The IS 2009 curriculum specifies a general course (Fundamentals of Information Systems) to provide an understanding of and skills related to Information Systems suitable for all students. This course establishes a foundation for specialized courses related to functional area information systems.

Students majoring in other subjects may wish to have a minor in Information Systems. The IS 2009 curriculum defines a subset of the courses in the major suitable for a minor. The courses include IS Strategy, Management & Acquisition, Enterprise Architecture, and Data and Information Management.

For Information Systems Practitioners

The report provides a basis for practitioner interaction with IS academic units in at least three ways: to gain an understanding of the model curriculum and therefore, the competencies of the graduates of the program, to identify opportunities for enhancing the educational experience for the students (for example, guest speakers, internships, advisory board memberships, and so forth), and to enable a continuous dialogue to improve the curriculum and the educational experience of students.

For Information Systems Students

For students who are enrolled in an IS program, this report can add to their understanding of the breadth and depth of the IS field and the career opportunities. Information in this report can prepare students for discussions with academic advisors as to options and choices in the program and strategies for entering the job market.

2. INFORMATION SYSTEMS MODEL CURRICULA

IS 2009 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems is the latest report on the model curriculum work in the Information Systems field. The work of IS curriculum task forces began in the early 1970s and has continued for the past 30+ years. The Association for Computing Machinery (ACM) has been a major organizer for these task forces including the first efforts in the 1970s. Other organizations, including AIS (Association for Information Systems), AITP (formerly DPMA) and IFIP (International Federation for Information Processing), have contributed significantly to model curriculum development.

IS 2009 is the third collaborative effort by ACM and AIS. Both organizations have worldwide membership. ACM has both professional and academic members in the broad field of computing. Through its Education Board, it supports a wide range of curriculum development including Computer Engineering, Computer Science, Information Systems, Information Technology, and Software Engineering. AIS, established in 1994, is primarily composed of faculty members in Information Systems. The partnership of ACM and AIS, therefore, combines the breadth of pedagogical and curriculum interests of these organizations.

Since ACM and AIS are worldwide organizations, IS 2009 includes elements that make it more universally adaptable than its predecessors. The separation of the core courses from the electives makes it easier to create curricula that both are compatible with the model curriculum and address local requirements that vary widely. IS 2009 is not directly linked to a degree structure in any

specific environment but it provides guidance regarding the core content of the curriculum that should be present everywhere and suggestions regarding possible electives and career tracks based on those.

IS 2002 (Gorgone et al. 2003) was a relatively minor update of IS'97, the latest comprehensive revision of the IS model curriculum. IS 2002 included new material related to the explosive growth of the Internet and electronic business, to the extent that it included a new course specifically targeted to this topic area. Otherwise, the changes were mostly minor in nature. The previous curriculum model, IS '97 (Couger et al. 1997; Davis et al. 1997) was circulated in draft form in 1994 (Gorgone et al. 1994; Longenecker et al. 1994) and 1995 (Couger et al. 1995) and finalized in 1996. Therefore, a significant revision of the model curriculum is clearly needed and overdue. These reasons will be discussed at a more detailed level in Section 4.

The next sections present the principles guiding the curriculum revision and provide further motivation for updating IS 2002. This is followed by a review of guiding assumptions about the IS profession that helped to shape the curriculum design and evolution. Key elements of the curriculum update from IS 2002 to IS 2009 will follow. Next, the report provides a description of Information Systems as a field of academic study. The relationship of the IS courses and programs at various levels is explained. This document presents an entirely new, significantly expanded section on outcome expectations for the Information Systems graduates. This is followed by a brief presentation of the curriculum architecture, the resources needed for IS degree programs, and courses shared with other computing disciplines. Finally, the report concludes by providing high-level course descriptions of the IS 2009 model curriculum and appendices for reference.

3. PRINCIPLES GUIDING THE CURRICULUM DESIGN

The key principles that guided this effort were as follows:

1. The model curriculum should represent a consensus from the Information Systems community.

2. The model curriculum should be designed to help Information Systems faculty produce competent and confident entry level graduates well suited to workplace responsibilities.

3. The model curriculum should guide but not prescribe. Using the model curriculum guidelines, faculty can design their own courses and schools can design their own programs.

4. The model curriculum should be based on sound educational methodologies and make appropriate recommendations for consideration by Information Systems faculty.

5. The model curriculum should be flexible and adaptable to most Information Systems programs.

6. The model curriculum is not restricted to a specific domain; all Information Systems programs are, however, linked to some domain.

7. The model curriculum has a core of content that is common to all Information Systems programs.