


GRADUATE PROGRAM CHANGE

[CHANGES IN BOXES AND UNDERLINED]

M.S. in Business and Information Systems

Code	Title	Credits
Bridge Courses		
<u>IS 513</u>	Programming Foundations for IS	
<u>IS 531</u>	Database Fundamentals	
<u>IS 565</u>	Aspects Of Information Systems	
Course List		
Code	Title	Credits
Business Core (2 courses)		
<u>IS 677</u> or <u>MIS 645</u>	Information System Principles Information Systems Principles	3
Select one of the following:		3
<u>ACCT 615</u>	Management Accounting ²	
<u>FIN 600</u>	Corporate Finance I ¹	
<u>HRM 601</u>	Organizational Behavior ¹	
Information Systems Core (5 courses) (6 courses)		
<u>IS 601</u>	<u>Web Systems Development</u>	3
<u>IS 631</u>	Enterprise Database Management	3
<u>IS 663</u>	System Analysis and Design	3
<u>IS 665</u>	Data Analytics for Info System ³	3
<u>IS 684</u>	Business Process Innovation	3
Select one of the following:		3
<u>IS 685</u>	Enterprise Architecture and Integration	
<u>IS 678</u>	IT Service Management	
Total Credits		 21 <u>24</u>
Course List		

Electives and Specialization Areas

We strongly encourage students to design and conduct a Masters Project Thesis with an Information Systems professor. If you are considering a Project or Thesis, please consult the professor early to determine the best electives to support your work. [IS 700](#) Master's Project can substitute for one elective and [IS 701](#) Master's Thesis for two electives, and be considered part of a specialization with the MS Advisor's permission.




Code	Title	Credits
	Select three <u>two</u> of the following electives or ²	9 <u>6</u>
	Select IS 700B and three <u>two</u> of the following electives or	
	Select IS 701 and two of the following to substitute for both of your electives:	

Course List

Code	Title	Credits
Data Analytics		
Recommended Electives:		
IS 634	Information Retrieval	3
IS 687	Transaction Mining and Fraud Detection	3
IS 688	Web Mining	3
Additional Electives:		
CS 602	Java Programming	3
CS 632	Advanced Database System Design	3
CS 634	Data Mining	3
CS 675	Machine Learning	3
CS 731	Applications of Database Systems	3
CS 732	Advanced Machine Learning	3
CE 602	Geographic Information System	3
MGMT 635	Data Mining and Analysis	3
PTC 628	Analyzing Social Networks	3
Business Decision Making		
IS 678	IT Service Management	3
ACCT 615	Management Accounting	3
FIN 600	Corporate Finance I	3
HRM 601	Organizational Behavior	3
MIS 648	Decision Support Systems for Managers	3
MIS 680	Management Science	3
MGMT 620	Management of Technology	3
MGMT 630	Decision Analysis	3

Code	Title	Credits
<u>MGMT 650</u>	Knowledge Management	3
<u>MGMT 685</u>	Operations Research and Decision Making	3
<u>MGMT 688</u>	Information Technology, Business and the Law	3
<u>MRKT 620</u>	Competing in Global Markets	3
<u>MRKT 645</u>	Internet Marketing Strategy	3
Healthcare Informatics		
<u>CS 639</u>	Elec. Medical Records: Med Terminologies and Comp. Imp.	3
<u>IE 686</u>	Intro to Healthcare Systems	3
<u>IE 687</u>	Healthcare Enterprise Systems	3
<u>IE 688</u>	Healthcare Sys Perfor Modeling	3
<u>R834 581</u>	Health Systems and Policy	3
<u>R834 582</u>	Health Care Management	3
<u>R834 659</u>	Healthcare Finance	3
User Experience Design		
Recommended Elective:		
<u>IS 661</u>	User Experience Design ⁴	3
Additional Electives:		
<u>IS 664</u>	Customer Discovery ⁴	3
<u>IS 686</u>	Pervasive Computing: An HCI Perspective	3
<u>IS 735</u>	Social Media	3
<u>IE 661</u>	Man-Machine Systems	3
<u>IE 662</u>	Cognitive Engineering	3
<u>IE 664</u>	Advanced Ergonomics	3
<u>PTC 605</u>	Elements of Visual Design	3
<u>PTC 606</u>	Advanced Information Design	3
<u>PTC 629</u>	Theory and Practice of Social Media	3
<u>PTC 650</u>	ELearning Design for Mobile	3
Security and Network Management		
<u>IS 680</u>	Information Systems Auditing	3
<u>IS 681</u>	Computer Security Auditing	3
<u>IS 682</u>	Forensic Auditing for Computing Security	3
<u>CS 608</u>	Cryptography and Security	3
<u>CS 645</u>	Security and Privacy in Computer Systems	3
<u>CS 646</u>	Network Protocols Security	3

Code	Title	Credits
<u>CS 647</u>	Counter Hacking Techniques	3
<u>CS 652</u>	Computer Networks-Architectures, Protocols and Standards	3
<u>CS 656</u>	Internet and Higher-Layer Protocols	3
<u>CS 696</u>	Network Management and Security	3
<u>IT 620</u>	Wireless Networks Security and Administration	3
<u>IT 640</u>	Network Services Administration	3
Systems Analysis and Design		
<u>IS 676</u>	Requirements Engineering	3
<u>IS 683</u>	Web Systems Development	3
<u>IS 685</u>	Enterprise Architecture and Integration	3
<u>IS 661</u>	User Experience Design	3
<u>IS 664</u>	Customer Discovery	3
<u>CS 673</u>	Software Design and Production Methodology	3
<u>CS 683</u>	Software Project Management	3
<u>CS 684</u>	Software Testing and Quality Assurance	3
<u>CS 685</u>	Software Architecture	3
<u>EM 636</u>	Project Management	3
<u>EM 637</u>	Project Control	3
Web Systems		
<u>IS 634</u>	Information Retrieval	3
<u>IS 661</u>	User Experience Design	3
<u>IS 664</u>	Customer Discovery	3
 <u>IS 683</u>	Web Systems Development	3
<u>IS 688</u>	Web Mining	3
<u>IS 690</u>	Web Services and Middleware	3
<u>PTC 605</u>	Elements of Visual Design	3
<u>PTC 628</u>	Analyzing Social Networks	3
<u>PTC 632</u>	Content Management and Information Architecture	3

Build Your Own Specialization

Students may propose a coherent set of courses that have a common thread related to an area that you are interested in. The MS BIS advisor approves the proposed specialization.

Course List

¹ Students who have taken an undergraduate equivalent of one of these courses may substitute up to one business core course with an additional elective.

² Students may optionally choose 2 or more courses from a single area, which will constitute a specialization.

- ³ Students considering a Master's Project or Thesis with this specialization are encouraged to take [IS 665](#) Data Analytics for Info System as an elective.
- ⁴ Students considering a Master's Project or Thesis with the User Experience specialization are encouraged to take both [IS 661](#) User Experience Design and [IS 664](#) Customer Discovery as electives.
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Updated Program after Updating

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Keywords: Faculty Senate, Motion, CGE, MS, Business and Information Systems