and its applications.

This certificate consists of six courses (19 credits) and will provide the student with the knowledge and understanding of computer hardware and software components and how they operate, use of common office automation and productivity application software, introduction to operating systems, introduction to event driven programming and graphical user interfaces, introduction to web based programming, introduction to computer networks and the client/server computing model.

Potential students who may benefit from this certificate may be found in many organizations, including health care, science and engineering, government, and not-for-profit agencies. In addition, existing students at IU South Bend, may find this certificate complementary to their major.

#### Core Requirements:

The student must complete the following courses at IU South Bend with a grade of C or better.

A106 - Introduction to Computing (3 credits)  
A107 - Advanced Microcomputing (Database Systems) (4 credits)  
A150 - Understanding Operating Systems (1 credits)  
A201 - Introduction to Programming I (Visual Basic .Net) (4 credits)  
A338 - Network Technologies & Systems Administration (4 credits)  
A340 - Introduction to Web Programming (3 credits)

#### Additional Requirements:

The student must take and pass W130 Pre-Composition with a grade of C or better, or else must score at the non-remedial level (i.e., at the level that would permit them to take W131 English Composition) on the IUSB placement exam in Composition.

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

#### Contact Information:

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