# INFORMATION SYSTEMS TECHNOLOGY (8401) CYBERSECURITY
**BACHELOR OF APPLIED SCIENCE DEGREE**

*The Bachelor of Applied Science (BAS) in Information Systems Technology degree provides students with the skills required to successfully design, plan, implement, and manage Computer and Information Systems. Students will receive instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system auditing and design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting. The specialization in Cybersecurity will provide students with the knowledge and skills needed to manage cybersecurity infrastructure.*

*This program uses a 2+2 model requiring the completion of an associate degree or higher with 60 transferable credits from an accredited 4-year college or university for entry into the program. The cybersecurity specialization is designed for students who earn an AA degree or an AS in Network Systems Technology.*

*The BAS in Information Systems Technology combines in-person and online courses.*

**For additional information, visit our website at SJRstate.edu/bachelors or send an email to BachelorsDegrees@SJRstate.edu.**

## GENERAL EDUCATION COURSES*                                                                 36
(Refer to Associate in Arts general education requirements)

## LOWER-LEVEL SPECIALIZED COURSES**                                                          45

### REQUIRED LOWER-LEVEL COURSES                                                              21
| | | | | |
|---|---|---|---|---|
| + | CET | 1600C | Network Fundamentals | 3 |
| + | CET | 2610C | Routing Protocols and Concepts | 3 |
| + | CET | 2615C | LAN Switching and Wireless | 3 |
| + | CET | 2660C | Network Security Essentials | 3 |
| | CGS | 1060 | Introduction to Computer Concepts | 3 |
| | CGS | 1540 | Database Fundamentals | 3 |
| | CNT | 1001 | Introduction to Networking | 3 |

### ADDITIONAL LOWER-LEVEL COURSES                                                            24
Choose 24 additional credits from CAP, CET, CGS, CIS, CNT, COP, CTS, DIG or any other lower-division transfer courses.

## UPPER-DIVISION CORE REQUIREMENTS                                                           21
| | | | | |
|---|---|---|---|---|
| | CAP | 3104 | Human-Computer Interaction | 3 |
| | CIS | 3080 | Introduction to Cloud Computing | 3 |
| | CIS | 3523C | Managing IT Projects | 3 |
| | CIS | 4365 | Computer Security Policies and Disaster Preparedness | 3 |
| | CIS | 4356 | Information Security and Risk Management | 3 |
| + | CIS | 4950 | Senior Capstone Project or Internship | 3 |
| | COP | 3703 | Database Design and Architecture | 3 |

## CYBERSECURITY SPECIALIZED COURSES                                                          18
| | | | | |
|---|---|---|---|---|
| | CIS | 3360 | Principles of Information Security | 3 |
| + | CNT | 3408 | Enterprise Security | 3 |
| + | CNT | 4514 | Wireless and Mobile Computing | 3 |
| + | CNT | 4704C | Advanced Network Traffic Analysis | 3 |
| + | ISM | 3321 | Cybersecurity Fundamentals | 3 |
| + | ISM | 4322C | Advanced Cybersecurity | 3 |

## REQUIRED TOTAL CREDIT HOURS                                                                120

* The AS degree in Network Systems Technology contains 15 general education credits; students pursuing the BAS degree who enter with this AS degree will be required to take 21 additional general education courses.

** The AS degree in Network Systems Technology contains 45 credits of lower-division courses, which can be used to satisfy this requirement.

+ Qualifying placement score or prerequisite course may be required. See course descriptions in catalog.