



SOUTHWEST
TEXAS★COLLEGE

www.swtxc.edu

COMPUTER INFORMATION SYSTEMS ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Coordinator: Luis M. Pérez

Southwest Texas College

Items to be presented

- Program description.
- Sites.
- Wages.
- CompTIA A+: Lessons learned.
- Engagement.
- Success stories.

Description

- The Computer Information Systems (CIS) program provides training for students interested in hardware, networking and software aspects of information technologies systems.
- The curriculum paves the way to attain certifications such as A+ (related to computer maintenance and software administration), CCNA (entry-level network engineers), or Microsoft Active directory.
- Students are encouraged to find ways to actively engage in activities that promote ongoing learning on their own. The IT field is very dynamic, and the only constant is change

FIRST YEAR

	Fall Semester	<u>Credit</u>
EDUC 1300 π	Learning Framework	
or		
COLS 0300	College Success Skills	
POFT 1329 ¹	Beginning Keyboarding	
ITSC 1301 ²	Introduction to Computers	
ITSC 1305	Introduction to PC Operating Systems	3
IMED 1316	Web Design I.....	3
ITSC 1325	Personal Computer Hardware.....	3
MATH 1314	College Algebra.....	3
ENGL 1301	Composition I.....	3
	Total	15

FIRST YEAR

	Spring Semester	<u>Credit</u>
ITSE 1302	Computer Programming.....	3
ITNW 1454	Implementing and Supporting Servers	4
ITNW 1313	Computer Virtualization	3
ELECTIVE	Select from General Education Core ⁵	3
ENGL 1302	Composition II	<u>3</u>
	Total	16

< COSC 1336 will take its place
in Fall 2026

SECOND YEAR

	Fall Semester	<u>Credit</u>
ITSY 1342	Information Technology Security	3
ITNW 1353	Supporting Network Server Infrastructure.....	3
ITNW 1325	Fundamentals of Networking Technologies ..	3
ELECTIVE ³	Technical Elective	3
ELECTIVE	Social and Behavioral Sciences	<u>3</u>
	Total	15

SECOND YEAR

	Spring Semester	<u>Credit</u>
ITSY 2300	Operating System Security.....	3
ITNW 2312	Routers.....	3
ITSC 2280 ⁴	Cooperative Education – Computer and Information Sciences – General.....	2
ELECTIVE ³	Technical Elective.....	3
ELECTIVE	Humanities and Fine Arts.....	<u>3</u>
	Total	14
	Total Credit Hours for A.A.S.....	60

Occupational Skills Award (OSA)

HELP DESK – CIS OCCUPATIONAL SKILLS AWARD (OSA)

ITSC 1305	Introduction to PC Operating Systems	3
IMED 1316	Web Design I	3
ITSC 1325	Personal Computer Hardware.....	3
TOTAL		9

COMP-TIA Security + CIS OCCUPATIONAL SKILLS AWARD (OSA)

ITSY 1342	Information Technology Security.....	3
ITNW 1353	Supporting Network Server Infrastructure	3
ITSC 1325	Personal Computer Hardware.....	3
TOTAL		9



COMPUTER SCIENCE SYSTEM ADMINISTRATOR OCCUPATIONAL SKILLS AWARD (OSA)

ITSE 1302	Computer Programming.....	3
ITNW 1454	Implementing and Supporting Servers	4
ITNW 1313	Computer Virtualization.....	3
TOTAL		10

BITS/CIS Class Sites

- Classes offered at these sites:
 - Crystal City
 - Del Rio
 - Eagle Pass
 - Hondo
 - Uvalde

BITS/CIS Technicians Median Annual Wages

	OCCUPATION	JOB SUMMARY	ENTRY-LEVEL EDUCATION	2024 MEDIAN PAY
	<u>Computer Support Specialists</u>	Computer support specialists maintain computer networks and provide technical help to computer users.	<u>See How to Become One</u>	\$61,550
	<u>Web Developers and Digital Designers</u>	Web developers create and maintain websites. Digital designers develop, create, and test website or interface layout, functions, and navigation for usability.	Bachelor's degree	\$95,380
	<u>Network and Computer Systems Administrators</u>	Network and computer systems administrators install, configure, and maintain organizations' computer networks and systems.	Bachelor's degree	\$96,800
	<u>Computer Programmers</u>	Computer programmers write, modify, and test code and scripts that allow computer software and applications to function properly.	Bachelor's degree	\$98,670
	<u>Computer Systems Analysts</u>	Computer systems analysts study an organization's current computer systems and design ways to improve efficiency.	Bachelor's degree	\$103,790

Last Modified Date: Thursday, August 28, 2025





CompTIA A+ certification

- Beginner/Novice <This notion has changed
- Covers a broad range of topics:
 - Mobile devices
 - Networking
 - Hardware
 - Virtualization & Cloud Computing
 - Hardware and Network Troubleshooting
 - Operating Systems
 - Security
 - Software Troubleshooting
 - Operational Procedure.
- Required by local businesses **Starting point in the IT field**
 - Help desk / support positions.

CompTIA A+ certification: Lessons learned

- Assuming students already "know"
 - Allow for late assignments:
 - Focus on collecting understanding.
 - Life just happens, neither side can control that.
 - Time
 - Has anybody noticed that action movies always have dialogues with a slow tempo?
- Currently coaching students via Zoom.
- Helping students learn how to learn.
 - Working at their pace.

Association of College and University Educators: Their topics cover these points & more very well. Their training is excellent.

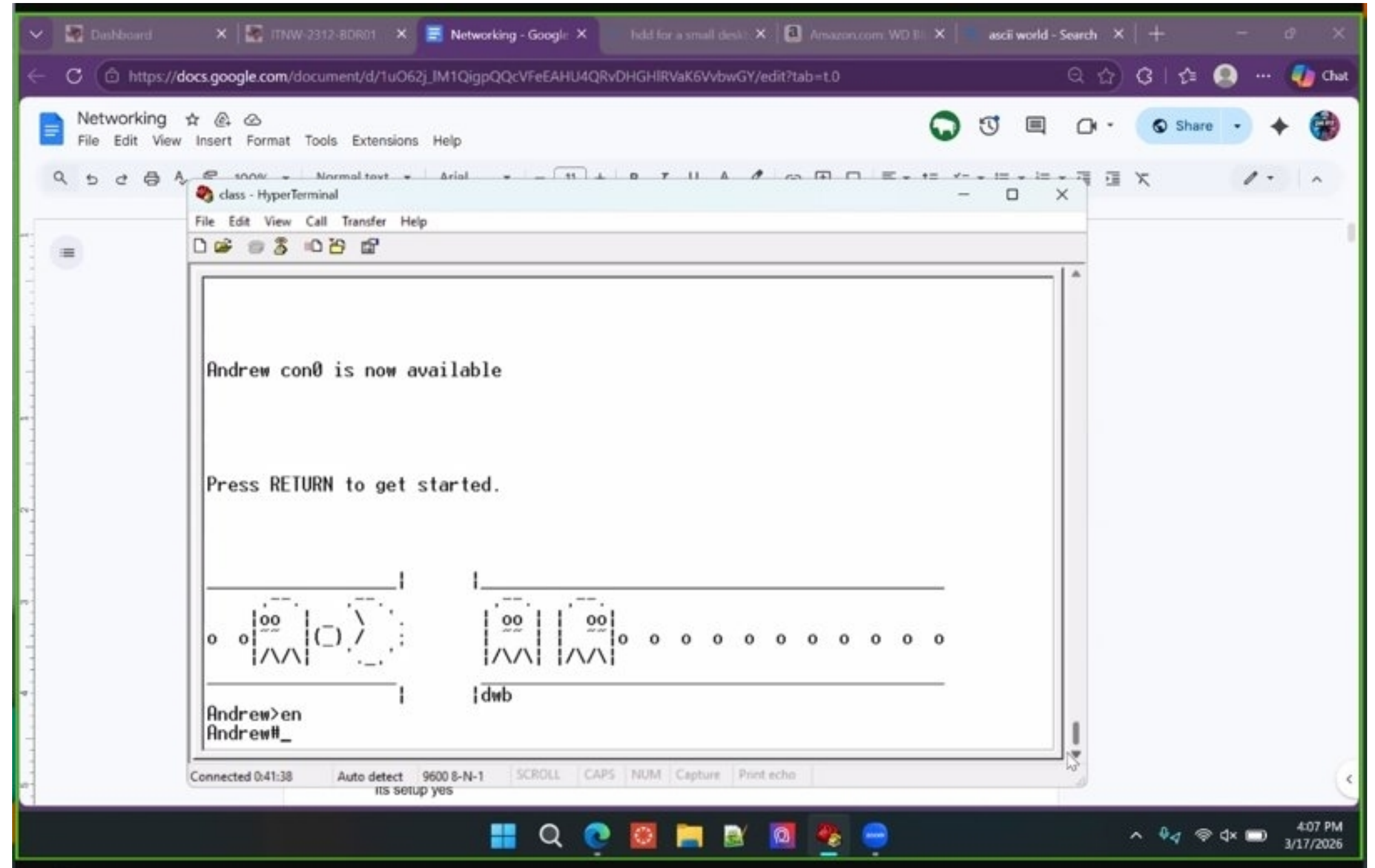
Greatest challenge: The online \$29.99 courses because within minutes they can reflect reality changes.

Student engagement

Yes!!!

Student is working in a lab, configuring a welcome banner for a CISCO router.

Thank you all that where involved in the approval process!



Student engagement

- Engaging with students in the future can rest on the strategy of personalizing the class as much as possible from the point of view of the curriculum pace.
- Although it is desirable to have an unified experience at all levels, a better way to accommodate their learning pace has to be found.
- The CIS program in particular has an advantage: A package of networking equipment plus a small server can be put together so students can do work from home. It does not have to bulky, because a computer, no larger than a box the size of a personal pizza can do wonders.

Student engagement

Steven Garcia received a donated server from another student. He is making the most of it!! Currently runs CASAos in his server.



Success stories

CompTIA

Miguel Herrera

has successfully completed the requirements to be recognized as



CANDIDATE ID
COMP001022766153
CERTIFICATION DATE
September 22, 2025
EXPIRATION DATE
EXP DATE : September 22, 2028


TODD THIBODEAUX, PRESIDENT & CEO

Code: 8LVNW0PSX214C2CJ
Criteria: 220-1101 - CompTIA A+ Core 1 Certification Exam, 220-1102 - CompTIA A+ Core 2 Certification Exam
Verify at: <http://verify.comptia.org>
<https://ca.certmetrics.com/CompTIA/en/public/verify/credential>