

# COMPUTER AND ADVANCED TECHNOLOGIES

## Computer and Internet Specialist Certificate

This one-semester specialization will provide students with the foundation required in the use of computers and the Internet. Students will learn entry-level skills needed to effectively use the latest computer and Internet technologies in a business environment. Graduates will have knowledge in the areas of technology including using computer hardware, using and installing computer software, fundamentals of operating systems, computer networking, Internet and electronic mail concepts, as well as using word processing applications, and presentation media software.

## Computer Maintenance Specialist Certificate

Students who graduate from this specialization will gain skills necessary to compete in the computer maintenance industry. They will learn skills such as programming on computing architecture, computer hardware and software installation, computer and mobile device maintenance, peripheral installation and troubleshooting, as well as provide hardware, software and computer security support for users within their organization.

## Specialization: Computer Support Specialist

### Associate of Applied Science

Students who graduate from this specialization will gain advanced skills necessary to compete in the computer support and maintenance industry. They will learn skills such as programming on computing architecture, computer hardware and software installation, computer and mobile device maintenance, computer and mobile device security, peripheral installation and troubleshooting, as well as provide hardware, software and computer security support for users within their organization.

## Advisory Committee Members

Michael Murphy, Senior Cloud Solution Architect, Hewlett Packard  
 William B. Roper, Principal Product Manager, Oracle Cloud Infrastructure  
 Michael Saucedo, IT Support Specialist, Doctors Hospital at Renaissance  
 David Esquivel, Camera Surveillance Operator, Sharyland ISD  
 Marciano Garza, IT Coordinator, Safeguard Insurance  
 Leo Mariscal, Field Service Technician, Energy Recovery, Inc.  
 Jaime Hinojosa, Information Technology Officer, Elsa State Bank

## Ex-Officio Members

Jose Lucio Gonzalez, Computer Services Engineer, South Texas College

## Certificates

- Computer and Internet Specialist Certificate (p. 1)
- Computer Maintenance Specialist Certificate (p. 1)

## Associate Degrees

- Computer and Advanced Technologies
  - Specialization: Computer Support Specialist Associate of Applied Science (p. 1)

## Computer and Internet Specialist Certificate

### TSI EXEMPT

Course	Title	Credit Hours
<b>First Semester</b>		
CPMT 1403	Introduction to Computer Technology	4
CPMT 1404	Microcomputer System Software	4
CPMT 1443	Microcomputer Architecture	4
CPMT 1411	Introduction to Computer Maintenance	4
Credit Hours		16
Total Credit Hours		16

## Computer Maintenance Specialist Certificate

### TSI EXEMPT

Course	Title	Credit Hours
<b>First Semester</b>		
CPMT 1403	Introduction to Computer Technology	4
CPMT 1404	Microcomputer System Software	4
CPMT 1411	Introduction to Computer Maintenance	4
CPMT 1443	Microcomputer Architecture	4
Credit Hours		16
<b>Second Semester</b>		
CPMT 1445	Computer Systems Maintenance	4
CPMT 1447	Computer System Peripherals	4
CPMT 1449	Computer Networking Technology	4
CPMT 1166	CAPSTONE: Computer Systems Technology Practicum	1
Credit Hours		13
Total Credit Hours		29

## Computer and Advanced Technologies

## Specialization: Computer Support Specialist Associate of Applied Science

### TSI LIABLE

Course	Title	Credit Hours
<b>First Semester</b>		
CPMT 1403	Introduction to Computer Technology	4
CPMT 1404	Microcomputer System Software	4
CPMT 1411	Introduction to Computer Maintenance	4
CPMT 1443	Microcomputer Architecture	4
Credit Hours		16
<b>Second Semester</b>		
CPMT 1445	Computer Systems Maintenance	4
CPMT 1447	Computer System Peripherals	4

CPMT 1449	Computer Networking Technology	4
Credit Hours		12
<b>Summer Session I</b>		
Social and Behavioral Sciences Elective <sup>1</sup>		3
Humanities Elective <sup>1</sup>		3
Credit Hours		6
<b>Third Semester</b>		
CPMT 2433	Computer Integration	4
CPMT 2445	Computer System Troubleshooting	4
CPMT 2449	Advanced Computer Networking Technology	4
Credit Hours		12
<b>Fourth Semester</b>		
CPMT 2350	Industry Certification Preparation	3
COSC 1301	Introduction to Computing <sup>1</sup>	3
ENGL 1301	Composition I <sup>1</sup>	3
Math Elective <sup>1</sup>		4
CPMT 2166	CAPSTONE: Computer Systems Technology Practicum	1
Credit Hours		14
Total Credit Hours		60

<sup>1</sup> Identifies courses to fulfill minimum 15 credit hour General Education requirement