College of Information Technology Bachelor of Science in Information Technology — Major in Cybersecurity



| Course No. | University Requirements (30 Credit Hours) | Prerequisite | СН |
|------------------|--|--------------|----|
| COMM 103 | Language and Communication | None | 3 |
| HIST 103 | History of Qatar | None | 3 |
| LAWC 305 | Governance | None | 3 |
| SOCI 102 | Islamic and World Cultures | None | 3 |
| UNIV 101 | University Success | None | 3 |
| UNIV 201 | Leadership, Entrepreneurship, and Innovation | None | 3 |
| ENGL 114 | English Composition I | None | 3 |
| ENGL 115 | English Composition II | ENGL 114 | 3 |
| STDE 201 | Sustainable Development | None | 3 |
| Foreign Language | Foreign Language Requirement | None | 3 |
| Course No. | Major Requirements (33 Credit Hours) | Prerequisite | СН |
| ITCS 303 | Networks | None | 3 |
| ITCS 310 | Network Security | ITCS 303 | 3 |
| ITCS 203 | Cybersecurity Programming | None | 3 |
| ITCS 304 | Secure Communication Protocols | None | 3 |
| ITCS 401 | Infrastructure Security | None | 3 |
| ITCS 402 | Data and Software Security | None | 3 |
| ITCS 405 | Foundation of Cybersecurity | None | 3 |
| IICS 405 | Touridation of Cybersecurity | | |
| ITCS 405 | Digital Forensics | None | 3 |
| | , , | None None | 3 |
| ITCS 305 | Digital Forensics | | |

| ITCC 101 | | | | | | |
|------------|--|--------------|----|--|--|--|
| + | Linear Algebra | None | 3 | | | |
| STAT 201 | Probability and Statistics | None | 3 | | | |
| ITCC 102 | Discrete Math | ITCC 101 | 3 | | | |
| ITCC 110 | Fourth Industrial Revolution | None | 3 | | | |
| ITCC 103 | Algorithms and Problem-Solving | None | 3 | | | |
| ITCC 201 | Data Structure | ITCC 103 | 3 | | | |
| ITCC 301 | Operating Systems | None | 3 | | | |
| ITCC 303 | IT Innovation and Entrepreneurship | None | 3 | | | |
| ITCC 204 | Computer Programming I | None | 3 | | | |
| ITCC 205 | Digital Design | None | 3 | | | |
| ITCC 306 | Database Systems | None | 3 | | | |
| ITCC 302 | Ethics and Professional Responsibilities | None | 3 | | | |
| ITCC 250 | Computer Programming II | ITCC 204 | 3 | | | |
| ITCC 401 | Graduation Project I | STAT 201 | 3 | | | |
| ITCC 402 | Graduation Project II | ITCC 401 | 3 | | | |
| Course No. | Major Elective Courses (9 Credit Hours) | Prerequisite | СН | | | |
| ITCS 315 | Special Topics in Cybersecurity | None | 3 | | | |
| ITEC 303 | Data Analytics | None | 3 | | | |
| ITEC 304 | Cloud Computing | None | 3 | | | |
| ITEC 305 | IT Project Management | None | 3 | | | |
| ITEC 309 | IoT Security | None | 3 | | | |
| ITEC 310 | Information Assurance Compliance and Audit | None | 3 | | | |
| | Free Electives (3 Credit Hours) | | | | | |
| Students | Students may choose 3 credit hours from any courses offered at Lusail University. | | | | | |
| FREL | Free Elective | | 3 | | | |

College of Information Technology Bachelor of Science in Information Technology — Major in Cybersecurity



Program Plan

| Academic Year 1 (30) | | | | | |
|----------------------------|------------------------------|------------------------------|-----------|--|----|
| Semester 1 - Fall Semester | | Semester 2 - Spring Semester | | | |
| Course no | Course Title | СН | Course no | Course Title | СН |
| HIST 103 | History of Qatar | 3 | UNIV 201 | Leadership, Entrepreneurship, and Innovation | 3 |
| UNIV 101 | University Success | 3 | ENGL 115 | English Composition II | 3 |
| ENGL 114 | English Composition I | 3 | ITCC 102 | Discrete Math | 3 |
| ITCC 101 | Linear Algebra | 3 | ITCC 103 | Algorithms and Problem-Solving | 3 |
| ITCC 110 | Fourth Industrial Revolution | 3 | LAWC 305 | Governance | 3 |
| | Total Credit Hours = 15 | | | Total Credit Hours = 15 | · |

| Academic Year 2 (30) | | | | | |
|----------------------------|----------------------------|----|------------------------------|------------------------------|----|
| Semester 1 - Fall Semester | | | Semester 2 - Spring Semester | | |
| Course no | Course Title | СН | Course no | Course Title | СН |
| COMM 103 | Language and Communication | 3 | Foreign Language | Foreign Language Requirement | 3 |
| STDE 201 | Sustainable Development | 3 | ITCC 250 | Computer Programming II | 3 |
| STAT 201 | Probability and Statistics | 3 | ITCC 205 | Digital Design | 3 |
| ITCC 201 | Data Structure | 3 | ITCS 203 | Cybersecurity Programming | 3 |
| ITCC 204 | Computer Programming I | 3 | ITCS 303 | Networks | 3 |
| Total Credit Hours = 15 | | | | Total Credit Hours = 15 | • |

| Academic Year 3 (30) | | | | | |
|----------------------------|------------------------------------|------------------------------|-------------------------|---|----|
| Semester 1 - Fall Semester | | Semester 2 - Spring Semester | | | |
| Course no | Course Title | СН | Course no | Course Title | СН |
| ITCC 306 | Database Systems | 3 | SOCI 102 | Islamic and World Culture | 3 |
| ITCC 301 | Operating Systems | 3 | ITCC 302 | Ethics and Professional Responsibilities | 3 |
| ITCC 303 | IT Innovation and Entrepreneurship | 3 | ITCS 310 | Network Security | 3 |
| ITCS 304 | Secure Communication Protocols | 3 | ITCS 305 | Digital Forensics | 3 |
| Major Elective | Major Elective | 3 | ITCS 308 | Data Integrity and Authentication | 3 |
| Total Credit Hours = 15 | | | Total Credit Hours = 15 | | |

| Academic Year 4 (30) | | | | | |
|----------------------------|------------------------------------|------------------------------|-------------------------|-----------------------------|----|
| Semester 1 - Fall Semester | | Semester 2 - Spring Semester | | | |
| Course no | Course Title | СН | Course no | Course Title | СН |
| ITCC 401 | Graduation Project I | 3 | ITCC 402 | Graduation Project II | 3 |
| ITCS 401 | Infrastructure Security | 3 | Major Elective | Major Elective | 3 |
| ITCS 402 | Data and Software Security | 3 | ITCS 405 | Foundation of Cybersecurity | 3 |
| ITCS 309 | Security in Blockchain and Fintech | 3 | ITCS 406 | Cloud Computing Security | 3 |
| Major Elective | Major Elective | 3 | Free Elective | Free Elective | 3 |
| Total Credit Hours = 15 | | | Total Credit Hours = 15 | | |