

Computer Information Systems 240101 CI Associate in Science Degree

Available: Phil Campbell and Shoals Campuses
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This program is designed for students who plan to transfer to four-year institutions for a major in Computer Information Systems or Management Information Systems. It is designed to provide skills for an entry-level position as an applications developer while providing the general education program for further study toward a baccalaureate degree.

Students are trained primarily on IBM-compatible Personal Computers. Courses may be adjusted to prepare a student for a specific four-year institution with the approval of the Dean of Instruction.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Semester Hours
Area I: Written Composition	6
**ENG 101 and 102	
Area II: Humanities and Fine Arts	12
*Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ...	6
SPH 107	3
Elective: Choose one course from among ART 100, MUS 101, PHL 206*, THR 120, Foreign Language*	3
Area III: Natural Sciences and Mathematics	14
Science: Choose two core courses from among BIO, CHM, PHS, PHY	8
Math: Choose one from MTH 112 or above	3
CIS 146	3
Area IV: History, Social and Behavioral Science	12
*History: HIS 101 and 102 or HIS 201 and 202	6
Choose two courses from among ECO 231, ECO 232, POL 200, POL 211, PSY 200, PSY 210, SOC 200	6
Area V: Pre-Professional, Pre-Major, and Elective Courses	16-20
BUS 241 and 242	6
CIS Electives	6
CIS Programming Elective	3
General Elective	1-5
PED can be used as a general elective.	

Total Semester Transfer Hours 60-64

*See note 2 on page 44.

**Keyboarding skills are essential for the successful completion of English 101.

Pre-Computer Science 240102 CS Associate in Science Degree

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This program is designed to prepare students for transfer to a four-year institution for a major in Computer Science, Computer Engineering, or Software Engineering, usually offered in a school of engineering or mathematics. Each program requires individual adjustment to prepare for transfer and the student should be in contact with the transfer institution as the A.S. degree is pursued. Students are trained primarily on IBM-compatible Personal Computers.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Semester Hours
Area I: Written Composition	6
***ENG 101 and 102	
Area II: Humanities and Fine Arts	12
***Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262	6
SPH 107	3
Elective: Choose one course from among ART 100, MUS 101, PHL 206*, THR 120, Foreign Language*	3
Area III: Natural Sciences and Mathematics	25
Science: Choose two core courses from among BIO, CHM, PHS, PHY	8
MTH 112**	3
MTH 113	3
MTH 125	4
MTH 126	4
CIS 146	3
Area IV: History, Social and Behavioral Science	12
***History: HIS 101 and 102 or HIS 201 and 202	6
Choose two courses from among ECO 231, ECO 232, POL 200, POL 211, PSY 200, PSY 210, SOC 200	6
Area V: Pre-Professional, Pre-Major, and Elective Courses	5-9
Computer Programming Electives	3-6
General Elective	2-3
PED can be used as a general elective.	

Total Semester Transfer Hours 60-64

*Although these courses will transfer, they may not satisfy the Fine Arts requirement of universities.

**Students with high placement scores may skip the lower math courses.

*** See note 2 on page 44.

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Computer Information Systems Technology Associate in Applied Science Degree

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The CIS Technology program is designed to prepare students for employment in the field of Data and Information Processing. Graduation from high school or the equivalent qualifies a prospective student for enrollment in CIS Technology. The two-year suggested curriculum is designed to develop computer personnel capable of planning, writing and installing commercial software on modern database computers. Students pursuing the Personal Computer Systems Option will receive training in electronics and networking technology used on common PC systems. Students pursuing the Programming Option are trained on the IBM AS/400 and/or personal computers.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

Programming Option 110101 PO

General Education Requirements	Semester Hours
BUS 241 Principles of Accounting I or ACT 141 Basic Accounting Principles	3
BUS 242 Principles of Accounting II or ACT 142 Advanced Accounting Principles	3
**ENG 101 English Composition I	3
ENG 130 Technical Report Writing or ENG 102 English Composition II	3
MTH 100 Intermediate Algebra	3
SPH 226 Business and Professional Speech or SPH 107 Fundamentals of Public Speaking	3
Humanities or Fine Arts Elective	3
Social Science Elective	3
Total General Education Requirements	24

Major Requirements

CIS 110 Intro to Computer Logic and Programming	3
CIS 146 Microcomputer Applications	3
CIS 205 Control Language and Utilities Applications	3
CIS 147 Advanced Microcomputer Applications	3
CIS 249 Microcomputer Operating Systems	3
CIS 281 System Analysis and Design	3
CIS 199 Network Communications or ILT 135 Local Area Networks	3
CIS 268 Software Support or ILT 130 Software Installation and Maintenance	3
CIS 269 Hardware Support or ILT 129 Personal Computer Hardware	3
CIS Programming Electives	15
CIS Elective	6
Total Major Requirements	48

Total Semester Credit Hours 72

**Keyboarding skills are essential for the successful completion of English 101.

Personal Computers Systems Option

110101 PCS

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

General Education Requirements	Semester Hours
BUS 241 Principles of Accounting I or ACT 141 Basic Accounting Principles	3
BUS 242 Principles of Accounting II or ACT 142 Accounting Principles II	3
**ENG 101 English Composition I	3
ENG 130 Technical Report Writing or ENG 102 English Composition II	3
MTH 246 Mathematics of Finance	3
SPH 226 Business and Professional Speech or SPH 107 Fundamentals of Public Speaking	3
Humanities or Fine Arts Elective	3
Social Science Elective	3
General Elective	3-5
Total General Education Requirements	27-29

Major Requirements

CIS 146 Microcomputer Applications	3
CIS 147 Advanced Microcomputer Applications	3
CIS 249 Microcomputer Operating Systems	3
CIS 191 Intro to Computer Programming Concepts	3
CIS 199 Network Communications or ILT 135 Local Area Networks	3
CIS 268 Software Support or ILT 130 Software Installation and Maintenance	3
CIS 269 Hardware Support or ILT 129 Personal Computer Hardware	3
CIS 110 Intro to Computer Logic and Programming	3
ILT 101 Survey of Electronics	3
ILT 131 Personal Computer Problem Determination	3
CIS 281 System Analysis and Design	3
Computer Science Elective	9
Programming Elective	3
Total Major Requirements	45

Total Semester Credit Hours 72-74

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**Computer Technology
PC Hardware Technician
Short-Term Certificate** 110101 PCH

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Almost all businesses today utilize microcomputers in their operations, whether they are large or small businesses. The investment they have made in microcomputers requires ongoing maintenance and service. The need for qualified technicians is continually expanding. These technicians need to know how to diagnose, configure, install, upgrade, and service industry standard microcomputers. This program is designed to provide the skills to become employed as a PC Hardware Technician.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Semester		
	Theory	Lab	Hours
CIS 249 Microcomputer Operating Systems	3	0	3
ILT 101 Survey of Electronics	3	0	3
ILT 112 Concepts of Digital Circuits	3	6	5
ILT 131 Personal Computer Problem Determination	2-3	3-0	3
CIS 110 Intro to Computer Logic and Programming	3	0	3
CIS 199 Network Communications or ILT 135 Local Area Networks	3	0	3
CIS 268 Software Support or ILT 130 Software Installation and Maintenance	3	0	3
CIS 269 Hardware Support or ILT 129 Personal Computer Hd.	3	0	3
CIS 146 Microcomputer Applications or ILT 175 Computer Fundamentals for Technology Students	3	0	3
Total Semester Credit Hours			29

**Computer Technology
PC Software Technician
Short-Term Certificate** 110101 PST

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The rapid expansion of microcomputer systems in all phases of business operations has generated a demand for knowledgeable technicians who can install, upgrade, service, and support industry standard software for microcomputers. This program will train the student to use PC operating systems, word processing, spreadsheets, database, and other related software tools which are commonly used in business.

Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.

	Semester		
	Theory	Lab	Hours
CIS 146 Microcomputer Applications	3	0	3
CIS 147 Advanced Microcomputer Applications	3	0	3
CIS 148 Post Advanced Microcomputer Applications	3	0	3
CIS 249 Microcomputer Operating Systems	3	0	3
CIS Elective	3	0	3
MTH 246 Mathematics of Finance or MTH 116 Mathematical Appl.	3	0	3
CIS 268 Software Support or ILT 130 PC Software Installation and Maintenance	2-3	3-0	3
OAD 133 Business Communications	3	0	3
Total Semester Credit Hours			24

PROGRAMS OF STUDY