

**Information Technology, Business & Personal Services**

**GUIDED PATHWAY: Cyber Security – Digital Forensics (Certificate, AAS Degree)  
CYBERSECURITY INSTITUTE**



This template provides information for students interested in pursuing a career in Digital Forensics. It does not represent a contract, nor does it guarantee course availability. Completing this pathway will earn students an Associate of Applied Science (AAS) degree in Digital Forensics <sup>1</sup>. For official degree requirements, [click here](#).

The Digital Forensics curriculum provides instruction in Digital Evidence Acquisition, eDiscovery, Incident Response, Digital Forensic Triage, Chain-of-Custody, and Digital Investigation. The Cybersecurity Institute is an EC-Council Academia Partner and a member of the AccessData Academic Program. These partnerships allow the Cybersecurity Institute programs the privilege of embedding AccessData and EC-Council certification topics with the curriculum. Students will demonstrate developed skill-sets through a capstone course and earn real world experience through hands-on exercises in cyber-range scenarios. Courses required to complete the Cybersecurity, Digital Forensics Associate of Applied Science Degree (D) and Digital Forensics Certificate (C1).

Visit [www.laredo.edu/pathways](http://www.laredo.edu/pathways) to view guided pathways created for students who complete an AAS degree and the options for transfer. Speak with an academic advisor at your college to identify courses that will transfer to partnering universities.

**COLLEGE READINESS REQUIREMENTS (only for the AAS)**

Enrolling in one or more courses may be necessary if assessment activities and previous academic experiences indicate a need for additional knowledge and skills:

READING & WRITING PLACEMENT	MATH PLACEMENT	ENGLISH LANGUAGE PROFICIENCY
TSI MET: YES NO IF NO, ADVISOR INSERT COURSE(S) NEEDED  <input type="checkbox"/> INRW _____ <input type="checkbox"/> OTHER: _____	TSI MET: YES NO IF NO, ADVISOR INSERT COURSE(S) NEEDED  <input type="checkbox"/> DEV MATH _____ <input type="checkbox"/> OTHER: _____	TSI MET: YES NO IF NO, ADVISOR INSERT COURSE(S) NEEDED  <input type="checkbox"/> ESOL _____ <input type="checkbox"/> OTHER: _____

Exemptions/waivers may exist. Speak with an academic advisor regarding placement in college readiness courses and your ability to enroll in core academic coursework.

**SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS <sup>2</sup>**

D	C1	SEMESTER 1	ACTION ITEMS
◆	◆	ITNW 1325 – Fundamentals of Networking Technologies	<input type="checkbox"/> Meet with your advisor to confirm academic and career goals before the end of the semester. <input type="checkbox"/> Meet with a career advisor or instructor to research your career options and opportunities for job shadowing.
◆	◆	ITNW 1413 – Computer Virtualization	
◆	◆	ITSC 1316 – Linux Installation and Configuration	
◆	◆	ITSE 1346 – Database Theory and Design	
◆	◆	ITSC 1342 – Shell Programming	

**TOTAL SEMESTER CREDIT HOURS: 16**

D	C1	SEMESTER 2	ACTION ITEMS
◆	◆	ITDF 1400 – Introduction to Digital Forensics	<input type="checkbox"/> Meet with your advisor to file and official degree plan, confirm or update your academic/career path and program of study.  <i>Apply for the 1-Year Certificate II (L2) Completion</i>
◆	◆	ITNW 2301 – Information Storage and Management	
◆	◆	ITDF 2317 – Digital Data Storage Forensics	
◆	◆	ITSY 2341 – Computer System Forensics	

**TOTAL SEMESTER CREDIT HOURS: 13**

D	C1	SEMESTER 3	ACTION ITEMS
◆		ITDF 2425 – Digital Forensics Tools	<input type="checkbox"/> Meet with a career advisor or coach for assistance in preparing for job search.
◆		ITDF 2420 – Digital Forensics Collection	
◆		ITDF 2430 – Digital Forensics Analysis	
◆		ITDF 2435 – Comprehensive Digital Forensics Project (Capstone)	

**TOTAL SEMESTER CREDIT HOURS: 16**

D	C1	SEMESTER 4	ACTION ITEMS
◆		ENGL 1301 – Composition I (C)	After reviewing your degree plan and program of study apply for graduation.
◆		MATH 1324 – Mathematics for Business & Social Sciences I (C)	
◆		ELECTIVE – American History / Government / Political Science and Behavioral Science (C)	<input type="checkbox"/> Meet with your advisor to apply for the AAS. Sign up for commencement
◆		ELECTIVE – Language, Philosophy and Culture / Creative Arts (C)	
◆		ELECTIVE – Life and Physical Sciences (C)	

**TOTAL SEMESTER CREDIT HOURS: 15**

**AAS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS/PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS**

1. Degree plans may change in later catalogs. Be sure to consult with your advisor if following an older degree plan.  
 2. Students must earn at least 25% of the program credit hours (15 hours) through instruction by Laredo College.  
 3. CAPSTONE Course: The learning experience in this course involves consolidation of all program skillsets to reinforce program curricula.  
 (C) This course is included in the LC Core, if core complete, credits transfer to any public college or university in Texas.

## Certification and Licensure Information

Python Institute Certified Entry-Level Python Programmer Certification  
 AccessData Certified Examiner Certification  
 EC-Council Computer Hacking Forensic Investigator Certification

## Career Information

### Common Job Titles

Network Security Specialist, Security Analyst, Threat Analyst Technical Specialist

### Regional Labor Market Information

A Threat Analyst Technical Specialist supports security operations. The professionals must play an active role in the detection of malicious activities. The technical specialist must also be able to respond to threats and ensure continuous improvement through data analytics. They should be able to take care of the other technical services such as design, development, installation and other wide-range of systems that support cyber intelligence functions. This Analyst must maintain and secure the enterprise-wide cyber systems and networks, come up with security initiatives that will provide timely and complete resolutions and work with advanced forensic tools and techniques for attack reconstruction. The candidates should possess a bachelor's degree in computer science, information systems, electrical engineering or any related field. The need for security professionals with appropriate skill in threat intelligence is growing. Organizations are looking for candidates who can evaluate the raw external and internal intelligence data and forming finished analysis to drive decisions. As per Ziprecruiter, the annual salary ranges from \$65,00 to \$186,500 nationally. The average salary of \$121,00 show that Threat Analyst pay rates are seeing general stability across the country.

Source: <https://www.fieldengineer.com/skills/threat-analyst-technical-specialist>

### Career and labor market research tools

(see Quick Reference Guide Bureau of Labor Statistics: <http://www.bls.gov/ooh/>, O\*NET: <https://www.onetonline.org/>)

**Career Resources:** Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an LC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

## Transfer Information

The Associate of Applied Science prepares students to directly enter the workforce; however, a Bachelor of Applied Arts and Sciences (BAAS) or Bachelor of Technology (BAT) degree can further a student's knowledge and probability for employment success. Baccalaureate degrees must meet general education requirements and completion of upper level courses.

**Transfer Guides:** The universities listed here do not constitute a Laredo College endorsement. Transfer course evaluations and determination of which courses will count toward a Bachelor's degree are made by the receiving transfer institution.

**Texas A&M University @San Antonio:** <https://www.tamusa.edu/>

**South Texas College:** <https://www.southtexascollege.edu/>

**Western Governors University:** <https://partners.wgu.edu/Pages/Transfer.aspx?iid=340>

**Additional Transfer Resources:** Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at LC will apply toward their bachelor's degree program.