

Anderson School of Management



Master of Science in Information Systems and Assurance (MS-ISA)

ALL CONCENTRATION INFORMATION EFFECTIVE FOR STUDENTS ADMITTED FALL 2014 OR THEREAFTER.

The MS-ISA is a specialized graduate degree for students with an undergraduate background in information systems, information technology, computer science, computer-related engineering, accounting, or business administration. Pre-requisites for the program are: (1) coursework in object-oriented computer programming, and (2) professional communications skills. The program is at least 32-credit hours and includes a mix of management and technical courses tailored to specific student experience, background, and career goals. Students enrolled in this program will gain technical and managerial practice that prepares graduates for a wide variety of competitive jobs in the local and national markets.

Once admitted to this program, students work with a faculty advisor to develop a formal plan of study. The plan includes courses from 3 different categories: Core Group, Management Group, and Technology Group. Courses are selected to build on the student's undergraduate degree and work experience and to match technology and management skills with the student's intended career path. Plan of study approvals will be granted by a designated faculty advisor. A variety of courses are offered in the following areas of technical emphasis (**see full course listing that follows**):

- Data Analytics (Big Data), Database Management, and Data Warehousing
- Cybersecurity and Information Assurance
- Fraud, White Collar Crime, and Digital & Financial Forensics
- Information System Acquisition, Development and Management
- System & Network Administration and Security

MS-ISA program graduates fill market needs for highly-trained professionals in information systems and information assurance. There is a strong demand for graduates with a professionally-oriented Master's degree that combines technical and managerial content related to information systems and information assurance. National estimates show faster than average growth in job categories targeted by the MS-ISA program:

- Database administrators
- Forensic technology
- Fraud investigation
- Information security analysts
- Information system managers
- Software developers
- System and network administrators

Students are encouraged to work closely with the faculty advisor to learn about opportunities in this program, course selection, career prospects, and available scholarships. Students admitted to the MS-ISA program may also apply for the UNM Information Assurance Scholarship for Service Program (<http://ia.unm.edu/sfs>)

MS-ISA PROGRAM FACULTY ADVISOR

Ranjit Bose, Regents Professor

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The **MS-ISA** consists of a **Core Group — 9 credit hours**, a **Management Group — 12 credit hours minimum** and a **Technology Group – 12 credit hour minimum courses** at the graduate level.

Students in the MS-ISA program will complete core group requirement and may select from the following required Management Group and Technology Group courses provided they have not taken the undergraduate equivalent. Please keep in mind the minimum and maximum coursework guidelines for your selection.

Coursework:

Required 9 credit hours Core Group Coursework:

MGMT 631 – Information Systems Project Management

MGMT 636 – Information Systems Security

MGMT 637 – Database Management Systems

Courses may be waived based on similar undergraduate/graduate courses or experience. Students who are granted waivers will complete additional courses in the technology group.

Required 12 credit hours minimum Management Group Coursework:

MGMT 501 – Data Driven Decision Making

MGMT 502 -- Financial Accounting and Analysis

MGMT 503 – Managerial-Cost Accounting

MGMT 506 – Managing People in Organizations

MGMT 508 – Business and Society

MGMT 520 – Operations Management

MGMT 522 – Managerial Marketing

MGMT 526 – Financial Decision Making

MGMT 633 – Vendor & Contract Management

Up to 12 credit hours may be waived based on similar undergraduate/graduate courses or experience. Students who are granted waivers will complete additional courses in the technology group.

Required 12 credit hours minimum Technology Group Coursework:

MGMT 551 – Problems

MGMT 552 -- Problems

MGMT 533 – Internal Auditing

MGMT 594 – Special Topics in Management

MGMT 599 – Master's Thesis

MGMT 630 – Management of Information Systems

MGMT 632 -- Web Application Development

MGMT 634 – Information System Analysis and Design

MGMT 635 – Data Analytics

MGMT 638 – Advanced Database Management

MGMT 639 – Advanced IS/IA topics

MGMT 641 – Forensic Accounting

MGMT 642 – Fraud Examination

MGMT 644 – Data Warehousing

MGMT 645 – Data Mining for Business Decisions

MGMT 646 – Digital Forensics

MGMT 647 – System and Network Administration

MGMT 648 – Advanced Information Systems Security

MGMT 649 – Information Assurance Project

MGMT 697 -- Internship

Computer science and Electrical and computer engineering courses (CS 521, CS 544, CS 565, CS 567, CS 581, CS 583, ECE 525, ECE 595, and other graduate-level CS and ECE courses with advance approval); and problems, special topics in management, or internship courses (MGMT 551, 552, 594, and 697) will be evaluated case by case.

<http://masters.unm.edu/ms-isa/>

