

## Certificate in Information Technology\*

The Certificate in Information Technology (IT) is designed to provide essential training to students, liberal arts graduates, as well as career changers and other professionals looking to enter the field of information technology. The selection of courses teaches and exposes the language of IT to those new to the field.

To earn a Certificate in Information Technology, participants must complete 15 hours from the following courses:

### Required Course:

Personal Computer Applications

### Choose one from the following:

Programming Using C++ (COP2334)

Visual Programming (CGS3464)

### Choose one from the following:

Networking Principles (CGS3283)

Applications of Information Technology (CGS3604)

### Choose one from the following:

Computer Graphics (CGS3523)

Desktop Publishing (CGS2580)

Multimedia Systems (CGS3875)

### Choose one from the following:

Exploring the Internet (CGS3559)

Web Page Design (CGS3823)

Web Design for E-Commerce (CGS3172)

\* Not intended for CS/CIS majors.

## Certificate in Database Systems

The Certificate in Database Systems is designed to provide both theory and practical knowledge in database design, development and implementation, advanced database concepts, database administration, as well as data mining. In-depth practice in the use of Structure Query Language (SQL) will also be provided. This certificate will prepare one to be a database professional, or work in any other information systems career in which knowledge of capturing, storing, retrieving, organizing, and analyzing information is important.

To earn a Certificate in Database Systems, participants must complete 12 hours from the following courses:

### Programming Pre-requisite (3hrs)

Choose one from the following:

Visual Programming (CGS3464)

Java Programming (COP2253)

Programming Using C++ (COP2334)

### Required Course:

Database Systems (COP4710/COP5XXX)

### Choose two from the following (6hrs):

Data Mining

Advanced Database Systems

Database Administration

### IT & Database Systems

Please direct questions to:

Dr. Sikha Bagui  
bagui@uwf.edu

### Web Development

Please direct questions to:

Lakshmi Prayaga  
lprayaga@uwf.edu

## Certificate in Web Development

The Certificate in Web Development is designed to prepare students, general practitioners, as well as professionals, for promising new careers as webmasters, application developers, designers, and managers of internet and web technologies. Students will learn basic programming and database skills, how to program the web using PERL/CGI/ASP.NET and ColdFusion, fundamentals and infrastructure of e-commerce applications, how to create and implement applets into web applications, how to create dynamic web-pages, and about web-database connectivity and SQL basics with ColdFusion and ASP.NET.

To earn a Certificate in Web Development, participants must complete 12 hours from the following courses:

### Programming Pre-requisite (3hrs)

Choose one from the following:

Visual Programming (CGS3464)

Java Programming (COP2253)

### Required Course:

Database Systems (COP4710)

### Choose two from the following (6hrs):

Internet Programming (COP3813)

Web Design for e-Commerce (CGS3172)

Software Methods for Remote Databases (CIS4340)

Note: This certificate can be obtained fully online.

# Certificates

*Information Technology*

*Database Systems*

*Web Development*

For information, contact:  
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*By earning one of our certificates,  
you can work in these exciting  
career fields:*

- Database Administrator
- Systems Analyst
- Web Developer
- Computer Systems Technician
- System Support Specialist
- Data Communications Analyst
- Computerized Office Specialist
- Network Support



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career takes you, our  
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***Web Development***