

# CYBER SECURITY, BACHELOR OF SCIENCE

---

**BACHELOR DEGREE REQUIREMENTS:**

- Minimum 122 Credit Hours
  - Writing Intensive Course
  - Minimum Cumulative G.P.A.: 2.00
  - 30 Credit Hours of Residency Courses
  - 9 Credits of Upper-Level Major Residency Courses
  - Minimum G.P.A. in the Major: 2.00
- 

**PROGRAM MAJOR REQUIREMENTS (82 CREDIT HOURS):**

- CIS 101 Introduction to Computer Science (3)
- CIS 110 Programming Fundamentals (3)
- Complete one of the following courses (3):
  - CIS 214 Applications Programming: Java*
  - CIS 215 Applications Programming: C+*
- CIS 221 Linux (3)
- CIS 240 Networking Concepts (3)
- CIS 255 Database Design (3)
- CIS 330 Systems Analysis (3)
- CIS 380 Internship (3)
- CIS 440 Network Security (3)
- CIS 460 Computers & Culture (3)
- ISS 210 Introduction to Information Security (3)
- ISS 340 Computer Security (3)
- ISS 410 Cyber Security I (3)
- MAT 115 Elementary Statistics I (3)

***Security Electives:***

- Complete any three 200-level or higher ISS or CIS electives (9)
- Complete any three 300-level or higher ISS or CIS electives (9)

**Select one of the following focus areas:*****Focus Area: Information Assurance***

- ISS 220 Security Risk Management (3)
- ISS 240 Security Policy and Governance (3)
- ISS 250 Auditing IT Infrastructures (3)
- ISS 310 Information Security Architecture (3)
- ISS 320 Security Analytics (3)
- ISS 360 Business Continuity and Disaster Recovery (3)
- ISS 470 Information Security Management (3)

***Focus Area: Network Security***

- CIS 241 Switching and Routing (3)
- CIS 345 Virtual Systems (3)
- ISS 320 Security Analytics (3)
- ISS 332 System Forensics I (3)
- ISS 412 Cyber Security II (3)
- ISS 432 Systems Forensics II (3)
- ISS 470 Information Security Management (3)

**OTHER PROGRAM REQUIREMENTS (37 CREDIT HOURS):**

- Complete any 100-level Communications course (3)
- ENG 101 College Writing (3)
- ENG 317W Professional Writing (3)
- Complete one of the following Fine Arts electives (3):
  - ART 1xx any 100-level Art course*
  - DRA xxx any Drama course*
  - ENG 351 Creative Writing I*
  - ENG 452 Creative Writing II*
  - MUH 1xx any 100-level Music History course*
  - MUS 1xx any 100-level Music course*
- Complete two of the following Humanities electives (6):
  - AME xxx any American Studies course*
  - ARH 105 History of Art & Architecture I*
  - ARH 106 History of Art & Architecture II*
  - DRA xxx any Drama course*
  - ENG xxx any English course (except ENG 101 or 317w)*
  - FRE xxx any French course*
  - HGH xxx any Holocaust, Human Rights & Genocide course*
  - HTY xxx any History course*
  - HUM xxx any Humanities course*
  - MUH xxx any Music History course*
  - PHI xxx any Philosophy course (except PHI 135 or 335)*
  - SPA xxx any Spanish course*
  - WGS xxx any Women and Gender Studies course*
- MAT 112 College Algebra (3)
- BUA 223 Principles of Management (3)
- BUA 365 Organizational Behavior (3)
- Complete any 100-level Laboratory Science course (4)
- Complete two of the following Social Science electives (6):
  - ANT 1xx any 100-level anthropology course*
  - ECO 1xx any 100-level economics course*
  - ECO 201 Macroeconomics*
  - ECO 202 Microeconomics*
  - JUS 1xx any 100-level justice studies course*
  - POS 1xx any 100-level political science course*
  - PSY 1xx any 100-level psychology course*
  - SOC 1xx any 100-level sociology course*
  - SSC 1xx any 100-level social science course*

**GENERAL ELECTIVES (3 CREDIT HOURS):**

- Complete any 100-level or higher general elective (3)

---

Students are encouraged to contact their faculty advisor and the Advising Center for academic advising and support services throughout their stay at UMA.

---