

# 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
<b>Written Communication</b>		
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	
<b>Oral Communication</b>		
Select one from the following:		3.00
COMM-101	FUNDAMENTALS OF ORAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
<b>Mathematical Ways of Knowing</b>		
Select one of the following:		3.00-5.00
MATH-143	COLLEGE ALGEBRA	
MATH-147	COLLEGE ALGEBRA AND TRIGONOMETRY	
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	
<b>Humanistic &amp; Artistic Ways of Knowing</b>		
Select one course from two categories:		6.00-8.00
<b>Literature</b>		
ENGL-175	LITERATURE AND IDEAS	
ENGL-257	WORLD CLASSICS	
ENGL-258	INTERNATIONAL LITERATURE	
ENGL-261	MYTHOLOGIES	
<b>Arts</b>		
ART-100	INTRODUCTION TO ART	
HUM-101	THE ART AND HISTORY OF THE MOTION PICTURE	
HUM-150	INTRODUCTION TO THE ARTS	
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	
<b>Language</b>		
NP-101	ELEMENTARY NEZ PERCE LANGUAGE I	
NP-102	ELEMENTARY NEZ PERCE LANGUAGE II	
SPAN-101	ELEMENTARY SPANISH I	
SPAN-102	ELEMENTARY SPANISH II	
<b>Scientific Ways of Knowing</b>		
BIOF-100	INTRODUCTION TO BIOINFORMATICS	3.00
CS-108	INTRODUCTION TO COMPUTER SCIENCE	4.00
<b>Social &amp; Behavioral Ways of Knowing</b>		
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	
<b>Diversity</b>		
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	COMMUNICATION AND DIVERSITY	
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	
ID-300C	ETHICS AND IDENTITY	

KIN-220	SOCIAL-CULTURAL ASPECTS OF SPORTS	
NP-101	ELEMENTARY NEZ PERCE LANGUAGE I	
NP-102	ELEMENTARY NEZ PERCE LANGUAGE II	
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	
<b>Integrative Seminar: Ethics &amp; Values</b>		
Select one of the following:		3.00
ID 300A - 300Z (see course descriptions for options)		
ID-301A	HELLS CANYON INSTITUTE	
<b>Foreign/Heritage Language</b>		
Select 16 credits of language if selecting Bachelor of Arts Degree		16.00
<b>Total Credits</b>		<b>37.00-42.00</b>

## Program Requirements

Code	Title	Credits
<b>Major Requirements</b>		
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
<b>Select one of the following:</b>		<b>3.00</b>
ECON/PSYC/SS-300	STATISTICAL METHODS	
<b>Upper Division Requirements</b>		
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
<b>Total Credits</b>		<b>83.00</b>

## Sequential Plan of Study

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CORE	Mathematical Ways of Knowing	3.00

CORE	Oral Communication	3.00
CS-108	INTRODUCTION TO COMPUTER SCIENCE	4.00
CS-111	FOUNDATIONS OF PROGRAMMING	4.00
ENGL-101	WRITING AND RHETORIC I	3.00
<b>Credits</b>		<b>17.00</b>
<b>Spring</b>		
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
<b>Credits</b>		<b>16.00</b>
<b>Second Year</b>		
<b>Fall</b>		
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
<b>Credits</b>		<b>17.00</b>
<b>Spring</b>		
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
<b>Credits</b>		<b>14.00</b>
<b>Third Year</b>		
<b>Fall</b>		
CYB-253	NETWORKING III	4.00
CYB-273	CYBERSECURITY III	4.00
ECON-300	STATISTICAL METHODS	3.00
BUS-360	LEADERSHIP	3.00
<b>Credits</b>		<b>14.00</b>
<b>Spring</b>		
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
<b>Credits</b>		<b>14.00</b>
<b>Fourth Year</b>		
<b>Fall</b>		
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
<b>Credits</b>		<b>13.00</b>
<b>Spring</b>		
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
	<b>Credits</b>	<b>15.00</b>
	<b>Total Credits</b>	<b>120.00</b>

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

- Computer Science
- Information Security Analyst