

INFORMATION SYSTEMS GRADUATE MAJOR (MS)

This program is available at the following locations:

- Corvallis
- Ecampus

The Master of Science in Information Systems (MIS) is designed to equip students with the advanced knowledge and skills necessary to excel in the rapidly evolving field of information systems management and technology. This interdisciplinary program combines principles of information systems, business management, business analytics and applied AI, preparing graduates to manage and lead the complex information needs of organizations. The degree offers concentrations in Cybersecurity Management, Business Analytics and Applied AI, and Geographic Information Sciences, plus a wide range of business and interdisciplinary electives.

Major Code: 2010

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

- Conduct research or produce some other form of creative work.
- Demonstrate mastery of subject material.
- Conduct scholarly or professional activities in an ethical manner.
- Analyze business processes and requirements to design and develop effective information systems and business applications that support organizational goals and enhance operational efficiency.
- Evaluate the performance, security, and usability of business information systems and applications, identifying areas for improvement and implementing necessary enhancements to optimize functionality and user satisfaction.
- Integrate business applications and information systems with existing enterprise systems and databases to ensure seamless data flow, interoperability, and alignment with organizational objectives.
- Collaborate effectively with stakeholders, including business analysts, project managers, and end-users, to ensure that developed information systems and applications meet user needs and business objectives.
- Apply ethical and legal considerations in the design, development, and governance of business information systems and applications, ensuring compliance with relevant standards, policies, and regulatory frameworks.

Code	Title	Credits
Required Core		
BA 572	ADVANCED INFORMATION SYSTEMS	3
BANA 560	BUSINESS ANALYTICS AND AI FOR COMPETITIVE ADVANTAGE	3
BANA 570	DATA MANAGEMENT	3
BIS 561	BUSINESS APPLICATION DEVELOPMENT	3
BIS 562	BUSINESS INFORMATION SYSTEMS DESIGN AND DEVELOPMENT	3
BIS 563	BUSINESS INFORMATION SYSTEMS CAPSTONE	3
BIS 571	BUSINESS TELECOMMUNICATIONS AND NETWORKING	4
BIS 572	INFORMATION SYSTEMS SECURITY	4
Areas of Concentration & Electives		

Select a minimum of 19 credits from the following:¹

19

General Business	
BA 513	BUSINESS LEGAL ENVIRONMENT
BA 514	OPERATIONS MANAGEMENT
BA 515	MANAGERIAL DECISION TOOLS
BA 516	CREATING VALUE IN EXCHANGE
BA 517	MARKETS AND VALUATION
BA 518	ENTREPRENEURIAL MINDSET AND INNOVATION
Business Analytics and Applied AI	
BA 555	PRACTICAL BUSINESS ANALYSIS
BANA 571	DATA EXPLORATION AND VISUALIZATION
BANA 572	MACHINE LEARNING AND TEXT MINING FOR BUSINESS
BANA 573	DESIGNING AI PRODUCTS AND SERVICES FOR BUSINESS
BANA 574	NEURAL NETWORKS AND DEEP LEARNING FOR BUSINESS
BANA 577	INTEGRATED BUSINESS ANALYTICS PROJECT
Cybersecurity Management	
ACTG 520	IT AUDITING
BIS 583	GOVERNING INFORMATION SECURITY PROGRAMS
CS 573	INTRODUCTION TO DIGITAL FORENSICS
PPOL 544	COLLABORATIVE GOVERNANCE
Geographic Information Science	
GEOG 510	INTERNSHIP
GEOG 551	PLANNING PRINCIPLES AND PRACTICES FOR RESILIENT COMMUNITIES
GEOG 560	GISCIENCE I: INTRODUCTION TO GEOGRAPHIC INFORMATION SCIENCE
GEOG 561	GISCIENCE II: ANALYSIS AND APPLICATIONS
GEOG 562	PROGRAMMING FOR GEOSPATIAL ANALYSIS
GEOG 564	GEOSPATIAL PERSPECTIVES ON INTELLIGENCE, SECURITY AND ETHICS
GEOG 580	REMOTE SENSING I: PRINCIPLES AND APPLICATIONS
GEOG 581	SATELLITE IMAGE ANALYSIS
Resource and Sustainability Management	
FES 545	ECOLOGICAL RESTORATION
FES 548	INVASIVE PLANTS: BIOLOGY, ECOLOGY AND MANAGEMENT
FES 552	FOREST WILDLIFE HABITAT MANAGEMENT
FES 586	PUBLIC LANDS POLICY AND MANAGEMENT
FES 585	CONSENSUS AND NATURAL RESOURCES
FW 537	STRUCTURED DECISION MAKING IN NATURAL RESOURCE MANAGEMENT
PPOL 547	INTEGRATED POLICY: FOOD, ENERGY, WATER, CLIMATE
SNR 512	SUSTAINABLE NATURAL RESOURCE DEVELOPMENT
SNR 520	SOCIAL ASPECTS OF SUSTAINABLE NATURAL RESOURCES
SNR 521	ECONOMICS OF SUSTAINABLE NATURAL RESOURCE MANAGEMENT
SNR 522	BASIC BELIEFS AND ETHICS IN NATURAL RESOURCES
SNR 530	ECOLOGICAL PRINCIPLES OF SUSTAINABLE NATURAL RESOURCES
SNR 532	PLANNING AGROFORESTRY PROJECTS
SNR 535	SUSTAINABLE MANAGEMENT OF AQUATIC AND RIPARIAN RESOURCES
SNR 540	GLOBAL ENVIRONMENTAL CHANGE
SNR 570	INDEPENDENT PROJECTS IN NATURAL RESOURCE SUSTAINABILITY AND FORESTS & CLIMATE CHANGE
SOC 580	ENVIRONMENTAL SOCIOLOGY
SOIL 511	SOIL: A NATURAL AND SOCIETAL RESOURCE
Total Credits	45

¹ Other electives and concentrations may be accepted with advisor approval

2 Information Systems Graduate Major (MS)

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