

COMPUTER TECHNOLOGIES

COMPUTER ENGINEERING

Computer Engineering AAS Degree – A25590CE

-Day and Evening

The Information Technologies – Computer Engineering A.A.S. degree provides students with the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating system and electronics concepts.

Course work includes operating systems, hardware support and repair, analog electronics, digital circuit analysis, programming, and customer service, with an emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include networking, databases, communication, professional practices and cybersecurity concepts.

Graduates should qualify for employment and entrepreneurial opportunities in electronics technology, computer service and support, computer networking, server administration, programming, and other areas requiring a knowledge of electronic and computer system repair. Graduates may also qualify to take industry certification exams in the electronic, computer, and networking fields.

Program Sequence

FIRST SEMESTER

CTI 110	Web, Pgm, & Db Foundation	3
CTI 120	Network and Security Foundations	3
ENG 111	Writing and Inquiry	3
MAT 143	Quantitative Literacy	3
NOS 110	Operating Systems Concepts	3

SECOND SEMESTER

CTS 120	Hardware/Software Support.....	3
ELC 131	Circuit Analysis I.....	4
ELC 131A	Circuit Analysis I Lab.....	1
NOS 130	Windows Single User	3
NOS 230	Windows Admin I	3

SUMMER SEMESTER

ELN 131	Analog Electronics I	4
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THIRD SEMESTER

CSC 133	C Programming	3
CTS 115	Info Sys Business Concepts	3
CTS 118	IS Professional Comm	2
ELN 133	Digital Electronics.....	4
OMT 154	Customer Satisfaction.....	2
— —	Social and Behavioral Sciences Elec.....	3

FOURTH SEMESTER

CTS 288	Professional Practices in IT.....	3
CTS 220	Advanced Hardware/Software Support.....	3
ENG 114	Professional Research and Reporting	3
— —	Major Elective.....	2
— —	HUM/FA Elective.....	3

General Education Electives

Humanities and Fine Arts Electives

(Choose 3 credit hours)

ART 111	Art Appreciation.....	3
HUM 115	Critical Thinking.....	3

MUS 110	Music Appreciation	3
PHI 240	Introduction to Ethics	3

Social and Behavioral Sciences Electives

(choose 3 credit hours)

ECO 151	Survey of Economics.....	3
ECO 251	Principles of Microeconomics	3
POL 120	American Government	3
PSY 118	Interpersonal Psychology	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

Major Electives

(choose a minimum of 2 credit hours)

CSC 116	Introduction to Functional Programming.....	3
CSC 120	Computing Fundamentals I	4
CSC 121	Python Programming.....	3
CSC 134	C++ Programming	3
CSC 139	Visual BASIC Programming	3
CSC 151	Java Programming	3
DBA 110	Database Concepts	3
DBA 115	Database Applications.....	3
NET 125	Introduction to Networks.....	3
NOS 120	Linux/UNIX Single User	3
SEC 110	Security Concepts	3
WBL —	Work Based Learning (all numbers accepted)	2

Graduation Requirement 64 Credit Hours

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