

COMPUTER INFORMATION SYSTEMS

Certificates

- *Computer Technician*
- *Webmaster*

Associate

- *Associate in Computer Information Systems*
- *Associate in Computer Science*

Partnership Programs

- *Central Michigan University*
- *Davenport University*
- *Ferris State University*
- *Franklin University*
- *Saginaw Valley State University*

See information on our partnership programs on the web at
www.kirtland.edu/partnerships/computers.htm

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. In the certificate programs there are no English, reading, or mathematics requirements, however, these courses are the foundation for success in all programs. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ENG-10000 Writing Lab (if required)
- English: _____

- Mathematics: _____
- Reading: _____

For more information, please contact the Computer Information Systems Department.

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COMPUTER TECHNICIAN

Certificate of Completion (CTEC0)

Minimum Credits: 33
Contact Hours: 33-34

Introduction

Kirtland Community College's Computer Technician program is designed to provide a comprehensive background of training necessary for success in technically oriented, computer-related jobs. Students will acquire skills that will allow them to analyze hardware and software related problems, assess solutions, implement the best solution, and evaluate the results. The program is intended to lay a foundation for a large variety of entry-level positions in the computer repair field. Emphasis is placed on both theoretical and hands-on applications. Students may also elect to pursue the Associate in Applied Science: Technology Management degree at any point in this program.

Course	Title	Credits
CIS-10500	Introduction to Computers	3
CIS-19600	Hardware Certification	3
CIS-19700	OS Certification	3
CIS-22400	UNIX	2
CIS-26000	Intro to Computer Networking	3
CIS-27001	Programming I	3
CIS-280--	Internship in Computer Info Sys	3-9
CIS-21000 or CIS-26100 and CIS-26200 and CIS-26300	Internet & Web Page Development OR Internet AND Web Pages AND Advanced Web Pages	3
ENG-10000	Writing Lab, if needed	0-1
ENG-10303	English Composition I w/Computers	3
Electives from following list:		1-6
CIS-11700	Visual Basic I	3
CIS-17001	Microsoft Office	3
CIS-22500	Spreadsheets	3
CIS-23501	Database Design	3
CIS-26400	JavaScript	3
CIS-27101	Programming II	4
MTH-12000	Intermediate Algebra	4
OIS-10100	Basic Keyboarding	1



WEBMASTER

Certificate of Completion (CWEB0)

Minimum Credits: 45

Contact Hours: 46-49

Introduction

Kirtland Community College's Webmaster certificate is designed to provide a background of training necessary for web based programming and development. Students will acquire skills that will allow them to create both static and dynamic (interactive) web pages. Students may also elect to pursue the Associate in Applied Science: Technology Management degree at any point in this program.

Course	Title	Credits
ART-10500	Introduction to Design	3
ENG-10403 or ENG-10602	English Composition II w/Computers OR Technical Writing w/Computers	3
CIS-10500	Introduction to Computers	3
CIS-11700	Visual Basic I	3
CIS-21000 or CIS-26100 and CIS-26200 and CIS-26300	Internet and Web Development OR Internet AND Web Pages AND Advanced Web Pages	3
CIS-21500	Web Animation & Multimedia	3
CIS-22400	UNIX	2
CIS-26000	Introduction to Networking	3
CIS-26400	JavaScript	3
CIS-27001	Programming I	3
CIS-27101	Programming II	4
CIS-27201	Web Programming	3
Select 9 credits from the following list:		
ART-19000	Digital Communications I*	3
ART-27545	Computer Generated Images I*	3
ART-27546	Computer Generated Images II	3
CIS-17001	Microsoft Office	3
CIS-19600	Hardware Certification	3
CIS-19700	OS Certification	3
CIS-23501	Database Design	3
CIS-280--	Internship	3-9
MTH-12000	Intermediate Algebra	4
OIS-10100	Basic Keyboarding	1

**Recommended electives*

ASSOCIATE IN COMPUTERS

Computer Science (DACP0)

or Computer Information Systems (DACP1)

Minimum Credits: 60

Contact Hours: 62-69

Contact Hours: 65-70

Introduction

Students interested in pursuing a career in the computer field should plan to eventually complete a bachelor's degree at a four-year school of their choice. Computer majors are found in two separate areas: Computer Information Systems and Computer Science.

Computer Science degrees are mathematically and engineering oriented. Positions of employment would include computer programmers, systems programmers, software engineers, systems engineers, database administrators, network administrators, systems administrators, or systems analysts. Degrees in this area include the following: Software Engineering, Computer Science, Computer Engineering or Computer Networking.

Computer Information Systems degrees are business oriented. Positions of employment would include computer programmers, application programmers, systems analysts, network administrators, database administrators, systems administrators, web developers, or microcomputer specialists. Degrees in these areas include the following: Management Information Systems (MIS), Computer Information Systems (CIS) or Information Systems (IS).

Students planning to transfer to a four-year college or university must consult with a Computer Information Systems (CIS) advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with the approval of the appropriate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology, elective, biology elective etc.) where deemed appropriate. This degree also satisfies the requirements of the MACRAO Transfer Agreement as defined in the handbook section of the college catalog.

Computer Science (DACP0)
Minimum Credits: 60
Contact Hours: 62-69

Course	Title	Credits
Year 1: Fall Semester		
	Chemistry w/lab (See CIS advisor for recommended course)	4-5
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab, if required	0-1
ENG-10303	English Composition I w/Computers	3
MTH-12000	Intermediate Algebra or higher (excluding MTH-20500/MTH-20600)	4
Year 1: Winter Semester		
ENG-10403	English Composition II w/Computers	3
MTH-13000	College Algebra or higher or elective course if math sequence is complete (excluding MTH-20500/MTH-20600)	3-4
MTH-14000	Trigonometry or higher or elective course if math sequence is complete (excluding MTH-20500/MTH-20600)	3-4
POL-10100	Introduction to American Government	3
PSY-10100 or SOC-10100	Introduction to Psychology OR Introduction to Sociology	3
Year 2: Fall Semester		
CIS-27001	Programming I	3
GEO-10000 or POL-20000 or POL-20100	World Geography OR International Relations OR Comparative Government	3-4
	Humanities Elective – ART, MUS, or THE	2-3
MTH-22002	Calculus I or higher or elective course if math sequence is complete (excluding MTH-20500/MTH-20600)	3-4
SPE-10500 or SPE-11400	Fundamentals of Speech OR Intro to Interpersonal & Public Communication	3
Year 2: Winter Semester		
BIO-10100 or BIO-20100 or BIO-20200 or BIO-21000 or BIO-21300	General Biology OR General Botany OR General Zoology OR Microbiology OR Nature Study (See CIS advisor for recommended course)	3-4
CIS-27101	Programming II	4
	CIS or MTH Elective (from list below)	2-4
HIS-10500 or HIS-10600 or HIS-20100 or HIS-20200 or HIS-20300 or HIS-20400	History of World Societies to 1500 OR History of World Societies Since 1500 OR United States History to 1865 OR United States History Since 1865 OR Michigan History OR The American Civil War	3
	Humanities Elective – Language or Literature (see CIS advisor for course list)	3-4
Electives:		
CIS-11700	Visual Basic I	3
CIS-17001	Microsoft Office	3
CIS-22400	UNIX	2
CIS-23501	Database Design	3
CIS-26000	Intro to Computer Networking	3
MTH-22102	Calculus II	4

Computer Information Systems (DACP1)
Minimum credits: 60
Contact Hours: 65-70

Course	Title	Credits
Year 1: Fall Semester		
	Chemistry w/lab (See CIS advisor for recommended course)	4-5
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab, if required	0-1
ENG-10303	English Composition I w/Computers	3
MTH-12000	Intermediate Algebra or higher (excluding MTH-20500/MTH-20600)	4
Year 1: Winter Semester		
BIO-10100 or BIO-20100 or BIO-20200 or BIO-21000 or BIO-21300	General Biology OR General Botany OR General Zoology OR Microbiology OR Nature Study	4
ENG-10403	English Composition II w/Computers	3
MTH-13000	College Algebra or elective course (from list below) if math sequence is complete (excluding MTH-20500/MTH-20600)	3-4
POL-10100	Introduction to American Government	3
PSY-10100 or SOC-10100	Introduction to Psychology OR Introduction to Sociology	3
Year 2: Fall Semester		
CIS-27001	Programming I	3
GEO-10000 or POL-20000 or POL-20100	World Geography OR International Relations OR Comparative Government	3-4
	Humanities Elective – Language or Literature (see CIS advisor for course list)	3-4
SPE-10500 or SPE-11400	Fundamentals of Speech Intro to Interpersonal & Public Communication	3
	Elective course (listed below)	3-4
Year 2: Winter Semester		
CIS-27101	Programming II	4
HIS-10500 or HIS-10600 or HIS-20100 or HIS-20200 or HIS-20300 or HIS-20400	History of World Societies to 1500 OR History of World Societies Since 1500 OR United States History to 1865 OR United States History Since 1865 OR Michigan History OR The American Civil War	3
	Humanities Elective – ART, MUS, or THE	2-3
	Elective Course (from list below)	2-3
	Elective Course (from list below)	3-4
Electives:		
ACC-12100	Accounting Principles I	4
ACC-12200	Accounting Principles II	4
BUS-10100	Introduction to Business	3
CIS-11700	Visual Basic I	3
CIS-17001	Microsoft Office	3
CIS-22400	UNIX	2
CIS-22500	Spreadsheets	3
CIS-23501	Database Design	3
CIS-26000	Intro to Computer Networking	3
ECO-20100	Principles of Economics-Macroeconomics	3
ECO-20200	Principles of Economics-Microeconomics	3

COMPUTER INFORMATION SYSTEMS DEGREE PARTNERSHIPS

College and University Contact Information:

<p>Central Michigan University Marcie Otteman, ottemlmm@cmich.edu or Bob Garcia, garcilr@cmich.edu 989-774-3076</p> <p>Davenport University Karen Aune, karen.aune@davenport.edu 989-705-3720</p> <p>Ferris State University Shari Chamberlain, chambers@ferris.edu 1-800-4-FERRIS</p> <p>Franklin University Thom Leiter, leitert@franklin.edu 1-888-341-6237, ext. 6057</p> <p>Saginaw Valley State University admissions@svsu.edu 989-964-4200 or 1-800-968-9500</p>	<p>Kirtland Community College Lisa Balbach, balbachl@kirtland.edu 989-275-5000, ext. 414 Don Dyer, dverd@kirtland.edu 989-275-5000, ext. 231</p>
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