# **Decision Sciences and Information Systems**

Monica Chiarini Tremblay, Associate Professor, Interim Chair and Faculty Director, MSHIMS

Dinesh Batra, Professor and Knight Ridder Research Fellow

Karlene Cousins, Associate Professor

David Darcy, Assistant Professor

Gloria Deckard, Associate Professor

Joyce J. Elam, Professor, James L. Knight Eminent Scholar and Dean, University College

S. Christopher Ellis, Instructor

Pouyan Esmaiel Zadeh, Post-Doctoral Research Associate

Paulo J. Gomes, Visiting Assistant Professor

Manjul Gupta, Assistant Professor

Sushil K. Gupta, Professor and Knight Ridder Research Fellow

Attila J. Hertelendy, Visiting Assistant Professor

Keum S. Kang, Assistant Professor

Richard Klein, Associate Professor and Assistant Chair, Knight Ridder Research Fellow and Faculty Director, Undergraduate MIS Major

Christos P. Koulamas, Professor, Ryder Eminent Scholar and Senior Associate Dean

Kuldeep Kumar, Professor

**George J. Kyparisis,** Professor and Knight Ridder Center Research Fellow

Roman Lukyanenko, Assistant Professor

George Marakas, Visiting Professor

Manoel Oliveira, Lecturer

Peter Polak, Instructor

Gladys Simpson, Instructor

Hemang C. Subramanian, Assistant Professor

Debra Vander Meer, Associate Professor

Nicole Wishart, Senior Instructor

Weidong Xia, Associate Professor and Knight Ridder Center Research Fellow

#### Participating Adjunct Faculty

Susan Clemmons, Associate Dean, University College and Associate Dean, Quality Assurance, University College

Ari Entin Tom M. Gomez Jorge Rev

#### **Mission**

The mission of the Department of Decision Sciences and Information Systems is to provide students with the knowledge and ability to design, develop, implement, and use information systems that allow organizations to effectively solve problems and use data for decision-making. The department offers courses in management information systems, management science, production and operations management, business analytics, and business statistics at both the graduate and undergraduate levels.

Students in our information systems related graduate programs learn the intellectual frameworks and methods used in areas including business analytics, business process design, database management, data warehousing, global electronic commerce, enterprise-wide

information systems, information security management, project management, and systems analysis and design (including object-oriented applications).

The Department of Decision Sciences and Information Systems offers a Master of Science in Health Informatics and Management Systems (MSHI&MS), Master of Science in Information Systems (MSIS), and a concentration within the College of Business' Ph.D. in Business program.

### Master of Science in Health Informatics and Management Systems (MSHI&MS)

Our Master of Science in Health Informatics and Management Systems is a fourteen month graduate degree program designed for information systems professionals, physicians, nurses, other clinical personnel and healthcare managers who want to increase their knowledge of health information technology and management of the complex social and organizational issues surrounding the increased emphasis on managing healthcare quality, efficiency and outcomes through information systems.

Health Informatics integrates the domains of information systems with the organizational domains of healthcare delivery processes and leadership and management principles. The goal of this program is to educate effective developers, users, and managers of health information systems. Students will learn how to implement and use the health information systems needed by hospital and system executives, government planners, public health officials, and other healthcare professionals. Courses will have both an academic and practical perspective, exposing students to both theoretical approaches and real world application.

#### **Admission Requirements**

To be eligible for admission to the MS HI&MS degree program in the Chapman School, prospective students must:

- Hold a Bachelor's degree or equivalent from an accredited college or university.
- Achieve a minimum score of 500 on the Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE) or have a minimum of four years of professional experience. If the applicant already completed a graduate degree from an accredited university with a minimum of a 3.0 grade point average (GPA), he or she may be eligible for a GMAT or GRE waiver.
- 3. Have a minimum upper division grade point average (GPA) of 3.0.
- Provide a personal statement on the motivation to attend the program, including personal and career goals.
- Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on paper-based version) or 6.5 overall of the International English Language Testing System (IELTS).
- If applicant is a student in the Graduate Certificate in Healthcare Management, and have completed the first 12 credits with a GPA of 3.25 or higher, he or she

may be eligible for admission to the program. Appropriate courses from the Certificate program may be transferred into the degree program.

7. Be in good standing with all previously-attended colleges and universities.

Admissions at the graduate level are competitive and meeting minimum program requirements does not guarantee admission.

#### **Graduation Requirements**

To graduate with the Master's degree, a student must:

- Satisfy all University requirements for a Master's degree.
- Meet the 36 hours required in the M.S. in Health Informatics and Management Systems "Program of Study."
- Earn an overall "B" (3.0) cumulative Grade Point Average.
- No courses in which a graduate student earns a grade below "C" may be counted towards any Master's degree program in the Chapman School.
- 5. Completion Professional Development Seminars I-III (0 credits) offered through the College of Business.

#### **Program Format**

Students will complete the program in 14 months. Students will complete this program as a cohort. The program will be offered on Saturdays in 8-week terms. Two courses will be taken each term. The students will be considered full time as within a "semester", or two terms in the cohort, they will complete 12 graduate credit hours.

#### **Required Courses**

HSA 6759	Quality Assessment and Outcome in	
	Healthcare	3
ISM 6205	Database Management	3
ISM 6326	Information Security and Compliance	3
ISM 6136	Business Analytics Applications	3
HSA 6197	Design and Management of Health	
	Information Systems	3
HIM 6937	Special Topics	3
HIM 6685	Electronic Health Record and Clinical	
	Support Systems	3
HIM 6019	Legal and Ethical Aspects of Healthcare	3
HSA 6186	Leadership and Organization Behavior	
	in Health Care Systems	3
ISM 6930	Special Topics in Management	
	Information Systems	3
ISM 6316	Project Management of Information	
	Sciences	3
ISM 6128	Business Process Design	3

Professional Development Seminars I, II, III Seminars will be mandatory, non-credit.

For more information, please contact the Program Manager at <a href="mailto:mshims@fiu.edu">mshims@fiu.edu</a> or (305) 779-7980.

### Master of Science in Information System (MSIS)

Our Master of Science in Information Systems (MSIS) is the only program of its kind designed with strategic direction from the top South Florida Chief Information Officers (CIOs) ensuring our program delivers knowledge critical to the success of future CIOs. To better prepare students for senior managerial and executive roles, we offer an integrated curriculum that combines technical and IT management skills, including electronic commerce management and strategy, database management, systems analysis and design, project management, knowledge management, and business analytics. This approach enables an understanding of the complexities of today's most critical business systems and an ability to manage IT resources to produce the best results for the organization.

- Students can complete the program in either 10 months (classes Monday through Friday) or 14 months (classes Saturdays).
- Students improve soft skills through numerous professional development seminars focused on leadership, team-building skills, oral and written presentation skills, and career preparation, while gaining experience to sought after technology skills such as Teradata, SAP, Rational Rose, .Net Java, PL/SQL, UML, XML, SAS Enterprise Miner, Tableau, and so on. Additionally, students build a future network of highly-qualified professionals and peers within the IT field.

#### Admission Requirements

To be eligible for admission to the MSIS degree program in the Chapman School, prospective students must:

- 1. Hold a Bachelor's degree or equivalent from an accredited college or university.
- 2. Show high promise of success in graduate work as determined by the faculty based on a minimum score of 500 on the Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE) or demonstrate at least four years of IT (Information Technology) related work experience. If the applicant already completed a graduate degree from an accredited university with a minimum of a 3.0 grade point average (GPA), or is entering a business master's program under a special agreement for admissions with specific foreign universities, he or she would be eligible for a GMAT or GRE waiver at the discretion of the faculty director.
- 3. Have a minimum upper division grade point average (GPA) of 3.0.
- Provide a personal statement on the motivation to attend the program, including personal and career goals
- Graduate student applicants whose studies were completed outside of the US must demonstrate proficiency in the English language by presenting a minimum score of 80 on the iBT TOEFL (equivalent to 550 on paper-based version) or 6.5 overall of the International English Language Testing System (IELTS).
- Be in good standing with all previously-attended colleges and universities.

Admissions at the graduate level are competitive and meeting minimum program requirements does not quarantee admission.

The following courses are required for the MSMIS degree:

ISM 6205 Database Management 3

ISM 6316	Project Management of Information Sciences	2
ICM 0400		3
ISM 6106	Systems Analysis	3
ISM 6156	Enterprise Information Systems	3
ISM 6136	Business Analytics Applications	3
ISM 6128	Business Process Design	3
ISM 6307	Management of the Information	
	Systems Function	3
ISM 6208	Data Warehousing	3
ISM 6489	Electronic Commerce and Internet	
	Business Applications	3
ISM 6024	Managing Distributed Architectures	3
ISM 6338	Information Systems Strategy and	
	Governance	3
ISM 6326	Information Security and Compliance	3
		-

Professional Development Seminars I, II, III

#### **Optional Elective**

ISM 6942 MIS Internship 1-3

#### **Professional Development Seminars**

Seminars will focus on soft skills such as leadership, team building, oral presentation, writing skills and career exploration. There will be team-building activities, including classroom exercises in group decision-making and problem-solving. Challenging outdoor exercises help participants build the skills they will need to work together in the program and to succeed in today's team-based organizations. Students will also work with a presentation and writing skills coach to improve the communication and writing skills that are critical to managerial success.

Seminars will be mandatory, non-credit.

#### **Professional Development Seminar I**

Team Building – Ropes Course	8hrs
Career Development	6hrs
Working in Teams	4hrs

#### **Professional Development Seminar II**

Presentation Skills 8hrs

#### **Professional Development Seminar III**

Writing Skills 8hrs

To complete MSMIS degree, students need to successfully complete all 12, three-credit hour courses for a total of 36 credit-hours, and maintain a B average (3.0 GPA).

For additional information, please visit <a href="http://msis.fiu.edu">http://msis.fiu.edu</a> or contact the Program Manager at (305) 779-7981 or msis@fiu.edu.

#### **Program Format**

Students will complete the program in either 10 months with classes offered Monday through Friday, or 14 months with classes meeting on Saturdays. Students will complete this program as a cohort. The program offers almost all classes in 8-week terms. Two to three courses will be taken each term. Students will be considered full time as within a "semester", or two terms in the cohort, they will complete at least 12 graduate credit hours.

#### Master of Science in Information System/Master of Business Administration Joint Degree Program

The Department of Decision Sciences and the MBA program in the Alvah H. Chapman Jr. Graduate School of Business at Florida International University are offering a joint degree program culminating in both a Master of Business Administration (MBA), and a Master of Science in Information Systems degree (MSIS). Under the joint degree program, a student can obtain both degrees in significantly less time then it would take to obtain both degrees if pursued consecutively. The joint degree program will use existing faculty, courses, and resources. Important criteria relating to the joint degree program are as follows:

- 1. Candidates to the joint degree program must meet the entrance requirements established by each individual program. Candidates must indicate on the application their intention to pursue the joint degree option. Students deciding to pursue the joint degree option after having been admitted to one program will indicate this intention only on their second application.
- Applications for a joint degree will not be accepted from candidates who have already completed either degree. MBA or MSIS students must apply and be admitted no later than the second to last semester in which they are expected to complete their original degree requirements.
- Candidates must satisfy all requirements for each degree. To obtain the MSIS degree, the student will be required to take twelve (12) MIS courses. This includes the one MIS course in the MBA core program, plus eleven MIS courses from the MSIS program, for a total of 36 credit hours. Four of these eleven MSIS courses will be used to satisfy part of the elective requirements of the MBA program. To obtain the MBA degree, the student will have to fulfill all the MBA program requirements. The two degrees will have five common courses. All courses transferred between degrees must be completed with a grade point average of 3.0 or higher. MSIS courses transferred to meet MBA elective credit must be 6000 level courses approved by the University Curriculum Committee. Directors of the MBA and MSIS degree programs mav adjust these exact course requirements as a result of future changes to the MBA or MSIS curriculums.
- 4. Joint degree candidates will not receive either degree until all requirements for both programs have been satisfied. Students deciding against completing a second degree must satisfy all first degree program requirements as if the student had never been a joint degree candidate. With the joint degree program students will take a total of 76 credit hours to get both degrees. Without the joint degree program students will need to take 91 credit hours to get both degrees. Thus, MBA students who have taken twelve credits of MSIS common courses may obtain an MSIS degree with an additional 21 credits. MSIS students who have taken three credits of a MBA core MIS course may obtain an MBA degree with only 40 credits.

For additional information, contact the Evening MBA office at (305) 348-3256 or the MSIS Office at (305) 348-6852.

### Combined MPH/Graduate Certificate in Healthcare Management

The Department of Health Policy and Management in the Robert Stempel College of Public Health and Social Work and the Health Management Programs in the Chapman Graduate School of Business are jointly proposing a new track of a Masters of Public Health (MPH) degree and a Graduate Certificate in Healthcare Management. An MPH with a specialization in Health Policy and Management provides students with grounding in public health, health policy analysis, health economics, public health leadership, and an introduction to qualitative and quantitative research methods. The Graduate Certificate in Healthcare Management is designed to provide breadth of knowledge in the healthcare management field. The objective of the graduate certificate is to provide individuals with the basic understanding of management, operational, and reimbursement issues challenging today's health care organizations.

Students are admitted to the MPH program once a year in the fall semester as a cohort. Classes begin in the fall semester in the College of Public Health and Social Work, concentrating on training in the core areas of public health. Students begin work in the graduate certificate during the second year, while taking public health courses. Requirements for the MPH are completed at the end of the second year. Nine credit hours (three courses) in the Certificate Program can be applied towards the student's MPH degree. Three credit hours (one course\*) in the MPH program can be applied towards the student's Certificate program. The remaining three credit hours (one course) in the Certificate Program must be completed prior to completing the MPH degree. Courses in the College of Public Health and Social Work are offered on a traditional semester schedule. Courses in the Graduate Certificate in Healthcare Management are offered using an 8-week hybrid schedule. This certificate program is open to degree-seeking students only.

#### **Required Credits**

Students will complete 45 degree credits required for the MPH, 9 credits of which will be credits from the certificate program. These nine credits are substitutes for electives in the MPH program. To obtain the certificate, students must complete an additional 6 credits, for a total of 15 credits, in the certificate program.

#### **Required Courses**

Students interested in pursuing the MPH/Certificate will apply to the MPH program in the College of Public Health and Social Work and the Certificate program in the College of Business. Before applying, students will be encouraged to speak with an advisor in the Department of Health Policy and Management and the advisor for the Graduate Certificate in Healthcare Management in the Chapman Graduate School of Business. Application for the Certificate program is completed after acceptance into the MPH program.

To be considered for admission to the College of Public Health, students must have, at minimum, a GPA of 3.0, GRE scores in the top 20<sup>th</sup> percentile, and strong letters of recommendation from three faculty familiar with previous academic performance.

Students will be admitted to and enroll in the MPH program. Students will be required to complete all the requirements of the MPH degree program. The 15 hour core elements of the MPH degree will be completed. Students will enroll in the certificate program in the second year.

Required courses included in the plan are:

PHC 6000	Epidemiology I: Introduction to Public	
	Health Epidemiology	3
PHC 6065	Public Health Statistics	3
PHC 6315	Introduction to Environmental Health	3
PHC 5430C	Public Health Economics	3
PHC 6102	Introduction to Public Health Policy and	
	Management	3
PHC 6155C	Health Policy Analysis	3
PHC 6063C	Health Policy Database Applications	3
MAN 6095	Management of Healthcare	
	Organizations in the 21st Century	3
HSA 6176	Financing & Reimbursement of Health	
	Systems	3
PHC 6930C	Integrative Seminar in Public Health	3
PHC 6104C	Public Health Management and	
	Leadership	3
HSA 6197	Design and Management of Health	
	Information Systems	3
HSA 6759	Quality Assessment and Outcome in	
	Healthcare	3
Two Public Health Elective		

#### MIS Concentration in the Ph.D. Program

The Department of Decision Sciences and Information Systems offers a Management Information Systems (MIS) concentration in the doctoral program in Business Administration. The concentration requires completion of the following six courses (18 credit-hours):

ISM 7935	Foundations of IS Research
ISM 7306	Seminar on Strategy and Information
	Resource
COP 7545	File and Database Systems
ISM 7126	Seminar on Systems Analysis
ISM 7406	Decision Support Systems
ISM 6156	Enterprise Information Systems

Please contact the Ph.D. program director, Professor Ronald M. Lee for further requirements and details.

## Graduate Certificate in Healthcare Management

The objective of this graduate certificate is to provide individuals with a basic understanding of the context, management and reimbursement issues for health services organizations.

#### **Admission Requirements**

Students must have an earned baccalaureate degree with a GPA of 2.75 or higher. This certificate is open to both degree-seeking students and those who are not currently enrolled at FIU.

#### Prerequisite:

Computer skills including: Word, Excel and PowerPoint

### Program of Study (15):

MAN 6095	Management of Healthcare	
	Organizations in the 21st Century	3
HSA 6176	Financing and Reimbursement of Health	
	Systems	3
MAN 6830	Organization Information Systems	3
HSA 6155	Health Policy and Economics	3
MAN 6501	Operations Management	3