UNIVERSITY OF SAN FRANCISCO
College of Professional Studies

(MSIS) Master of Information Systems—Program Assessment Plan

Program Goals

Students who complete the Master of Information Systems will be able to:

1. Address the needs of organizations to define and develop effective information systems, both for the introduction of new systems and the enhancement of legacy systems, fostering effective communication channels for both internal and external stakeholders.
2. Recognize both the opportunity and demands of emergent technologies, including communications and networking, information security, publicly available information systems, and newly-available information tools.
3. Utilize information technology to be economically responsible, to foster sound financial systems, to create more effective organizational structures, and to understand how policy and strategic decisions are affected by information systems.
4. Demonstrate Information Systems-relevant people, business, and team skills, incorporating ethics, humanistic values and professionalism.

Program Learning Outcomes

- Students will develop competence in systems design and analysis techniques, including core database concepts, using both hierarchical and object-oriented approaches. (Goal 1)
- Students will identify and incorporate communications, networking and information security issues as they relate to information systems, organizations, and organizational policy. (Goal 2)
- Students will utilize, evaluate, store, archive and manage emergent information systems within present-day organizations, including strategies to effectively ensure success in these activities. (Goal 2)
- Students will identify the economic and financial management issues relative to information systems and organizations, including the legal, regulatory and ethical implications. (Goal 3)
- Students will identify all aspects of project management relative to the information systems development life cycle and change/updates to in-place information systems, and relate these aspects to system design and relevant economic considerations. (Goal 3)
- Students will be able to produce professional quality documents ready for submission to management, professional technical implementers, and other stakeholders. (Goal 4)
- Students will integrate the collective expertise incorporated herein and reflect on the ethical and humanistic aspects of information systems. (Goal 4)

Curriculum Map

Your Program/Departmental Goals/Outcomes	Your Course Numbers															
	MSIS 612	MSIS 611	MSIS 620	MSIS 625	MSIS 613	MSIS 651	MSIS 624	MSIS 647	MSIS 631	MSIS 648	MSIS 656	MSIS 626				
1. Address the needs of organizations to define and develop effective information systems, both for the introduction of new systems and the enhancement of legacy systems, fostering effective communication channels for both internal and external stakeholders.																
a. Students will develop competence in systems design and analysis techniques, including core database concepts, using both hierarchical and object-oriented approaches.	C	C	I	I			I		M	I	I	I				
2. Recognize both the opportunity and demands of emergent technologies, including communications and networking, information security, publicly available information systems, and newly-available information tools.																
a. Students will identify and incorporate communications, networking and information security issues as they relate to information systems, organizations, and organizational policy.		I			C	C		I	C	M		M				
b. Students will utilize, evaluate, store, archive and manage emergent information systems within present-day organizations, including strategies to effectively ensure success in these activities.	I	M				M	M	C	C	C	C	M				
3. Utilize information technology to be economically responsible, to foster sound financial systems, to create more effective organizational structures, and to understand how policy and strategic decisions are affected by information systems.																
a. Students will identify the economic and financial management issues relative to information systems and organizations, including the legal, regulatory and ethical implications.			C	C	I	M			I	I	M	M				
b. Students will identify all aspects of project management relative to the information systems development life cycle and change/updates to in-place information systems, and relate these aspects to system design and relevant economic considerations.	I		M	I			C			I		I				
4. Demonstrate Information Systems-relevant people, business, and team skills, incorporating ethics, humanistic values and professionalism.																
a. Students will be able to produce professional quality documents ready for submission to management, professional technical implementers, and other stakeholders.	C			C			M	C	I	I	M	C				
b. Students will integrate the collective expertise incorporated herein and reflect on the ethical and humanistic aspects of information systems.	I		M	I		I	I	C	M	I		C				

Key I = Introduced with minimal coverage M = Moderate Coverage C = Comprehensive Coverage

Outcome Rubrics

Outcome	Very Poor Achievement of Outcome	Poor Achievement of Outcome	Average Achievement of Outcome [Benchmark Standard]	Good Achievement of Outcome	Very Good Achievement of Outcome
1. Develop competence in systems design and analysis techniques, including core database concepts, using both hierarchical and object-oriented approaches.	Inaccurate descriptions of information systems use cases and essential data; Incomplete design specifications; Able to perform only some practical methods	Partial descriptions of information systems use cases and/or essential data; Incomplete design specifications; Able to perform practical methods but only for simple cases	Able to produce at least 1 complete and accurate systems design document; able to perform all practical methods	Produced a complete and accurate systems design document relevant to their current business; Adjusted methods to meet the unique situation of their business environment	Produced a complex systems design document relevant to their current business; Engaged in a feedback cycle with their business environment
2. Identify and incorporate communications, networking and information security issues as they relate to information systems, organizations, and organizational policy.	Unable to comprehend most of the current technical state of communications and networking, information security, and related tech issues. Unable to apply to information policy and systems design.	Able to comprehend most of the current technical state of communications and networking, information security, and related tech issues. Unable to apply to information policy and systems design.	Able to comprehend the current technical state of communications and networking, information security, and related tech issues. Able to apply to information policy and systems design.	Comprehends the current technical state of communications and networking, information security, and related tech issues. Has applied to information policy and systems design in their business environment.	Comprehends the current technical state of communications and networking, information security, and related tech issues. Has applied to information policy and systems design in their business environment, and engaged in a feedback cycle.
3. Utilize, evaluate, store, archive and manage emergent information systems within present-day organizations, including strategies to effectively ensure success in these activities.	Unable to identify and/or understand most information systems within enterprises; Understands some of the principles including e-business, etc.; Cannot relate strategies and policy to principles; Cannot relate to own business environment.	Can identify all all information systems within enterprises, but only understands two-three applications; Understands many of the principles including e-business, etc.; Can understand strategies and policy, but not incorporate principles; Cannot relate to own business environment.	Able to identify and understand at least 4 different types of information systems within enterprises; Understands principles including e-business, data warehousing, and global information systems; Can incorporate into strategies and policy.	Able to identify and understand information systems within enterprises in general and their business environment; Understands principles including e-business, etc.; Can incorporate into strategies and policy, and has reviewed policies within their business environment.	Able to identify and understand information systems within enterprises in general and their business environment; Understands principles including e-business, etc.; Can incorporate into strategies and policy, and has reviewed policies within their business environment; Has engaged in a feedback cycle.

4. Identify the economic and financial management issues relative to information systems and organizations, including the legal, regulatory and ethical implications.	Unable to identify most of the economic aspects of the information systems development life cycle and/or the management of information systems on an ongoing basis; Cannot relate to own business environment.	Unable to identify the all the economic aspects of the information systems development life cycle and/or the management of information systems on an ongoing basis; Cannot relate to own business environment.	Able to identify the economic aspects of the information systems development life cycle and the management of information systems on an ongoing basis.	Able to identify the economic aspects of the information systems development life cycle and the management of information systems on an ongoing basis; Can relate to their own business environment.	Able to identify the economic aspects of the information systems development life cycle and the management of information systems on an ongoing basis; Can relate to their own business environment; Has engaged in a feedback loop.
5. Identify all aspects of project management relative to the information systems development life cycle and change/updates to in-place information systems, and relate these aspects to system design and relevant economic considerations.	Unclear on all the elements of the information systems development life cycle and cannot relate them to project management skills; Cannot produce many standard project management methodologies, and cannot relate these to information systems.	Unclear on all the elements of the information systems development life cycle and cannot relate them to project management skills; Can produce some project management methodologies, but not all	Able to identify all the elements of the information systems development life cycle and related them to project management skills; Can produce Work Breakdown Structures, Gantt charts and other similar project management methodologies	Able to identify all the elements of the information systems development life cycle and related them to project management skills; Can produce Work Breakdown Structures, Gantt charts and other similar project management methodologies; Has related activities to actual business projects	Able to identify all the elements of the information systems development life cycle and related them to project management skills; Can produce Work Breakdown Structures, Gantt charts and other similar project management methodologies; Has related activities to actual business projects; Has implemented in the workplace and/or engaged in a a feedback look.
6. Be able to produce professional quality documents ready for submission to management, professional technical implementers, and other stakeholders.	Produced an incomplete systems design document which does not meet professional standards.	Produced an incomplete systems design document meeting professional standards or a complete design specification below standard.	Produced at least 1 complete and accurate systems design document, which attains professional quality standards	Produced at least 1 complete and accurate systems design document, which attains professional quality standards on a project within their business environment	Produced at least 1 complete and accurate systems design document, which attains professional quality standards on a project within their business environment; engaged in a feedback cycle
7. Integrate the collective expertise incorporated herein and reflect on the ethical and humanistic aspects	Produced an incomplete final project including an information system, and lacked ethical and/or human implications.	Produced a complete and accurate final project including an information system, but lacking in ethical and human	Produced a complete and accurate final project including an information system and its ethical and human implications.	Produced a complete and accurate final project including an information system and its ethical and human implications;	Produced a complete and accurate final project including an information system and its ethical and human implications;

of information systems.		implications.		Project was within their business environment.	Project was within their business environment; Engaged in a feedback cycle.

Assessment Measures

Note: The assessments for Academic Year 2008-2009 shall include four courses:

1. *MSIS 612 Analysis, Modeling, and Design*
2. *MSIS 611 Database*
3. *MSIS 620 Economics for IS Managers*
4. *MSIS 625 IT Policy and Strategy*

The remaining MSIS courses shall be assessed in AY 2009-2010 and 2010-2011. This document covers only those Assessment Measures which shall be undertaken in AY 2008-2009.

APPENDIX: MSIS Course Descriptions and Course Learning Outcomes

Outcomes

The learning outcomes for each course are directly embodied in the homework, tests, presentations and projects assigned during the course and well-established in each course's syllabus. The attainment of learning is assisted by course design. While course-dependent, several tools are essential to success: (1) All assignments are delivered from the student to the teacher electronically via Blackboard, (2) Student assignments are broken down into smaller units and even large projects unfold through the period of the course, (3) Grading feedback is continuous throughout the course via Blackboard on-line grading and via in-person feedback, and (4) as these are small, on-going cohorts of students, who spend just over two years together, Wiki's (on Blackboard) are used so that students have access to selections of other student's work. In this way, all may see various levels of achievement, anyone may incorporate this performance and skill sets into their own work, and there is no question as to the expected level of performance relative to grades.

Analysis, Modeling, and Design (MSIS 612):

This course focuses on Outcomes 1, 3, 5, 6 and 7.

This course provides an introduction to the fundamentals of systems analysis and design. It is designed to provide a firm understanding of:

- Object-Oriented Development and the Unified Process
- Project Management and the Inception Phase
- The Requirements Discipline
- Use Cases and Domain Models
- Design Activities and Environments
- Designing the Data Access Layer and the User Interface Layer
- Designing System Interfaces, Controls, and Security

Database (MSIS 611)

This course focuses on Outcomes 1, 2 and 3.

This course provides an introduction to the fundamentals of database design. It is designed to provide a firm understanding of:

- How to analyze and model business processes so that they may be supported by well designed database systems
- The structure of relational database systems, their underlying theory, and their power and limitations
- How to use 1) and 2) to design and implement real life database systems
- How to use relational database systems (programming in SQL, query processing)
- How to hold managerial database design meetings

Economics for IS Managers (MSIS 620)

This course focuses on Outcomes 1, 4, 5 and 7.

This course provides an introduction to the fundamentals of economics for both information systems development and in an ongoing information systems organization. It is designed to provide a firm understanding of:

- The micro- and macroeconomic views of information technology in organizations and society
- The key analytical methods available to facilitate effective decision-making for IT investments
- The management of a portfolio of IT investments

IT Policy and Strategy (MSIS 625)
This course focuses on Outcomes 1, 4, 5, 6 and 7.

This course provides an introduction to IT Policy and Strategy. It is designed to provide a firm understanding of:

- How Information Systems can be used strategically to achieve goals
- The CIO's perspective on the internal management of information systems services?
- How Information Systems policies and strategies impact us, as professionals, in a variety of positions, firms, and industries

Time Frame

The timeframe for analysis of these four courses is:

MSIS 612 Analysis, Modeling, and Design
Fall, 2008 Cohorts T0709/V0709

MSIS 611 Database
Fall, 2008 Cohorts T0709/V0709

MSIS 620 Economics for IS Managers
Spring, 2009 Cohorts TBD

MSIS 625 IT Policy and Strategy
Spring, 2009 Cohorts TBD

Who Will Do the Assessment?

Information Systems Program Director Dr. Moira Gunn will be responsible for the assessment, working with each instructor to carry out the assessment. Dr. Gunn is teaching the MSIS 612, and Dean Richard Beer will be teaching MSIS 611. Instructors for MSIS 620 and MSIS 625 have not yet been appointed.

How Data Will Be Used to Improve Program

Where students achieve a performance of "poor" or "very poor", additional attention will be given to that module within the course, as well as the student work and feedback approach to that work. An overall assessment of the achievement of program learning outcomes will be prepared on an annual basis by the Program Director and shared with the faculty through email distribution and at the annual faculty meeting. Changes in the curriculum or in individual courses suggested by the assessment will be implemented.