

COMPUTER INFORMATION TECHNOLOGY

SYSTEMS

A.S. DEGREE



Fuel Your Passion for Computer Technology

Computer technology is evolving faster than ever before and demand for computer professionals with the right qualifications is at an all-time high. IT professionals are involved with designing, developing, supporting and managing computer software, hardware and information networks. ACC offers programs in Networking, Programming and Systems providing a wide range of options to help you gain entry into this high paying, in demand career path.

Career Opportunities

The field of computer information technology offers some of the most well-paying and sought after careers in today's job market.

The Computer Information Technology field employs people in many different roles including:

- Application Programmer
- Computer Network Technician
- Computer Systems Analyst
- Database Programmer/Administrator
- Help Desk Clerk
- Information Security Analyst
- Information Technology Specialist
- and more!

What Will I Study?

The Computer Systems Degree curriculum will provide you with an introduction to data processing and prepare you for entry into a Bachelor of Science degree program upon completion.

For More Information:

Website: www.alvincollege.edu/computer-information-technology

Phone: 281.756.3811

Email: computerinfotech@alvincollege.edu

COMPUTER INFORMATION TECHNOLOGY SYSTEMS

Associate of Science - 60 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
△COSC 1436 - Programming Fundamentals I - C++	4
⁺ ENGL 1301 - Composition I	3
*Select from Mathematics Core Curriculum	3
+Select from Social & Behavioral Sciences Core Curriculum	3
SECOND SEMESTER	
⁺ ENGL 1302 - Composition II	3
^{Δ+} MATH 2413 - Calculus I	4
⁺ GOVT 2306 - Texas Government	3
[△] COSC 1437 - Programming Fundamentals II - JAVA	4
[△] COSC 2325 - Computer Organization & Machine Language	3
THIRD SEMESTER	
^{Δ+} MATH 2414 - Calculus II	4
SECOND YEAR FIRST SEMESTER	
⁺ Select from American History Core Curriculum	3
^{^*} COSC 2336 - Programming Fundamentals III - Data Structures	3
+Select from Creative Arts Core Curriculum	3
△+PHYS 2425 - College Physics I	4
SECOND SEMESTER	
⁺ Select from American History Core Curriculum	3
⁺ GOVT 2305 - Federal Government	3
$^+ Select from \ Language, Philosophy \ \& \ Culture \ Core \ Curriculum$	3
△+PHYS 2426 - College Physics II	4
COMPUTER INFORMATION TECHNOLOGY - SYSTEMS	
(A.S.) DEGREE	60

*PROGRAM COSTS

Approximate costs for the A.S. Degree program including tuition and fees are \$4,200 for indistrict students, \$6,960 for students out-of-district, and \$9,840 for non-residents. Additional fees for books and supplies may vary.

*Alvin Community College may change tuition rates and other fees without notice or when directed by the Board of Regents.

TRANSFER OPPORTUNITIES

This is a recommended course of study for students who plan to pursue a baccalaureate degree or higher in Computer Information Systems, Digital Gaming & Simulation, Information Technology, Management Information Systems, Game Development, Computer Science, Digital Media, Computer Engineering Technology, Electrical Engineering, Graphic Communications, and other computer technology fields. *This degree has a 2+2 agreement with other universities.

⁺ Denotes core requirement. Speak with Department Chair or Academic Advisor for proper course selection.

^{*} Capstone Course

[△] Field of Study



COMPUTER NETWORKING

A.A.S. DEGREE/CERTIFICATES



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Career Opportunities

The field of computer networking offers some of the most well-paying and sought after careers in today's iob market.

The Computer Technology field employs people in many different roles including:

- Computer Network Technician
- Computer Systems Analyst
- Help Desk Technician
- Information Security Analyst
- Information Technology Specialist
- and more!

What Will I Study?

The Computer Networking Degree/Certificate program prepares you for careers in many areas of LAN/WAN administration and design. The program will train you for the Microsoft Certified Systems Administrator (MCSA) and/or Microsoft Certified Systems Engineer (MCSE) certification exams as well as other exams such as CompTIA's Network+, A+, and Security+.

For More Information:

Website: www.alvincollege.edu/computernetworking

Phone: 281.756.3812

Email: computernetworking@alvincollege.edu

COMPUTER NETWORKING

Associate of Applied Science - 60 credit hours

FIRST YEAR - FIRST SEMESTER	CREDIT
⁺ ENGL 1301 - Composition 1	3
ITSC 1305 - Introduction to PC Operating Systems	3
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking	3
SECOND SEMESTER	
ITMT 1357 - Administering Windows Server OS	3
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Configuration	3
MATH 1332 - Quantitative Reasoning	3
THIRD SEMESTER	
ITNW 1358 - Network+	3
+SPCH 1318 - Interpersonal Communication	3
SECOND YEAR FIRST SEMESTER	
ITNW 1353 - Supporting Network Server Infrastructure	3
ITNW 1354 - Implementing & Support Services	3
ITSY 1342 - Information Technology Security	3
ITSY 2300 - Operating System Security	3
⁺ COMM 1307 - Introduction to Communications	3
SECOND SEMESTER	
ECON 2301 - Principle of Macroeconomics	3
ITMT 2305 - Designing & Implementing Server Infrastructure	3
ITNW 2321 - Networking with TCP/IP	3
*ITNW 2380 - Cooperative Education Computer Systems	
Networking & Telecommunications or	_
*ITNW 2335 - Network Troubleshooting & Support	3
ITSY 2330 - Intrusion Detection	3
COMPUTER NETWORKING	
(A.A.S.) DEGREE	60

COMPUTER NETWORKING

Certificate 2 - 45 credit hours

Certificate 2 43 credit floars	
FIRST YEAR - FIRST SEMESTER	CREDITS
ITSC 1305 - Introduction to PC Operating Systems	3
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking	3
SECOND SEMESTER	
ITMT 1357 - Administering a Windows Server OS	3
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Configuration	3
THIRD SEMESTER	
ITNW 1358 - Networking+	3
SECOND YEAR FIRST SEMESTER	
ITNW 1353 - Supporting Network Server Infrastructure	3
ITNW 1354 - Implementing & Supporting Servers	3
ITSY 1342 - Information Technology Security	3
ITSY 2300 - Operating System Security	3
SECOND SEMESTER	
ITMT 2305 - Designing & Implementing Server Infrastructure	3
ITNW 2321 - Networking with TCP/IP	3
*ITNW 2380 - Cooperative Education-Computer Systems	
Networking & Telecommunications or	2
*ITNW 2335 - Network Troubleshooting & Support	3 3
ITSY 2330 - Intrusion Detection	3
COMPUTER NETWORKING	
CERTIFICATE 2	45

 $^{^+} Denotes\ core\ requirement.\ Speak\ with\ Department\ Chair\ or\ Academic\ Advisor\ for\ proper\ course\ selection.$

COMPUTER NETWORKING

Certificate 1 - 21 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
ITSC 1305 - Introduction to PC Operating Systems	3
ITMT 1358 - Windows Client Operating System	3
ITNW 1325 - Fundamentals of Networking SECOND SEMESTER	3
ITMT 1357 - Administering a Windows Server OS	3
ITNW 1313 - Computer Virtualization	3
ITSC 1316 - Linux Installation & Confirguration	3
THIRD SEMESTER	
ITNW 1358 - Networking+	3
COMPUTER NETWORKING	
CERTIFICATE 1	21

*PROGRAM COSTS

Approximate costs for the A.A.S. Degree programs are \$3,996 for in-district students and \$6,756 for those out-of-district. This includes tuition and fees. Additional fees for books and supplies may vary.

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^{*} Capstone Course



COMPUTER INFORMATION TECHNOLOGY

PROGRAMMING

A.A.S. DEGREE/CERTIFICATE



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- Computer Network Technician
- Computer Systems Analyst
- Database Programmer/Administrator
- Help Desk Clerk
- Information Security Analyst
- Information Technology Specialist
- and more!

What Will I Study?

The Computer Programming Degree/Certificate will teach you how to create instructions that tell computers which information to identify and access, how to process it, and what equipment to use. To excel in this field you should have strong math, analytical, and communication skills.

For More Information:

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Phone: 281.756.3812

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COMPUTER INFORMATION TECHNOLOGY PROGRAMMING

Associate of Applied Science - 60 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
BCIS 1305 - Business Computer Applications [^] COSC 1436 - Programming Fundamentals I - C++ or	3
ITSE 1407 – Introduction to C++ Programming	4
ITNW 1325 - Fundamentals of Networking	3
ITNW 1358 - Network+	3
ITSE 1431 - Introduction to Visual BASIC Programming	4
SECOND SEMESTER	
^Δ COSC 1437 - Programming Fundamentals II – JAVA or	
ITSE 2417 – Java Programming	4
*ENGL 1301 - Composition I	3 4
IMED 2415 - Web Design I ⁺ MATH 1314 – College Algebra or	4
*MATH 1332 Quantitative Reasoning	3
SECOND YEAR FIRST SEMESTER	<u> </u>
^A COSC 2336 - Programming Fundamentals III - Data Structure or	
ITSE 2345 – Data Structures	3
ITSE 2409 - Database Programming	4
ITMT 1357 – Administering a Windows Server Operating System	3
ITMT 1358 – Windows Client Operating System	3
+SPCH 1315 - Public Speaking or +PSYC 1300 - Learning Framework	3
SECOND SEMESTER	3
ACOCC 2225 Commutes Organization 9 Markins I	
⁴ COSC 2325 - Computer Organization & Machine Language or	3
ITSE 2337 – Assembly Language Programming	3 4
ITSW 1404 - Introduction to Spreadsheets ⁺ Select from Language, Philosophy & Culture Core Curriculum o	•
*Select from Creative Arts Core Curriculum	3
*Select from Social & Behavioral Sciences Core Curriculum	3
COMPUTER INFORMATION TECHNOLOGY - PROGRAMMING (A.A.S.) DEGREE	60

⁺ Denotes core requirement. Speak with Department Chair or Academic Advisor for proper course selection.

COMPUTER INFORMATION TECHNOLOGY PROGRAMMING

Certificate - 32 credit hours

FIRST YEAR - FIRST SEMESTER	CREDITS
BCIS 1305 - Business Computer Applications	3
ITNW 1325 - Fundamentals of Networking	3
ITNW 1358 - Network+	3
ITSE 1407 - Introduction C++ Programming	4
ITSE 1431 - Introduction to Visual BASIC Programming	4
SECOND SEMESTER	
ITSE 2337 – Assembly Language Programming	3
IMED 2415 – Web Design II	4
*ITSE 2417 – Java Programming	4
ITSW 1414 – Introduction to Spreadsheets	4
COMPUTER INFORMATION TECHNOLOGY - PROGRAMMI	
CERTIFICATE	32

^{*} Capstone Course

*PROGRAM COSTS

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