



## COMPUTER INFORMATION SYSTEMS - PROGRAM

### • Associate of Applied Science

#### About The Program

The Computer Information Systems program meets the specific skills and knowledge requirements for technical and professional jobs within the information technology (IT) field for entry-level programmer/analyst positions. It is designed to meet the educational needs of most segments of the IT field in a client-server environment, and microprocessor platform along with web and server applications. The training blends general education courses with the required IT skills for programmer/analyst in government, insurance, manufacturing, service, sales, utilities and banking. Additional education and job experience lead to work in systems analysis and project management.

#### Career Potential

- Applications Programmer/Analyst
- Database Administrator
- Information Systems Department Manager
- System Analyst
- System Programmer
- Database Assistant
- Project Manager
- System Administrator

#### Admission Requirements

Students are admitted to the program each semester. Students must have the program approval, a completed application, and other required information submitted by the due date. If there are openings after the application deadline, any remaining openings will be filled on a "first-come" basis.

To be admitted into the CIS program students must:

- Fulfill all WCCCD admission requirements.
- Declare program intent on the WCCCD admission application or change program intent at the campus admission office.
- Fulfill course placement requirements based on COMPASS test.
- Students must complete WCCCD program admission applications during the semester they are enrolled in the CIS 112, Structured Design course and turn the program application in to the Campus Academic Officer or the Student Services Office.

### Associate of Applied Science General Orientation

#### GENERAL EDUCATION (GE)

ENG 119	English I	3
	English Requirement	3
	American Government Requirement	3
	Natural Science Lab Requirement	4
	Social Science Requirement	3
	Humanities Requirement	3
<b>Total GE Credits</b>		<b>19</b>

#### OCCUPATIONAL SUPPORT (OS)

BUS 225	Business Application	3
MAT 113	Intermediate Algebra	3
SPH 101	Fundamentals of Speech	3
<b>Total OS Credits</b>		<b>9</b>
<b>Total Electives</b>		<b>6</b>

*Any 27 credits from the following*

#### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 112	Structured Design	3
CIS 210	Introduction to UNIX	3
CIS 212	LINUX	3
CIS 260	Analysis and Design	4

#### PROGRAMMING OPTION

CIS 203	Visual Basic	3
CIS 207	Java Programming Language	4
CIS 209	C Programming Language	4
CIS 223	Cobol	3
CIS 258	JavaScript/PERL	4
CIS 259	C++ Programming	3

#### DATABASE OPTION

CIS 246	Oracle Database Administration I	4
CIS 247	Oracle Database Administration II	4
CIS 285	Introduction to Database Concepts	3

#### INTERNET OPTION

BIT 250	E-Commerce Strategies and Practices	3
BUS 228	Web Page Design	3
CIS 241	Internet Foundations	4
CIS 266	Introduction to Graphic Design	3
CIS 267	Understanding and Developing Multimedia	3

#### NETWORKING, MICROSOFT AND HARDWARE OPTION

CIS 237	Cisco CCNA	7
CIS 240	Networking Essentials	3
CIS 243	Network Security Fundamentals	3
CIS 245	Wireless Networking	3
CIS 249	Computer Support I	3
CIS 248	Computer Support II	3
CT 210	CompTIA A+	6

CT 211	Networking I	4
CT 213	Networking II	4
CT 215	Networking III	4
CT 217	Networking IV	4

#### PROGRAM

**TOTAL CREDITS 61**

### Associate of Applied Science Occupational Specific

#### MASTER WEB SITE DESIGNER

Web designers are responsible for day-to-day site creation, design and all technical aspects of a web site.

#### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

#### OCCUPATIONAL SPECIFIC

BIT 250	E-Commerce Strategies and Practices	3
BUS 228	Web Page Design	3
CIS 110	Introduction to Computer Information Systems	4
CIS 112	Structured Design	3
CIS 213	Web Design Methodology and Technology	3
CIS 241	Internet Foundations	4
CIS 258	JavaScript/Perl	4
CIS 266	Introduction to Graphic Design	3
CIS 267	Understanding and Developing Multimedia	3
<b>Total</b>		<b>64</b>

#### WEBMASTER ADMINISTRATOR

Webmaster Administrator directs the planning, development, maintenance, and administration of a web site.

#### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

#### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 112	Structured Design	3
CIS 210	Introduction to UNIX	3
CIS 240	Networking Essential	3
CIS 241	Internet Foundations	4
CIS 242	Web Administration	3
CIS 243	Network Security Fundamentals	3
CIS 244	TCP/IP Concepts and Practices	3
CIS 285	Introduction to Databases	3
<b>Total</b>		<b>63</b>

(over)

## District Office

801 West Fort Street  
Detroit, MI 48226

General Information Number:  
(313) 496-2600

Career Program Hotline:  
1-800-300-2118

Information Website:  
www.wcccd.edu

E-mail:  
info@wcccd.edu

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## SYSTEM ADMINISTRATOR

They maintain network hardware and software, analyze problems, and monitor the network to ensure its availability.

### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 210	Introduction to UNIX	3
CIS 212	LINUX	3
CIS 240	Networking Essentials	3
CT 210	CompTIA A+	6
CT 211	Networking I	4
CT 213	Networking II	4
CT 215	Networking III	4
Total		65

## COMPUTER NETWORK ADMINISTRATOR

They provide day-to-day on-site administrative support for software users in a variety of work environments.

### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 210	Introduction to UNIX	3
CIS 212	LINUX	4
CIS 240	Networking Essentials	3
CIS 245	Wireless Networking	3
CIS 249	Computer Support I	3
CIS 248	Computer Support II	3
CT 210	CompTIA A+	6
CT 211	Networking I	4
Total		67

## COMPUTER SUPPORT SPECIALIST

Computer Support Specialists provide technical assistance, support, and advice to all users.

### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 210	Introduction to UNIX	3
CIS 212	LINUX	4
CIS 240	Networking Essentials	3
CIS 245	Wireless Networking	3
CIS 249	Computer Support I	3
CIS 248	Computer Support II	3
CT 210	CompTIA A+	6
CT 211	Networking I	4
Total		67

## COMPUTER PROGRAMMING SPECIALIST

They write, test, and maintain computer programs.

### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 112	Structured Design	3
CIS 203	Visual Basic	3
CIS 207	Java Programming	4
CIS 209	C Programming Language	4
CIS 210	Introduction to UNIX	3
CIS 258	JavaScript/PERL	4
CIS 259	C++ Programming	4
CIS 260	System Analysis and Design	3
Total		66

## COMPUTER DATABASE SPECIALIST

Database administrators work with database management systems software and determine ways to organize and store data.

### CORE REQUIREMENTS

GENERAL EDUCATION	19
OCCUPATIONAL SUPPORT	9
ELECTIVES	6

### OCCUPATIONAL SPECIFIC

CIS 110	Introduction to Computer Information Systems	4
CIS 112	Structured Design	3
CIS 203	Visual Basic	3
CIS 210	Introduction to UNIX	3
CIS 212	LINUX	3
CIS 246	Oracle Database Administration I	4
CIS 247	Oracle Database Administration II	4
CIS 285	Introduction to Database Concepts	3
Total		61