

# INFORMATION SYSTEMS: PROGRAMMING IN C++ (AS)

**Catalog Effective Term:** Fall 2024

**Program Code:** ASISPC

**Credential:** Associate in Science

*High Demand Occupation, High Skill Occupation, High Wage Occupation*

This program prepares students to transfer to complete a bachelor's degree in Business Administration with a major in Computer Information Systems. Undergraduates and graduates of CIS programs are prepared to create and maintain information systems for organizations, manage information systems projects, and develop strategies for effective use of enterprise information resources.

## Articulation

- Eastern Michigan University, BBA degree and several BS degrees
- Madonna University BS degree

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <http://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php>.

## Program Admission Requirements

An Academic Math Level of 4 is required to enroll in MTH 176 College Algebra.

*See an advisor to choose courses that meet the requirements of the program to which you are transferring.*

**Minimum Credits Required for the Program: 60**

## Full-Time Students

Course	Title	Credits
<b>First Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CPS 171	Introduction to Programming with C++	4
ENG 111	Composition I	4
MTH 176	College Algebra (or higher 4 credit math course)	4
<b>Credits</b>		<b>15</b>
<b>Second Semester</b>		
CPS 271	Object Features of C++	4
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> ) 1		3
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) 1		3
Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )		3
<b>Credits</b>		<b>16</b>
<b>Third Semester</b>		
CPS 272	Data Structures with C++	4
CPS 276	Web Programming Using PHP and MySQL	4

Nat. Sci. Lab Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#natscilab">https://coursecatalog.wccnet.edu/academics/general-education/#natscilab</a> )		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) 2		3
<b>Credits</b>		<b>14</b>
<b>Fourth Semester</b>		
CPS 298	Professional Team Programming	4
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> ) 2		3
General Education and/or open elective(s) to reach a minimum of 30 General Education and 60 total credits.		8
Possible CIS/CPS electives include:		
CIS 282	Database Principles and Application	
CPS 161	An Introduction to Programming with Java	
CPS 251	Android Programming	
CPS 261	Advanced Java Concepts	
CPS 278	Java Spring Framework	
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>60</b>

## Part-Time Students

Course	Title	Credits
<b>First Semester</b>		
CPS 171	Introduction to Programming with C++	4
MTH 176	College Algebra (or higher 4 credit math course)	4
<b>Credits</b>		<b>8</b>
<b>Second Semester</b>		
CIS 120	Linux/UNIX I: Fundamentals	3
CPS 271	Object Features of C++	4
<b>Credits</b>		<b>7</b>
<b>Third Semester</b>		
ENG 111	Composition I	4
Nat. Sci. Lab Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#natscilab">https://coursecatalog.wccnet.edu/academics/general-education/#natscilab</a> )		3
<b>Credits</b>		<b>7</b>
<b>Fourth Semester</b>		
CPS 272	Data Structures with C++	4
CPS 276	Web Programming Using PHP and MySQL	4
<b>Credits</b>		<b>8</b>
<b>Fifth Semester</b>		
CPS 298	Professional Team Programming	4
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) 1		3
<b>Credits</b>		<b>7</b>
<b>Sixth Semester</b>		
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> ) 1		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) 2		3
<b>Credits</b>		<b>6</b>

**Seventh Semester**

Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> )	3
General Education and/or open elective(s) to reach a minimum of 30 General Education and 60 total credits.	4
Possible CIS/CPS electives include:	
CIS 282 Database Principles and Application	
CPS 161 An Introduction to Programming with Java	
CPS 251 Android Programming	
CPS 261 Advanced Java Concepts	
CPS 278 Java Spring Framework	
<b>Credits</b>	<b>7</b>

**Eighth Semester**

Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> )	3
General Education and/or open elective(s) to reach a minimum of 30 General Education and 60 total credits.	4
Possible CIS/CPS electives include:	
CIS 282 Database Principles and Application	
CPS 161 An Introduction to Programming with Java	
CPS 251 Android Programming	
CPS 261 Advanced Java Concepts	
CPS 278 Java Spring Framework	
<b>Credits</b>	<b>7</b>

**Ninth Semester**

Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> )	3
<b>Credits</b>	<b>3</b>
<b>Total Credits</b>	<b>60</b>