

# BUSINESS INFORMATION SYSTEMS UNDERGRADUATE MAJOR (BA, BS, HBA, HBS)

This program is available at the following locations:

- Corvallis
- Ecampus

Options available:

- Dean's Academy (<https://catalog.oregonstate.edu/college-departments/business/school-accounting-finance-information-systems/business-information-systems-ba-bs-hba-hbs/deans-academy-option/>)
- International Business (<https://catalog.oregonstate.edu/college-departments/business/school-accounting-finance-information-systems/business-information-systems-ba-bs-hba-hbs/international-business-option/>)

The Business Information Systems (BIS) curriculum teaches you to marshal technology to help organizations achieve a competitive advantage in today's rapidly changing environment.

You will gain a firm foundation in business administration and learn to analyze, develop, manage and protect information systems.

The BIS program offers two focus areas:

1. The *IS Management Focus* concentrates on developing and managing information systems that will help organizations succeed.
2. The *Cybersecurity Management Focus* emphasizes Governance, Risk and Compliance (GRC) and aligning IT processes with organizational goals.

Depending on the skills, interests and focus you choose, you might become a business process analyst, IT security administrator, IT project manager, IT auditor, application specialist, data modeler, security/GRC (Governance, Risk and Compliance specialist, systems analyst, software quality tester, developer, database or systems administrator, or choose from other technology-oriented business careers.

You will not just learn theory. You have plenty of opportunities to build, troubleshoot, refine and manage information systems through targeted exercises based on real-world projects.

**Major Code: 183**

Upon successful completion of the program, students will meet the following learning outcomes:

- Model and analyze the flow of information through business processes.
- Design architectures for the capture, storage and retrieval of data.
- Develop computer programs to support or automate business processes.
- Apply networking concepts and technologies to support business needs.
- Assess cybersecurity risks in existing information infrastructures and processes.

Degree requirements include university core education, business and major curricula. The business curriculum provides students with a broad overview of business; basic skills in accounting and quantitative methods; an understanding of the legal and social environment of business; a background in management and organizational behavior, marketing, finance, and operations management; an understanding of the entrepreneurial process; and the opportunity to integrate coursework and further develop decision-making skills through the analysis of business cases. The lower-division business curriculum involves completion of courses within the first and second year that build a solid foundation for the upper-division curricula.

Transitions to OSU and Introduction to Business coursework will depend on student type. At registration, an academic advisor will determine the most appropriate path.

1. Students entering OSU as their first college experience after high school will take a 100 Transitions course, BA 160, and a BA 16X series;
2. Students entering OSU COB as a second-year transfer student (approximately three years to graduation) will take a 300 Transitions course, BA 160, and BA 101Z; or
3. Students entering OSU COB as a third-year transfer student (approximately two years or less to graduation) will take a 300 Transitions course and BA 101Z.

Code	Title	Credits
<b>Summary of Requirements</b>		
Business Curriculum <sup>1</sup>		102-106
Business Information Systems Curriculum		30
Unspecified Core Education <sup>1</sup>		22-26
Unrestricted Electives <sup>2</sup>		18-26
<b>Total Credits</b>		<b>180</b>

<sup>1</sup> Some courses in the Business Curriculum double-count with Core Education categories. Unspecified Core Education credits are not shared with the Business Curriculum

<sup>2</sup> Options and minors are available to provide specializations and fulfill unrestricted elective credits

## Business Curriculum

Code	Title	Credits
<b>Foundations of Business</b>		
<i>Introduction to Business</i>		
Third-year transfer students may be eligible to waive BA 160.		
BA 160	+COB CAREER AND MAJOR EXPLORATION	1
Dependent on entry level, students will take one of the following:		
BA 161 & BA 162	INNOVATION NATION—AWARENESS TO ACTION and INNOVATION NATION—IDEAS TO REALITY	4-6
BA 167 & BA 168	LAUNCH PAD I and LAUNCH PAD II	
BA 101Z	INTRODUCTION TO BUSINESS	
<i>Communications</i>		
COMM 114	+*ARGUMENT AND CRITICAL DISCOURSE	3-4
or COMM 111Z	+*PUBLIC SPEAKING	
or COMM 218Z	+*INTERPERSONAL COMMUNICATION	
<i>Economics</i>		
ECON 201Z	+*PRINCIPLES OF MICROECONOMICS	4
ECON 202Z	+*PRINCIPLES OF MACROECONOMICS	4
<i>Mathematics</i>		
MTH 241	+*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE	4
<i>Writing</i>		

## 2 Business Information Systems Undergraduate Major (BA, BS, HBA, HBS)

WR 323	+*ADVANCED WRITING & ARGUMENTATION	3-4
or WR 227Z	+*TECHNICAL WRITING	
<b>Business Core</b>		
BA 169Z	DATA ANALYSIS USING MICROSOFT EXCEL	4
BA 211Z	PRINCIPLES OF FINANCIAL ACCOUNTING	4
BA 213Z	PRINCIPLES OF MANAGERIAL ACCOUNTING	4
BA 223	PRINCIPLES OF MARKETING	4
or BA 390	PRINCIPLES OF MARKETING	
BA 226Z	INTRODUCTION TO BUSINESS LAW	4
BA 240	FINANCE	4
BA 252	INTRODUCTION TO ORGANIZATIONAL BEHAVIOR	4
BA 260	FOUNDATIONS OF THE ENTREPRENEURIAL MINDSET	4
BA 275	FOUNDATIONS OF STATISTICAL INFERENCE	4
BA 270	BUSINESS PROCESS MANAGEMENT	4
BA 347	INTERNATIONAL BUSINESS	4
BA 354	^ETHICS IN ORGANIZATIONS	4
BA 357	OPERATIONS AND SUPPLY CHAIN MANAGEMENT	4
BA 370	BUSINESS INFORMATION SYSTEMS OVERVIEW	4
BA 375	APPLIED QUANTITATIVE METHODS	4
BA 396	+MARKETS AS SOCIAL STATUS SYSTEMS	3
or BA 398	+SUSTAINABLE CAPITALISM: EXPLORING POWER, PROSPERITY, AND JUSTICE	
BA 466	INTEGRATIVE STRATEGIC EXPERIENCE	4
<b>Blueprint: Personal &amp; Professional Development</b>		
<i>Second Year</i>		
Third-year transfer students may be eligible to substitute BA 381 for second year Professional Development and Blueprint coursework.		
BA 281	PROFESSIONAL DEVELOPMENT	3
BA 282	DRAFTING YOUR CAREER BLUEPRINT	1
BA 283	NAVIGATING CRUCIAL CONVERSATIONS IN THE WORKPLACE	1
BA 284	FOUNDATIONS OF PERSONAL FINANCE I	1
<i>Third Year</i>		
BA 311	+FRAMING YOUR CAREER PLAN	1
BA 312	FOUNDATIONS OF PERSONAL FINANCE II	1
BA 313	A CASE FOR CIVIL DISCOURSE IN BUSINESS	1
<i>Fourth Year</i>		
BA 411	NAVIGATING CAREER TRANSITIONS	1
BA 412	FINANCIAL PLANNING I	1
BA 413	FINANCIAL PLANNING II	1
<b>Total Credits</b>		<b>102-106</b>

\* Baccalaureate Core course. Applies to general education requirements for undergraduate students in a catalog year up to 2024-2025

+ Core Education course. Applies to general education requirements for undergraduate students in catalog year 2025-2026 and beyond

^ Writing Intensive Curriculum (WIC) course

## Business Information Systems Curriculum

Code	Title	Credits
<b>BIS Core</b>		
BIS 272	BUSINESS APPLICATION DEVELOPMENT	4
or CS 161	INTRODUCTION TO COMPUTER SCIENCE I	
BIS 371	BUSINESS DATA MANAGEMENT	4
BIS 471	BUSINESS TELECOMMUNICATIONS AND NETWORKING <sup>1</sup>	4
or BIS 421	NETWORKING BASICS PRACTICUM	
BIS 472	INFORMATION SYSTEMS SECURITY <sup>1</sup>	4
or BIS 422	CYBERSECURITY BASICS PRACTICUM	
<b>Electives</b>		
Select a minimum of 12 credits from the following (see Focus Areas for guidance):		12
<sup>2</sup>		
ACTG 420	IT AUDITING <sup>1</sup>	

or BIS 423	IT AUDIT BASICS PRACTICUM	
BANA 270	INTRODUCTION TO BUSINESS ANALYTICS AND ARTIFICIAL INTELLIGENCE	
BIS 372	BUSINESS INFORMATION SYSTEMS DESIGN AND DEVELOPMENT	
BIS 482	INFORMATION SECURITY GOVERNANCE	
CS 473	INTRODUCTION TO DIGITAL FORENSICS	
MGMT 364	INTRODUCTION TO PROJECT MANAGEMENT	
<b>Experiential Learning</b>		
Select 2 credits from the following courses:		2
Any COB 004 Internship (eg. BIS 004) <sup>3</sup>		
Any COB 403 Thesis (eg. BIS 403)		
Any COB 405 Reading & Conference (eg. BA 405)		
Any COB 406 Projects (eg. BA 406)		
Any COB 409 Practicum (eg. BIS 409)		
Any COB 410 Internship (eg. BIS 410)		
Department Approved Certification		
BA 348 & BA 349	INTERNATIONAL EXCHANGE ORIENTATION and IMPACT OF CULTURE ON BUSINESS	
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> With departmental approval, students may substitute a course with an equivalent certification and practicum hours and choose another elective to reach the 28 credit minimum

<sup>2</sup> Some elective courses require a prerequisite grade of C or higher

<sup>3</sup> Students may substitute a COB 004 Internship (e.g. BIS 004) course for the experiential learning requirement if they do not need an additional 2 credits to meet their 180 credit degree total

## Focus Areas

Focus Areas are suggested course combinations directed at specific areas of interest and professional goals, but other combinations of focus area courses may be selected.

The **Cybersecurity Management Focus** emphasizes Governance, Risk and Compliance (GRC) and aligning IT processes with organizational goals.

The **IS Management Focus** concentrates on developing and managing information systems that will help organizations succeed.

Code	Title	Credits
<i>Cybersecurity Management</i>		
ACTG 420	IT AUDITING	4
BIS 482	INFORMATION SECURITY GOVERNANCE	4
CS 473	INTRODUCTION TO DIGITAL FORENSICS	4
<i>IS Management</i>		
BANA 270	INTRODUCTION TO BUSINESS ANALYTICS AND ARTIFICIAL INTELLIGENCE	4
BIS 372	BUSINESS INFORMATION SYSTEMS DESIGN AND DEVELOPMENT	4
MGMT 364	INTRODUCTION TO PROJECT MANAGEMENT	4

## Major Code: 183

*Degree plans are subject to change and the following is only an example of how students may complete their degree in four years. Students should consult their advisor to determine the best degree plan for them. Contact details for advisors can be found on the Academic Advising (<https://catalog.oregonstate.edu/advising/>) page.*

### First Year

Fall		Credits
BA 160	+COB CAREER AND MAJOR EXPLORATION	1
MTH 111Z	+*PRECALCULUS I: FUNCTIONS	4

COMM 111Z	+*PUBLIC SPEAKING	3-4
or COMM 114	or +*ARGUMENT AND CRITICAL DISCOURSE	
or COMM 218Z	or +*INTERPERSONAL COMMUNICATION	
Core Ed: Transitions		2
Core Ed: Arts & Humanities General		3-4
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
BA 161	INNOVATION NATION--AWARENESS TO ACTION	3
BA 169Z	DATA ANALYSIS USING MICROSOFT EXCEL	4
ECON 202Z	+*PRINCIPLES OF MACROECONOMICS	4
MTH 241	+*CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA 162	INNOVATION NATION--IDEAS TO REALITY	3
ECON 201Z	+*PRINCIPLES OF MICROECONOMICS	4
WR 121Z	+*COMPOSITION I	4
Core Ed: Scientific Inquiry & Analysis		4
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
BA 226Z	INTRODUCTION TO BUSINESS LAW	4
BA 252	INTRODUCTION TO ORGANIZATIONAL BEHAVIOR	4
BA 275	FOUNDATIONS OF STATISTICAL INFERENCE	4
BA 282	DRAFTING YOUR CAREER BLUEPRINT	1
Core Ed: Difference, Power & Oppression Foundations		3-4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BA 211Z	PRINCIPLES OF FINANCIAL ACCOUNTING	4
BA 260	FOUNDATIONS OF THE ENTREPRENEURIAL MINDSET	4
BA 270	BUSINESS PROCESS MANAGEMENT	4
BA 283	NAVIGATING CRUCIAL CONVERSATIONS IN THE WORKPLACE	1
WR 323	+*ADVANCED WRITING & ARGUMENTATION	3-4
or WR 227Z	or +*TECHNICAL WRITING	
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA 213Z	PRINCIPLES OF MANAGERIAL ACCOUNTING	4
BA 223	PRINCIPLES OF MARKETING	4
or BA 390	or PRINCIPLES OF MARKETING	
BA 240	FINANCE	4
BA 281	PROFESSIONAL DEVELOPMENT	3
BA 284	FOUNDATIONS OF PERSONAL FINANCE I	1
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
BA 311	+FRAMING YOUR CAREER PLAN	1
BA 357	OPERATIONS AND SUPPLY CHAIN MANAGEMENT	4
BA 370	BUSINESS INFORMATION SYSTEMS OVERVIEW	4
BIS 272	BUSINESS APPLICATION DEVELOPMENT	4
or CS 161	or INTRODUCTION TO COMPUTER SCIENCE I	
Core Ed: Arts & Humanities Global		3-4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BA 312	FOUNDATIONS OF PERSONAL FINANCE II	1
BA 354	^ETHICS IN ORGANIZATIONS	4
BA 375	APPLIED QUANTITATIVE METHODS	4
BIS 371	BUSINESS DATA MANAGEMENT	4
Elective		2
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA 313	A CASE FOR CIVIL DISCOURSE IN BUSINESS	1
BIS Elective		4

Experiential Learning		2
Core Ed: Seeking Solutions		3-4
Core Ed: Scientific Inquiry & Analysis		4
<b>Credits</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
BA 411	NAVIGATING CAREER TRANSITIONS	1
BA 347	INTERNATIONAL BUSINESS	4
BIS Elective		4
BIS Elective		4
Elective		2
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
BA 412	FINANCIAL PLANNING I	1
BA 466	INTEGRATIVE STRATEGIC EXPERIENCE	4
BIS 471	BUSINESS TELECOMMUNICATIONS AND NETWORKING	4
or BIS 421	or NETWORKING BASICS PRACTICUM	
Elective		5
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
BA 396	+*MARKETS AS SOCIAL STATUS SYSTEMS	3
or BA 398	or +SUSTAINABLE CAPITALISM: EXPLORING POWER, PROSPERITY, AND JUSTICE	
BA 413	FINANCIAL PLANNING II	1
BIS 472	INFORMATION SYSTEMS SECURITY	4
or BIS 422	or CYBERSECURITY BASICS PRACTICUM	
Electives		6
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>180</b>

- \* Baccalaureate Core course. Applies to general education requirements for undergraduate students in a catalog year up to 2024-2025
- + Core Education course. Applies to general education requirements for undergraduate students in catalog year 2025-2026 and beyond
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