

# Cybersecurity Specialist Program Review

Prepared by Hector Rivera, Program Director

Board of Trustees Presentation | Southwest Texas College



# | Program Leadership & Faculty



**Hector Rivera**

Program Director (Retired)



**Gilbert Gonzalez**

Adjunct Instructor



**Ramiro Salazar**

Adjunct Instructor

# | Texas 2026 Industry Demand

# \$123,875

AVG ENTRY SALARY IN TEXAS

## Rapid Growth Projection

Information security analyst roles are projected to grow by 35% through 2032.


 Average Hourly Rate: \$59.56/hr


 75th Percentile: \$139,700/yr

# AI Disruption & Entry-Level Impact

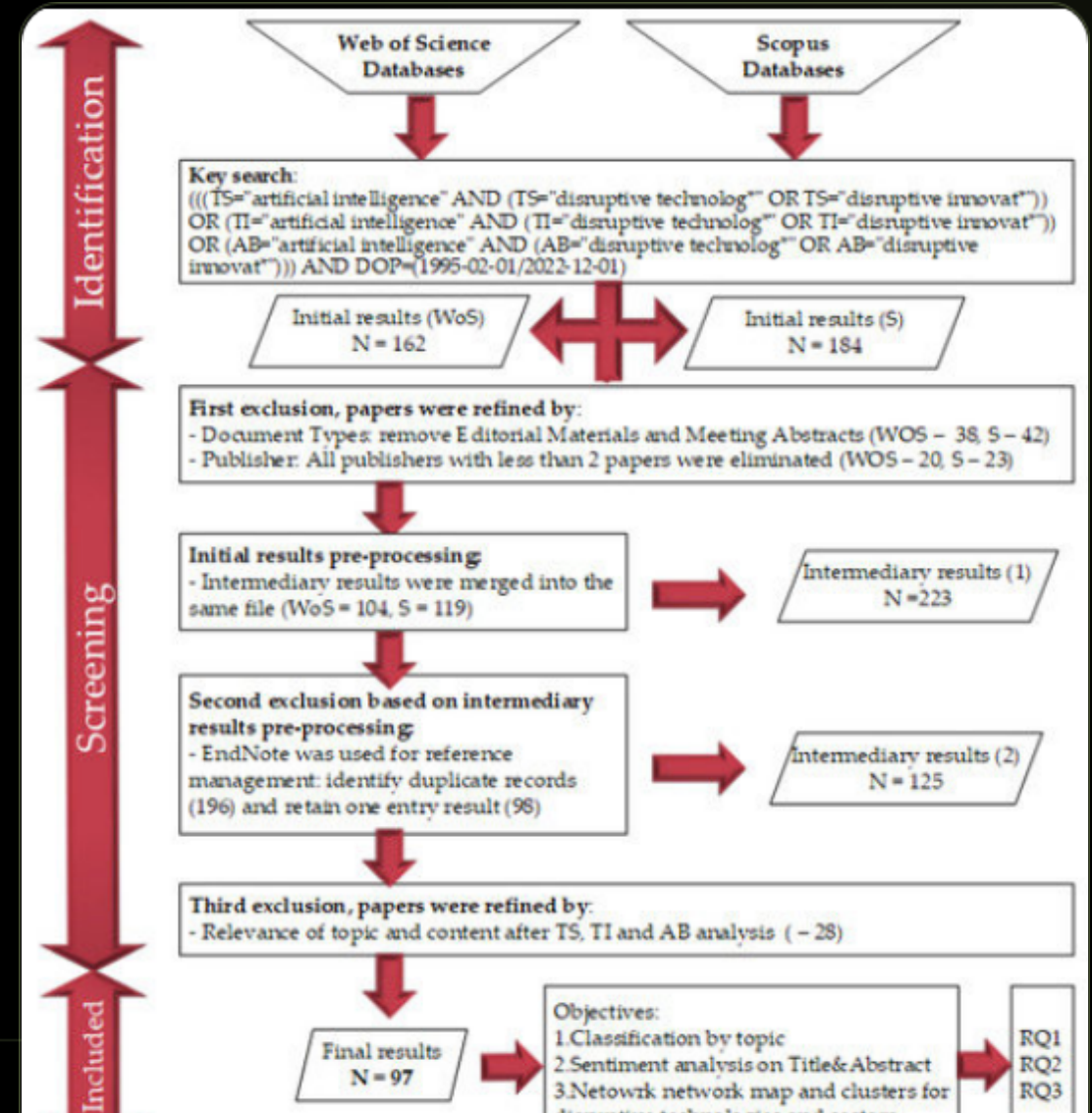
## The "Unknown" Shift

Rapid advancements in Artificial Intelligence are creating significant uncertainty in the IT labor market.

 **Job Displacement:** AI is increasingly automating routine entry-level tasks like L1 support and basic scripting.

 **Unknown Variables:** The speed of algorithmic evolution makes it difficult to predict which legacy roles will remain viable.

 **Curriculum Demand:** Need to shift from "maintenance" skills to "AI-enhanced" security oversight.



# Program Graduation & Retention Outcomes

## Academic Performance Data

16

PEAK GRADUATES

46%

RETENTION RATE

## Credential Tracks



Level 1 Certificate

Year One: OS Administration & Security Fundamentals



Level 1 Advanced Certificate

Year Two: Incident Response & Advanced Labs



AAS Degree

Full Mastery: Technical Core + Academic Requirements

**Program Insight:** Enrollment achieved a historic peak in the previous cycle. Current initiatives are focused on increasing student persistence to a target of **32 students** for the 2025–2026 academic year.

# Professional Certification Strategy

## Highly Encouraged Path

To maximize student flexibility while ensuring marketability, industry certifications are now **Highly Encouraged** but not mandatory for graduation.

CompTIA Security+ Readiness



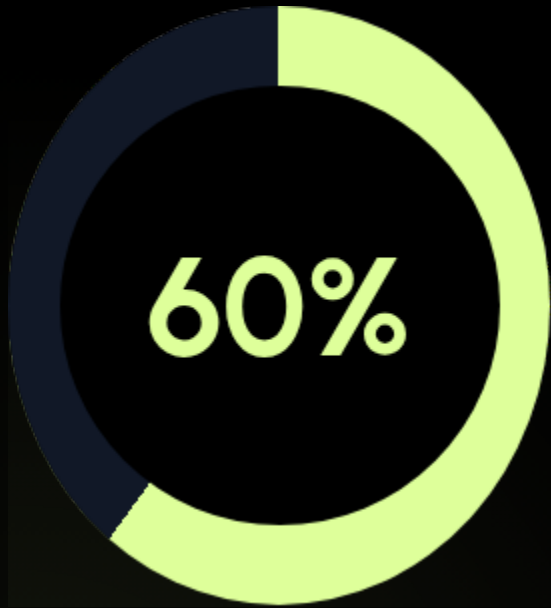
CompTIA Network+ Alignment



Professional Resume Credibility






# | SPI: Strategic Performance Indicators



RETENTION GOAL

## Target Metrics: 2025–26

-  Target Enrollment: 32 Students
-  Retention Growth Goal: 60%
-  Standard: 70% Pass Rate

Establishing an institutional framework for tracking and monitoring student pathways under Objective 3-3.

# | *Success Intervention Strategy*



## **Monitoring**

Identifying students with grade averages below 80% for early intervention.



## **Referrals**

Direct placement with Student Success Center and dedicated tutoring.



## **Resources**

Utilization of Writing Center, CARE referrals, and MyLab resources.

# *Program Modernization*

## **Online Transition (recommended)**

Shifting to a fully online format to meet the demands of a mobile and professional student workforce.

## **AI Curriculum Integration**




Updating technical labs to incorporate AI-driven security challenges and defensive automation, preparing students for the AI shift.



# Technical Mastery Focus

## Industry-Standard Labs

Practical training using virtualization and routing tools to build job-ready infrastructure expertise.

-  Windows Server & Linux Admin
-  pfSense Routing & Security
-  VirtualBox Environment Deployment



# | Moving Forward: 2026 Strategy

## **Recruiter Engagement**

Inviting industry professionals and recruiters to speak with graduating classes.

## **High School Outreach**

Promoting OSAs to local districts as a gateway to the AAS degree pipeline.

## **Graduate Tracking**

Establishing a systematic framework to monitor employment and career progression.

*Focus: Identifying drivers of enrollment trends and implementing targeted recruitment strategies for the post-peak era.*

---

# Thank You

To the Board of Trustees for your dedication to technical education and the  
Cybersecurity Specialist Program.

---

**SOUTHWEST TEXAS COLLEGE**

