



## Master of Science in Information Systems Murray State University, Murray, KY 42071, USA

The Master of Science in Information Systems prepares individuals for management careers in the vast and growing field of Information Systems. This field includes such diverse areas as Software Development, Information Management, Data Analysis, Information Security, Information Systems Architecture, System Planning and Systems Analysis, to name a few. According to the Bureau of Labor and Statistics “*employment of computer and information systems managers is expected to grow much faster than the average for all occupations through the year 2012. Technological advancements will boost the employment of computer-related workers; as a result, the demand for managers to direct these workers also will increase. In addition, job openings will result from the need to replace managers who retire or move into other occupations. Opportunities for obtaining a management position will be best for workers possessing an MBA with technology as a core component, or a management information systems degree, advanced technical knowledge, and strong communication and administrative skills.*” (<http://stats.bls.gov/oco/ocos258.htm>).

The curriculum consists of seven core courses and three elective courses. This structure prepares the student for both depth and breadth in the Information Systems field. A sound foundation in Business and Information Systems is expected prior to beginning the program. The required foundation courses are available as undergraduate courses at Murray.

Upon successful completion, graduates can move into careers as Information Systems Managers, Business Analysts, Software Architects, College-level Instructors, Information Systems Auditors, Project Managers, Consultants etc. based on individual strengths, skills and inclination.

Items to submit	Minimum	Deadlines
<b>Standardized test scores (Verbal &amp; Quantitative):</b>	GRE (900) or GMAT (500)	Prospective students must make sure that the information in the first column (five items, six for those needing to submit TOEFL) is available to us before the deadlines (May 1 for US-based students and February 1 for international students)
<b>Analytical writing assessment:</b>	GRE or GMAT (4.5)	
<b>TOEFL (international students, if required):</b>	Paper (550) or Computer version (213)	
<b>Undergraduate transcripts:</b>	3.0 / 4.0 Grade Point Average	
<b>Resume</b>	Summarize work experience, if any	
<b>Statement of purpose</b>	500 words or less	

The director (in consultation with the admissions committee) reserves the right to limit the number of students admitted.

### Foundation courses/skills

These courses (or their equivalent) are required of those students lacking the requisite foundation in Business and/or Information Systems. Some of these courses may have additional pre-requisites. A minimum grade of C is required to satisfy each foundation course.

Technical		Business	
CSC332	Visual Basic II (or equivalent Object-oriented language)	ACC 490	Survey of Accounting (ACC200 & ACC201 will substitute)
CIS317	Principles of Systems Analysis and Design	FIN 330	Principles of Finance
CIS 407	Advanced Database Management Systems	CIS243/ 343	Business Statistics I and II (or equiv. Statistics course)

### Graduate Core and Elective courses

The graduate courses include 21 hours in seven required courses and 9 hours of approved electives.

Core requirements (21 hours)		Electives (9 hours)	Other Requirements
ACC604	Quantitative Financial Controls	Any CIS/CSC/TSM or other business course at the 500 level or above is admissible with the approval of the graduate director. Other courses may also be considered at the discretion of the graduate director.	In order to receive a degree, a candidate must earn a minimum grade point average of 3.00 on all graduate courses taken at Murray State University. Repeating a graduate course does not cancel a previous grade in the course.  A minimum grade of C is required to receive credit for a graduate course. No more than one C will be accepted in fulfillment of the core.
CIS 650	Software Methodologies		
CSC510	Data Communication and Networking		
CIS645	Decision Support Systems		
CIS 609	Data Warehousing and Data mining		
CIS 695	Project in Computer Information Systems		
TSM603	Project Management		

### Financial Aid

A limited number of Graduate Assistantships are available. They are extremely competitive and are awarded to students with excellent technical+communication and/or research skills. A graduate assistantship typically pays a small stipend and includes a waiver of the out-of-state portion of the tuition.

### Course offerings and a long-range planning guide

Use this guide to track your progress and plan your schedule so you can complete the program in the most efficient manner.

Course	Description	Term	Completed
<b>Foundation (pre-requisites in parentheses)</b>			
ACC490	Must be admitted to GR status.	SP	
FIN330	Principles of Finance	SP	
CSC332	VB.Net Or equivalent prog. skill	SP	
MAT135	Statistics (or equivalent: CIS243/343)		
CIS317	Principles of Sys. Analysis (on-line)		
CIS407	Adv. Database Management Systems		
<b>Core</b>			
CIS650	Software Methodologies	F	
CIS645	Decision Support Systems	F	
CIS609	Data warehousing and data mining	SP	
CSC510	Data comm. and Networking	SP*	
TSM603	Project Management (on-line+)	SP+	
ACC604	Quantitative Financial Controls		
CIS695	Comprehensive Project	F/SU	
<b>Electives – Choose 3 (need advisor approval)</b>			
CIS595	Special Problems	SU	
CIS646	Data base management for managers	SP+	
CIS653	Management Science (CIS443)		
CSC540	Legal and Ethical Issues in Comp Sci.	SP	
ECO500	Foundation of ECO Analysis	SP	
FIN612	Capital Budgeting (FIN 330)	?	
FIN621	Financial Models (FIN330)	F	
TSM530	Systems Planning (on-line)	F	
TSM602	Telecomm. Systems (on-line)	SP+	

(+) Course is offered online only

(\*) Course is offered in alternate years

### Typical Schedules

Students starting in the Fall term can finish the program in two semesters and a summer. The constraints:

- Must take four courses each term and two in the summer
- Must not need any foundation work

### Starting in the Fall term

In this format, a student may start in the Fall of one year and graduate in December of the following year.

Schedule	Fall	Spring	Summer	Fall
	CIS645 ACC604 CIS650	CIS609 TSM603 CSC510	Elective Elective TSM603	CIS695 Elective Elective

### Starting in the Spring term

In this format, the student must wait for the summer of the following year to complete his/her requirements as he/she would not have covered enough of the curriculum to tackle the capstone course – CIS695. Tentative graduation date will be August of the following year.

Schedule	Spring	Fall	Spring	Summer
	CIS609 Elective CSC510	CIS645 ACC604 CIS650	Elective Elective TSM603	CIS695

The required project (CIS695) may be taken in the summer (perhaps a study abroad course) or a live project through employer.



## Computer Science and Information Systems

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