

**Bachelor of Science in Cybersecurity Engineering
Study Plan (Fall Start)**

Total Credit Hours: **133**

First Year (Freshman)

Semester 1

| Code | Title | Cr. | Prerequisite |
|---------|---------------------------|-----|-------------------------------|
| ECT 200 | Introduction to Computing | 3 | nil |
| ENG 200 | English II | 3 | EPT/ENG102 + UNS 102 (co-req) |
| MTT 102 | Calculus I | 3 | C grade in MTT 101 or MPT |
| STT 100 | General Statistics | 3 | nil |
| ISL 100 | Islamic Culture | 3 | nil |
| UNS 102 | University Study Skills | 1 | nil |

Total Credit Hours 16

Semester 2

| Code | Title | Cr. | Prerequisite |
|-----------|--|-----|----------------------------|
| ARL100 | Communication Skills in Arabic I | 3 | nil |
| CSE 210 | Introduction to Cybersecurity Engineering | 3 | ECT 200 |
| CSC 201 | Programming I | 3 | MTT 101 or Higher |
| PHY 102 | Physics and Engineering Applications I | 3 | MTT 102 |
| PHY 102 L | Physics and Engineering Applications I Lab | 1 | MTT 102 + PHY 102 (co-req) |
| MTT 200 | Calculus II | 3 | MTT 102 |

Total Credit Hours 16

Second Year (Sophomore)

Semester 3

| Code | Title | Cr. | Prerequisite |
|---------|---|-----|----------------------------|
| FWS211 | Fundamentals of Emotional Intelligence | 3 | ENG 102 + UNS 102 (co-req) |
| PHY 201 | Physics and Engineering Applications II | 3 | PHY 102 |
| PHY 201 | Physics and Engineering Applications II Lab | 1 | PHY 102 + PHY 201 (co-req) |
| CSE 300 | Introduction to Digital Forensics | 3 | CSC 201 |
| STT 201 | Intermediate Statistics | 3 | STT 100 |
| CSC 303 | Digital Logic Design | 3 | ECT 200 |

Total Credit Hours 16

Semester 4

| Code | Title | Cr. | Prerequisite |
|-----------|--|-----|-------------------|
| CSC 202 | Programming II | 3 | CSC 201 |
| CEN 325 | Internet of Things: Foundationq and Design | 3 | CSC 201 + CSC 303 |
| MTT 202 | Discrete Mathematics | 3 | STT 100 |
| MTT 204 | Introduction to Linear Algebra | 3 | MTT 200 |
| CHE 205 | General Chemistry I | 3 | ENG 102 |
| CHE 205 L | General Chemistry Lab | 1 | CHE 205 (co-req) |

Total Credit Hours 16

Third Year (Junior)

Semester 5

| Code | Title | Cr. | Prerequisite |
|---------|---|-----|--|
| ITE 390 | Computer Ethics | 3 | Junior Level / Consent of Department |
| CSC 301 | Data Structures and Algorithms | 3 | CSC 202 + MTT 202 |
| CSC 305 | Data Communications and Networks | 3 | Junior Level |
| CEN 425 | Internet of Things: Applications and Networking | 3 | CEN325+(CEN333/ITE421)+CSC305 (co-req) |
| FWS 305 | Technical Communications for Work Place | 3 | ENG 200 + (Comp. of 45CH) |
| CSC 302 | Database Management Systems | 3 | MTT 202 + CSC 201 |

Total Credit Hours 18

Semester 6

| Code | Title | Cr. | Prerequisite |
|---------|---------------------------------------|-----|----------------------------|
| CSE 310 | Introduction to Cryptography | 3 | STT 201 + MTT 202 |
| CSC 308 | Operating Systems | 3 | CSC 301 |
| CSC 307 | Web Design | 3 | CSC 201 |
| ITE 421 | Native Mobile Application Development | 3 | CSC 201 |
| OE 1 | Open Elective I | 3 | - |
| FWS205 | UAE and GCC Society | 3 | ENG 102 + UNS 102 (co-req) |

Total Credit Hours 18

Summer Semester

| Code | Title | Credit | Prerequisite |
|---------|-------------------------------------|--------|-----------------|
| CSE 399 | Internship/Project in Cybersecurity | 3 | 90 Credit Hours |

Fourth Year (Senior)

Semester 7

| Code | Title | Cr. | Prerequisite |
|----------|--|-----|----------------------------|
| ITE 408 | Information Security | 3 | CSC 305 |
| ME 1 | Major Elective I | 3 | - |
| CSE 400 | Network Security and Forensics | 3 | CSC 305 |
| ME 2 | Major Elective II | 3 | - |
| FWS 310 | Fundamentals of Innovation and Entrepreneurship | 3 | ENG 200 + completion of 60 |
| CSE 499A | Capstone Project in Cybersecurity Engineering-Part A | 1 | 90 Credit Hours |

Total Credit Hours 16

Semester 8

| Code | Title | Cr. | Prerequisite |
|----------|--|-----|-------------------|
| CIS 408 | Distributed Information Systems | 3 | CSC 202 + CSC 305 |
| CSE 420 | Ethical Hacking | 3 | CSC 305 |
| CSE 410 | Mobile Device Security | 3 | CSC 305 |
| CSE 499B | Capstone Project in Cybersecurity Engineering-Part B | 2 | CSE 499A |
| CEN 445 | Securing the Internet of Things | 3 | CEN 425 |

Total Credit Hours 14