

JIDEN9COUNIII

EDUCATIONAL PROGRAMS ECONOMIC SNAPSHOT



The University of Texas at El Paso is one of only 21 colleges and universities in the nation designated as a Center for Academic Excellence in two National Security Agency focus areas: cyber defense and cyber operations. As a national leader in cybersecurity education and research, UTEP is strengthening the cybersecurity workforce and combatting global security challenges.

> OF UTEP CYBERSECURITY GRADUATES HAVE JOB PLACEMENT UPON GRADUATION

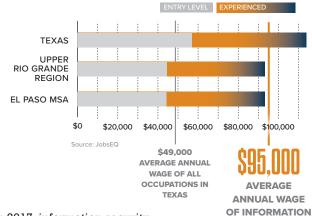
UTEP cybersecurity program graduates are highly recruited and quickly employed, earning average starting salaries of up to \$110,000 annually.

UTEP offers a fully online Bachelor of Arts in security systems to meet the needs of working professionals and distance learners.

UTEP is designated as a CyberCorps® university through a \$4 million DHS/NSF grant.

# ALL SYSTEMS: GROW!

ESTIMATED ANNUAL WAGES FOR INFORMATION SECURITY ANALYSTS, 2017



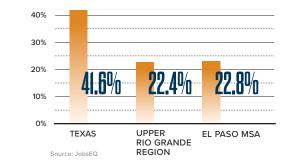
SECURITY

ANALYSTS IN

**TEXAS** 

In 2017, information security analysts in Texas earned nearly twice as much as the average annual salary of all occupations in Texas.

10-YEAR FORECASTED GROWTH RATES FOR INFORMATION SECURITY ANALYST EMPLOYMENT BY TEXAS REGION, 2018



- In 2018, more than 100 information security analysts were employed in the Upper Rio Grande region, with almost all in the El Paso Metropolitan Statistical Area (MSA).
- Forecasts predict the occupation will grow over the next 10 years by 22 percent in the region and the MSA, below the state forecasted growth rate of 41.6 percent.

# UTEP'S COMMUNITY INVESTMENT AND ECONOMIC IMPACT

**UTEP IS HOME** to a satellite campus as part of a cybersecurity-focused collaboration between UTEP and the Army Research Lab (ARL). Since August 2017, UTEP's designation as part of the ARL-South initiative has allowed an exchange of staff between ARL and UTEP, providing ARL internship opportunities for UTEP students.

# UTEP AND ARL PERSONNEL CONTRIBUTE ideas and

talent through the UTEP Center of Cyber Analysis and Assessment, which conducts

cybersecurity research and promotes long-term collaboration.

UTEP MAKES AVAILABLE

**PROGRAM, USING A** 

THE S-STEM SCHOLARSHIP

UTEP'S \$750,000 DEPARTMENT OF EDUCATION MINORITY SCIENCE AND ENGINEERING IMPROVEMENT PROGRAM ENHANCES COMPUTER SCIENCE AND CYBERSECURITY STUDENT LEADERSHIP SKILLS.

**3.2 MILLION GRANT** 

FROM THE NATIONAL SCIENCE FOUNDATION IN PARTNERSHIP WITH EL PASO COMMUNITY COLLEGE, CALIFORNIA STATE UNIVERSITY AND MERCED COLLEGE IN CALIFORNIA TO INCREASE ENROLLMENT AND DIVERSITY IN CYBERSECURITY DEGREE PROGRAMS.

## **PROGRAMMED FOR SUCCESS**

UTEP's cybersecurity education and research programs, student recruitment efforts and cybersecurity center combined with unique access to military research projects at the ARL-South initiative campus — have made the university a significant contributor to the nation's cybersecurity workforce.

TO SEE INFORMATION ON CYBERSECURTY AND THE TEXAS ECONOMY: https://comptroller.texas.gov/economy/economic-data/cybersecurity/

# EDUCATIONAL PROGRAMS ECONOMIC SNAPSHOT

In 2017, Texas ranked third among states in its number of cybercrime victims and, at \$115.7 million, second in financial losses.

Cybercrime — the use of computer technology or the internet to gain unauthorized access to information for exploitative or malicious purposes — poses a danger to both national and personal security.

CYBERSECURITY INDUSTRY EMPLOYMENT IN TEXAS

GROSS STATE PRODUCT

> Source: Texas Comptroller of Public Accounts, JobsEQ

#### UNEMPLOYMENT

Cybersecurity has a NEAR-ZERO UNEMPLOYMENT RATE and an average annual wage of \$110,000 across its various occupations.

#### **GROWTH RATES FOR INFORMATION SECURITY ANALYST EMPLOYMENT IN TEXAS, 2018**

CURRENT 14.000 2018 12,000 10.000 8.000 6.000 PROJECTED GROWTH 4.000 RATE 2.000 10-5-YEAR YEAR HISTORY FORECAST

During the past five vears, the state added 1,338 jobs in this occupation and is expected to add 3,757 more during the next 10 years, for a growth rate of 41.6 percent.

#### Source: JobsEQ

#### PROGRAMS AND AWARDS

The Comptroller's office has examined educational and employment statistics for the information security analyst occupation, defined by the federal Standard Occupational Classification system as workers who plan, implement, upgrade or monitor security measures for the protection of computer networks and information. These workers ensure appropriate security controls are in place and respond to computer security breaches and viruses.

CERTIFICATES & 2-YEAR AWARDS

4-YEAR

POSTGRADUATE

1.415

AWARDS

866

#### INFORMATION SECURITY ANALYST PROGRAM AWARDS IN TEXAS

COMPUTER AND INFORMATION SYSTEMS SECURITY/ INFORMATION ASSURANCE

COMPUTER SCIENCE

COMPUTER SYSTEMS NETWORKING AND TELECOMMUNICATIONS

INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY PROJECT MANAGEMENT

NETWORK AND SYSTEM ADMINISTRATION/ADMINISTRATOR

SYSTEM NETWORKING AND LAN/WAN MANAGEMENT/MANAGER

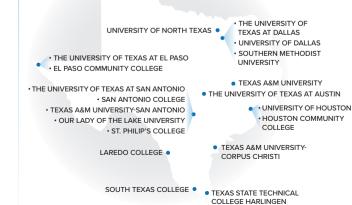
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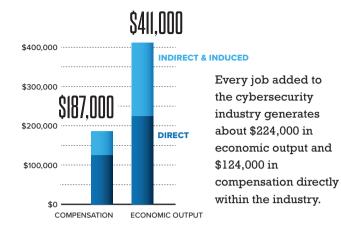
Source: JobsEQ

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#### NATIONAL SECURITY AGENCY DESIGNATED CENTERS FOR ACADEMIC EXCELLENCE IN TEXAS



#### ESTIMATED ANNUAL IMPACT OF CYBERSECURITY INDUSTRY PER JOB



Source: JobsEG

### CONCLUSION

Millions of businesses and individuals face financial and personal risk from compromised systems every day. Unfortunately, cybercriminals see Texas' large, ever-growing population simply as a large and ever-growing pool of potential targets. The state's colleges and universities have continued to develop nationally recognized programs that produce the highly skilled professionals needed to address these challenges while creating high-wage, high-demand jobs for Texans. During the 2017 academic year, these programs awarded more than 484 degrees for information security analysts as well as thousands of degrees for workers in other IT occupations.

Texas' cybersecurity educational programs train workers who enter almost every industry of the state economy. But they also contribute greatly to the cybersecurity industry itself ---an industry so new it has yet to be defined by NAICS.