

CYBERSECURITY MANAGEMENT BA/BS

The Cybersecurity Management program is designed to prepare students for industry. The Cyber Management major fuses the three components: a strong cybersecurity management base, computer programming, and business management. The curriculum is designed to be very focused on industry needs and skills. Students take courses in networking, advanced cyber security and pentesting.

The goals of the Cyber Management program is to provide students with learning experiences in both the classroom and laboratory so that they will be well-prepared to:

- Design and implement object-oriented and imperative programs
- Understand algorithms and data structures
- Understand relational databases, and network development
- Understand online safety in the context of the wider world
- Understand the different types of malware, including viruses and trojans, network security, and cryptography
- Identity theft and risk management
- Students will explain the concepts, theories, and practices in the functional areas of business
- Students will prepare professional oral and written forms of communication
- Students will evaluate and apply information technology in support of management decision making

General Education Requirements

| Code | Title | Credits |
|--|---|-----------|
| Written Communication | | |
| Select one of the following: | | 6.00 |
| ENGL-101 & ENGL-102 | WRITING AND RHETORIC I and WRITING AND RHETORIC II | |
| ENGL-109 | COLLEGE WRITING AND RESEARCH | |
| Oral Communication | | |
| Select one from the following: | | 3.00 |
| COMM-101 | FUNDAMENTALS OF ORAL COMMUNICATION | |
| COMM-203 | SMALL GROUP COMMUNICATION | |
| COMM-204 | PUBLIC SPEAKING | |
| Mathematical Ways of Knowing | | |
| Select one of the following: | | 3.00-5.00 |
| MATH-143 | PRECALCULUS I: ALGEBRA | |
| MATH-147 | PRECALCULUS | |
| MATH-153 | STATISTICAL REASONING | |
| MATH-170 | CALCULUS I | |
| MATH-253 | STATISTICAL METHODS FOR THE SCIENCES | |
| MATH-257 | MATHEMATICS FOR ELEMENTARY TEACHERS II | |
| MTHPT-130 | FINITE MATHEMATICS | |
| MTHPT-137 | MATH FOR TECHNOLOGY | |
| MTHPT-153 | STATISTICAL REASONING | |
| Humanistic & Artistic Ways of Knowing | | |
| Select one course from two categories: | | 6.00-8.00 |
| Literature | | |
| ENGL-175 | LITERATURE AND IDEAS | |
| ENGL-257 | WORLD CLASSICS | |
| ENGL-258 | INTERNATIONAL LITERATURE | |
| ENGL-260 | NATIVE AMERICAN LITERATURE | |
| ENGL-261 | MYTHOLOGIES | |
| Arts | | |
| ART-100 | INTRODUCTION TO ART | |
| HUM-101 | THE ART AND HISTORY OF THE MOTION PICTURE | |
| HUM-150 | INTRODUCTION TO THE ARTS | |

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| MUS-101 | SURVEY OF MUSIC | |
| MUS-102 | MUSIC IN AMERICA | |
| MUS-150 | WORLD MUSIC | |
| MUS-151 | HISTORY OF MUSICAL THEATER | |
| MUS-152 | HISTORY OF JAZZ AND POPULAR MUSIC STYLES | |
| THEA-101 | SURVEY OF THE THEATER | |
| Language | | |
| NP-101 | NEZ PERCE LANGUAGE AND CULTURE | |
| NP-102 | NEZ PERCE LANGUAGE AND HISTORY | |
| SPAN-101 | ELEMENTARY SPANISH I | |
| SPAN-102 | ELEMENTARY SPANISH II | |
| Scientific Ways of Knowing | | |
| BIOF-100 | INTRODUCTION TO BIOINFORMATICS | 3.00 |
| CS-108 | INTRODUCTION TO COMPUTER SCIENCE | 3.00 |
| Social & Behavioral Ways of Knowing | | |
| Select one course from two disciplines: | | 6.00 |
| ANTH-102 | CULTURAL ANTHROPOLOGY | |
| ANTH-120 | WORLD PREHISTORY | |
| ANTH-170 | INTRODUCTION TO NATIVE AMERICAN STUDIES | |
| ECON-201 | PRINCIPLES OF MACROECONOMICS | |
| ECON-202 | PRINCIPLES OF MICROECONOMICS | |
| GEOG-102 | INTRODUCTION TO GEOGRAPHY | |
| HIST-101 | WORLD HISTORY I | |
| HIST-102 | WORLD HISTORY II | |
| HIST-111 | UNITED STATES HISTORY I | |
| HIST-112 | UNITED STATES HISTORY II | |
| HRPT-184 | DIVERSITY IN ORGANIZATIONS | |
| HRPT-185 | HUMAN RELATIONS IN ORGANIZATIONS | |
| POLS-101 | AMERICAN NATIONAL GOVERNMENT | |
| POLS-237 | INTERNATIONAL POLITICS | |
| POLS-285 | COMPARATIVE GOVERNMENT | |
| PSYC-101 | INTRODUCTION TO GENERAL PSYCHOLOGY | |
| PSYC-205 | LIFESPAN DEVELOPMENTAL PSYCHOLOGY | |
| SOC-101 | INTRODUCTION TO SOCIOLOGY | |
| SOC-102 | SOCIAL PROBLEMS | |
| SS-184 | DIVERSITY IN ORGANIZATIONS | |
| SS-185 | HUMAN RELATIONS IN ORGANIZATIONS | |
| Diversity | | |
| Select one of the following: | | 3.00-4.00 |
| ANTH-102 | CULTURAL ANTHROPOLOGY | |
| ANTH-120 | WORLD PREHISTORY | |
| ANTH-170 | INTRODUCTION TO NATIVE AMERICAN STUDIES | |
| ANTH-360 | RACE AND ETHNICITY | |
| COMM-345 | INTERCULTURAL COMMUNICATION | |
| ENGL-258 | INTERNATIONAL LITERATURE | |
| ENGL-474 | NATIVE AMERICAN WRITTEN LITERATURE | |
| GEOG-102 | INTRODUCTION TO GEOGRAPHY | |
| HIST-101 | WORLD HISTORY I | |
| HIST-102 | WORLD HISTORY II | |
| HIST-111 | UNITED STATES HISTORY I | |
| HIST-112 | UNITED STATES HISTORY II | |
| HRPT-184 | DIVERSITY IN ORGANIZATIONS | |

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| ID-300C | ETHICS AND IDENTITY | |
| KIN-220 | SOCIAL-CULTURAL ASPECTS OF SPORTS | |
| NP-101 | NEZ PERCE LANGUAGE AND CULTURE | |
| NP-102 | NEZ PERCE LANGUAGE AND HISTORY | |
| POLS-285 | COMPARATIVE GOVERNMENT | |
| SOC-101 | INTRODUCTION TO SOCIOLOGY | |
| SPAN-101 | ELEMENTARY SPANISH I | |
| SPAN-102 | ELEMENTARY SPANISH II | |
| SPAN-201 | INTERMEDIATE SPANISH I | |
| SPAN-202 | INTERMEDIATE SPANISH II | |
| SS-184 | DIVERSITY IN ORGANIZATIONS | |
| Integrative Seminar: Ethics & Values | | |
| Select one of the following: | | 3.00 |
| ID 300A - 300Z (see course descriptions for options) | | |
| ID-301A | HELLS CANYON INSTITUTE | |
| Foreign/Heritage Language | | |
| Select 16 credits of language if selecting Bachelor of Arts Degree | | 16.00 |
| Total Credits | | 36.00-41.00 |

Program Requirements

| Code | Title | Credits |
|-------------------------------------|--------------------------------------|--------------|
| Major Requirements | | |
| CS-111 | FOUNDATIONS OF PROGRAMMING | 4.00 |
| CS-211 | COMPUTER SCIENCE II | 4.00 |
| CS-226 | SQL: STRUCTURED QUERY LANGUAGE | 3.00 |
| CYB-251 | NETWORKING I | 4.00 |
| CYB-252 | NETWORKING II | 4.00 |
| CYB-253 | NETWORKING III | 4.00 |
| CYB-254 | NETWORKING IV | 4.00 |
| CYB-271 | CYBERSECURITY I | 4.00 |
| CYB-272 | CYBERSECURITY II | 4.00 |
| CYB-273 | CYBERSECURITY III | 4.00 |
| CYB-274 | CYBERSECURITY IV | 4.00 |
| Select one of the following: | | 3.00 |
| ECON/PSYC/SS-300 | STATISTICAL METHODS | |
| Upper Division Requirements | | |
| BUS-311 | FOUNDATIONS OF MANAGEMENT THEORY | 3.00 |
| BUS-360 | LEADERSHIP | 3.00 |
| BUS-365 | BUSINESS LAW I | 3.00 |
| BUS-370 | PRODUCTION AND OPERATIONS MANAGEMENT | 3.00 |
| CS-311 | ALGORITHMS AND DATA STRUCTURES | 4.00 |
| CS-480 | CAPSTONE DESIGN PROJECT | 4.00 |
| CS-494 | INTERNSHIP IN COMPUTER SCIENCE | 4.00 |
| CYB-300 | CYBER ETHICS | 3.00 |
| CYB-360 | CYBERSECURITY MANAGEMENT | 3.00 |
| Elective Credit | | 7.00 |
| Total Credits | | 83.00 |

Sequential Plan of Study

| Course | Title | Credits |
|--------------------|---------------------------------------|--------------|
| First Year | | |
| Fall | | |
| CORE | Mathematical Ways of Knowing | 3.00 |
| CORE | Oral Communication | 3.00 |
| CS-108 | INTRODUCTION TO COMPUTER SCIENCE | 3.00 |
| CS-111 | FOUNDATIONS OF PROGRAMMING | 4.00 |
| ENGL-101 | WRITING AND RHETORIC I | 3.00 |
| Credits | | 16.00 |
| Spring | | |
| BIOF-100 | INTRODUCTION TO BIOINFORMATICS | 3.00 |
| CORE | Humanistic & Artistic Ways of Knowing | 3.00 |
| CORE | Social & Behavioral Ways of Knowing | 3.00 |
| CS-211 | COMPUTER SCIENCE II | 4.00 |
| ENGL-102 | WRITING AND RHETORIC II | 3.00 |
| Credits | | 16.00 |
| Second Year | | |
| Fall | | |
| CORE | Diversity | 3.00 |
| CORE | Humanistic & Artistic Ways of Knowing | 3.00 |
| CS-226 | SQL: STRUCTURED QUERY LANGUAGE | 3.00 |
| CYB-251 | NETWORKING I | 4.00 |
| CYB-271 | CYBERSECURITY I | 4.00 |
| Credits | | 17.00 |
| Spring | | |
| BUS-311 | FOUNDATIONS OF MANAGEMENT THEORY | 3.00 |
| CORE | Social & Behavioral Ways of Knowing | 3.00 |
| CYB-252 | NETWORKING II | 4.00 |
| CYB-272 | CYBERSECURITY II | 4.00 |
| Credits | | 14.00 |
| Third Year | | |
| Fall | | |
| CYB-253 | NETWORKING III | 4.00 |
| CYB-273 | CYBERSECURITY III | 4.00 |
| ECON-300 | STATISTICAL METHODS | 3.00 |
| BUS-360 | LEADERSHIP | 3.00 |
| Credits | | 14.00 |
| Spring | | |
| CYB-254 | NETWORKING IV | 4.00 |
| CYB-274 | CYBERSECURITY IV | 4.00 |
| BUS-365 | BUSINESS LAW I | 3.00 |
| BUS-370 | PRODUCTION AND OPERATIONS MANAGEMENT | 3.00 |
| Credits | | 14.00 |
| Fourth Year | | |
| Fall | | |
| CORE | Integrative Seminar: Ethics & Values | 3.00 |
| CS-311 | ALGORITHMS AND DATA STRUCTURES | 4.00 |
| CYB-360 | CYBERSECURITY MANAGEMENT | 3.00 |
| Elective | Elective Credits | 3.00 |
| Credits | | 13.00 |

Spring

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| CYB-300 | CYBER ETHICS | 3.00 |
| CS-480 | CAPSTONE DESIGN PROJECT | 4.00 |
| CS-494 | INTERNSHIP IN COMPUTER SCIENCE | 4.00 |
| Elective | Elective Credits | 4.00 |
| Credits | | 15.00 |
| Total Credits | | 119.00 |

Graduates with a BA/BS in Cybersecurity Management go on to obtain careers in a variety of fields:

- Computer Science
- Information Security Analyst