



Discover

Schoolcraft College

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Computer Information Systems

You're a problem solver by nature, with a love of computers, but you don't know how far you want to go with it. Relax. Schoolcraft's got you covered.

Our Computer Information Systems department offers different options for different levels of ability and interest. Just starting out in computing? Enroll in our introductory certificate program for basic training in software applications and programming. Like the idea of sharing your knowledge with others? Then maybe our Microcomputer Support Technician degree program is right for you.

If programming holds your interest, you can earn a degree with courses in Windows, Visual Basic, C++, LINUX, UNIX, and Java. Already working in the field? Check out our post-associate degree certificate program with advanced offerings in languages, networking, and systems design.

Schoolcraft also offers Web Specialist. See our catalog or website for details.

FREQUENTLY ASKED QUESTIONS

What Do MICROCOMPUTER SUPPORT TECHNICIANS and PROGRAMMERS Do?

Technicians recommend appropriate hardware and software, interpret software manuals, organize disk storage, and create systems solutions using microcomputers. Programmers write, test, and maintain the detailed instructions (programs) that computers must follow to perform their functions.

What Characteristics Do I Need To Work In This Field?

Accuracy, persistence, patience, and the ability communicate both orally and in writing are critically important.

Where Could I Find a Job?

Virtually every work environment needs computing expertise, including professional offices, small businesses, government, and large corporations.

What Is My Employment Outlook?

Employment opportunities for Microcomputer Support Technicians and Programmers are expected to grow slower than the average for all occupations through the year 2020.

Related Websites

Service & Support Professionals Association (SSPA): www.thesspa.com

Association for Computing Machinery: www.acm.org

IEEE Computer Society: www.computer.org

For More Information

Visit www.schoolcraft.edu where you can view course and program information, schedule a campus tour, apply for admission, register for courses, and request more information.

Contact the Admissions and Enrollment Center at 734-462-4426 with additional questions.

employment

JOB TITLES & MEDIAN SALARIES OR HOURLY RATES

Microcomputer Support Technician	\$39,052 (Michigan)
Programmer	\$59,975 (Michigan)

Program Requirements 2012-2013 CATALOG

COMPUTER INFORMATION SYSTEMS— PROGRAMMING ASSOCIATE DEGREE

Schoolcraft program code # AAS.00012

As business and industry embrace new technology and procedures, the need for specially trained people accelerates. This program is designed to prepare the student for a position as an entry-level programmer. Students will learn to become proficient in following directions, analyzing problems, and writing step-by-step instructions so that the computer will efficiently process the data needed to solve these problems. Accuracy, persistence, patience, and the ability to communicate both orally and in writing are important characteristics a computer programmer should possess.

All courses are not offered each semester. Students should work with the Counseling Center to set up a schedule that will work for them. Students who satisfactorily complete all College Requirements qualify for an Associate in Applied Science Degree.

SAMPLE SCHEDULE OF COURSES

FIRST YEAR

Fall Semester

CIS 115	Introduction to Computer Based Systems.....	3
CIS 129	Introduction to Programming Logic.....	3
MATH 113	Intermediate Algebra for College Students.....	4
COMA 103	Fundamentals of Speech.....	3
ENG 101	English Composition 1.....	3
		16

Winter Semester

ENG 102	English Composition 2.....	3
CIS Elective	Select 1.....	3
CIS 170	Microsoft Windows	
CIS 178	Technical Microsoft Windows	
CIS 225	Database Management Systems.....	3
Science*	Select any General Education Science course.....	4
Elective	Select from the list below.....	3
		16

SECOND YEAR Fall Semester

CIS 176	Visual Basic.NET.....	3
CIS 211	Introduction to C++.....	2
CIS Elective	Select 1.....	3
CIS 255	Introduction to LINUX	
CIS 260**	Introduction to UNIX	
Elective	Select from the list below.....	6
		14

Winter Semester

CIS 250	Systems Development and Design.....	4
CIS 290	Object-Oriented Programming with Java.....	3
CIS 221	Advanced C++.....	2
Social Science	Select 1.....	3-4
POLS 105	Survey of American Government	
PSYCH 153	Human Relations	
PSYCH 201	Introductory Psychology	
Elective	Select from the list below.....	2-3
		14-16

PROGRAM TOTAL 60-62 CREDITS

* Number of credits may vary depending on the General Education Science course selection.

** CIS 260 is offered Winter Semester.

Students planning to transfer should check the transfer institution's requirements/guides or discuss their options with a counselor or advisor. Number of credits may vary depending on the course selection

ELECTIVES

CIS 120	Software Applications.....	3
CIS 122	Microsoft Outlook.....	2
CIS 125	Principles of Information Security.....	3
CIS 185	Introduction to HTML.....	3
CIS 223	Introduction to C#.....	3
CIS 238	JavaScript.....	3
CIS 251	IT Project Management.....	3
CIS 255	Introduction to LINUX.....	3
CIS 260	Introduction to UNIX.....	3

COMPUTER INFORMATION SYSTEMS— PROGRAMMING SKILLS CERTIFICATE

Schoolcraft program code # CRT.00366

The Microsoft .NET framework is a common environment for building, deploying, and running Web Services and Web Applications in the Windows environment. This certificate is designed to introduce the student to the top four programming languages used in software development today. The student will use the new Visual Studio.NET, which is a common development environment for the new .NET Framework. The .NET Framework provides a feature-rich application execution environment, simplified development, and easy integration between a number of different development languages.

All courses are not offered each semester. Students should work with the Counseling Center to set up a schedule that will work for them. A Certificate of Completion is granted after completion of required courses with a grade of 2.0 or better.

SAMPLE SCHEDULE OF COURSES

FIRST YEAR

Fall Semester

CIS 129	Introduction to Programming Logic.....	3
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Winter Semester

CIS 176	Visual Basic.NET.....	3
CIS 211	Introduction to C++.....	2
		5

SECOND YEAR Fall Semester

CIS 221	Advanced C++.....	2
CIS 223	Introduction to C#.....	3
		5

Winter Semester

CIS 290	Object-Oriented Programming with Java.....	3
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PROGRAM TOTAL 16 CREDITS

Go to www.schoolcraft.edu/academicprograms to see the Gainful Employment Disclosure which includes additional information about this program, such as program costs, student graduation rates, and the median debt of students who complete the program.

INFORMATION SYSTEMS

COMPUTER INFORMATION SYSTEMS— MICROCOMPUTER SUPPORT TECHNICIAN ASSOCIATE DEGREE

Schoolcraft program code # AAS.00014

This program is designed to prepare the student for entry-level positions supporting users of microcomputer components of the operating system. Technicians will assist microcomputer users by recommending appropriate hardware and software, interpreting software manuals, organizing the disk storage, networking workstations and creating systems solutions using the microcomputer.

All courses are not offered each semester. Students should work with the Counseling Center to set up a schedule that will work for them. Students who satisfactorily complete all College Requirements qualify for an Associate in Applied Science Degree.

SAMPLE SCHEDULE OF COURSES

FIRST YEAR		Fall Semester	
CIS 115	Introduction to Computer Based Systems	3	
CIS 171	Introduction to Networking	3	
MATH 113	Intermediate Algebra for College Students	4	
ENG 101	English Composition I	3	
			13

Winter Semester

CIS 120	Software Applications	3	
CIS Elective	Select I	3	
CIS 170	Microsoft Windows		
CIS 178	Technical Microsoft Windows		
ENG 102	English Composition 2	3	
CIS 173	Wireless Local Area Networks	3	
CIS 235	Managing and Troubleshooting PCs	3	
			15

Spring Session

Social Science	Select I	3-4	
POLS 105	Survey of American Government		
PSYCH 153	Human Relations		
PSYCH 201	Introductory Psychology		

SECOND YEAR Fall Semester

CIS 180	Spreadsheet Applications—Current Software	3	
CIS 225	Database Management Systems	3	
CIS 265	Networking I	3	
COMA 103	Fundamentals of Speech	3	
Science*	Select any General Education Science course	4	
			16

Winter Semester

CIS 215	Advanced Software Applications	3	
CIS 250	Systems Development and Design	4	
CIS 276	Networking 2	3	
Elective	Select from the list below	3	
			13

PROGRAM TOTAL 60-61 CREDITS

* Number of credits may vary depending on the General Education Science course selection.

Students planning to transfer should check the transfer institution's requirements/guides or discuss their options with a counselor or advisor. Number of credits may vary depending on the course selection

ELECTIVES

CIS 125	Principles of Information Security	3
CIS 172	Network Security Fundamentals	3
CIS 251	IT Project Management	3
CIS 255	Introduction to LINUX	3
CIS 260	Introduction to UNIX	3
CIS 273	TCP/IP and Network Architectures	3

COMPUTER INFORMATION SYSTEMS— INTRODUCTORY CERTIFICATE

Schoolcraft program code # 1YC.00004

The Computer Information Systems Certificate Program introduces students to the operating system and concepts surrounding programming logic. In addition, students obtain a basic knowledge of software applications and programming languages.

Students may select one of the Computer Information Systems Associate Degree Programs at anytime during or after the first year. However, all degree requirements must be fulfilled.

All courses are not offered each semester. Students should work with the Counseling Center to set up a schedule that will work for them. Students who satisfactorily complete the Program Courses qualify for a Certificate of Program completion.

SAMPLE SCHEDULE OF COURSES

FIRST YEAR		Fall Semester	
CIS 115	Introduction to Computer Based Systems	3	
CIS 120	Software Applications	3	
CIS 129	Introduction to Programming Logic	3	
CIS Elective	Select I	3	
CIS 170	Microsoft Windows		
CIS 178	Technical Microsoft Windows		
			12

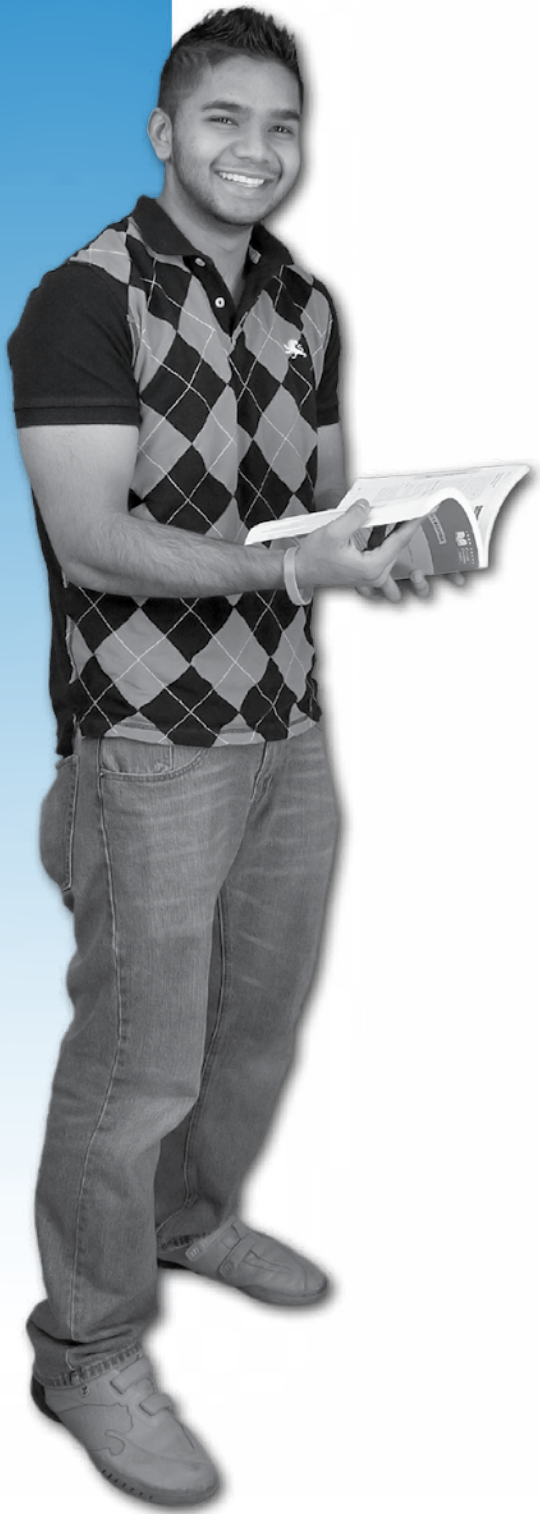
Winter Semester

ENG 101	English Composition I	3	
MATH 113	Intermediate Algebra for College Students	4	
CIS 176	Visual Basic.NET	3	
CIS 225	Database Management Systems	3	
Elective	Select from the list below	2-3	
			15-16

PROGRAM TOTAL 27-28 CREDITS

ELECTIVES

CIS 122	Microsoft Outlook	2
CIS 125	Principles of Information Security	3
CIS 251	IT Project Management	3
CIS 255	Introduction to LINUX	3



COMPUTER INFORMATION SYSTEMS— POST-ASSOCIATE CERTIFICATE

Schoolcraft program code # PAC.00155

This post-associate certificate in Computer Science Information Systems is designed for working professionals who have experience and/or training in the computer field. This certificate will provide study in the newest technology and will enhance students' ability to meet the needs of the ever changing Computer Information Systems environment.

Prior to admission in this program, students must have already completed a minimum of an accredited Associate Degree in Applied Science. All courses are not offered each semester. Students should work with the Counseling Department to set up a schedule that will work for them. The post-associate certificate is awarded upon successful completion of 16 credit hours (exact number may vary slightly due to credit value of courses).

PROGRAM COURSES

CIS 185	Introduction to HTML	3
CIS 211	Introduction to C++	2
CIS 221	Advanced C++	2
CIS 223	Introduction to C#	3
CIS 235	Managing and Troubleshooting PCs	3
CIS 238	JavaScript	3
CIS 250	Systems Development and Design	4
CIS 251	IT Project Management	3
CIS 255	Introduction to LINUX	3
CIS 260	Introduction to UNIX	3
CIS 265	Networking 1	3
CIS 276	Networking 2	3
CIS 290	Object-Oriented Programming with Java	3

Completion of a minimum of 16 credit hours is required.

Courses can be taken through independent study.

Virtually any program at Schoolcraft College can be a transfer program if you plan to continue at a four-year institution to earn a bachelor's degree in your major. Visit www.schoolcraft.edu/transfer for information about transfer options. To ensure that the Schoolcraft courses you select are the specific ones required by the four-year college of your choice, be sure to consult regularly with your counselor/advisor.



**Schoolcraft
College**

18600 Haggerty Road
Livonia, MI 48152-2696

It is the policy of Schoolcraft College that no person shall, on the basis of race, color, national origin, gender, age, marital status, creed or disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination during any program or activity or in employment.

PROGRAM INFORMATION UPDATED 4-12