CAMPUS SENATE AY 2007/2008
RESOLUTION 37-4

Proposal for Graduate Certificate in Digital Organizations
in the Department of Management Information Systems

WHEREAS, the Department of Management Information Systems has proposed a Graduate Certificate in Digital Organizations [12 credit hours]; and

WHEREAS, the Graduate Council approved their request at the meeting of May 7, 2007,

THEREFORE, BE IT RESOLVED that the Campus Senate of the University of Illinois at Springfield hereby approve the Graduate Certificate in Digital Organizations.
Proposed Graduate Certificate in Digital Organizations  
College of Business and Management  
Management Information Systems Department

Purpose of certificate: Objectives and Learning Outcomes

The purpose of the Certificate in Digital Government is to provide information systems practitioners with the fundamental knowledge needed to be able to successfully apply new and emerging information technology solutions to the providing of government services. The initial motivation for this certificate comes from the Management Information Systems Department’s emerging relationship with the State of Illinois’ Illinois Technology Board of Advisors (ITBA).

The Illinois Technology Board of Advisors (ITBA) is a consortium of Information Technology professionals, consisting of more than 200 active members. The group consists of Chief Information Officers, Directors of Technology, or other senior IT professionals serving in various positions throughout Illinois State Government. This organization provides a forum for identification, discussion, collaboration, and resolution of common issues that arise within the state’s IT community. The ITBA works with the Governor’s Office, Central Management Services, and other policy making bodies to promote enhanced quality, productivity, and operational efficiency within technology-enabled business solutions. More recently, the ITBA has extended its collaborative processes to include associate members from local government, educational institutions, and other government entities.

The state has undergone a series of early retirement initiatives, staffing reductions, and above average attrition. As a result, it now needs to redevelop the specialized knowledge and expertise of its professional and technical staff in order to pursue anticipated technology-enabled business initiatives. Additionally, its’ professional and technical staff needs to learn new skills and best practices not utilized in the past.

Based on a survey of state CIO’s and IT Managers, 94% agree there is a compelling need for professional certification and continuing education opportunities for IT professionals in state government. Based on the need for state government to improve delivery of services to constituents, a certificate in Digital Government is an important step in developing the skills needed to help make this a reality.

The growth of the Internet and digital technologies has provided an opportunity for government entities to improve their level of service to their constituencies (citizens, businesses and other government entities). Through the use of these technologies, government entities can make it easier for their constituents to access the services they need, can be more responsive to their needs, and can reduce the costs of providing services. To accomplish this, government entities need to effectively use new and emerging technologies. Consequently, information technology practitioners are needed who understand how apply these new technologies to providing services. At this point the State of Illinois as well as many other government entities are at the point where
providing services electronically is a must. Reduced budgets and staffing make it difficult to provide acceptable levels of services to constituents. As a result new, more effective and efficient means of providing these services needs to be implemented. Using technologies such as the Internet appear to be ideal solutions to this problem.

While the motivation for this certificate comes from the government sector, much of the same needs in the field of information technology exist in the private sector as well (eBusiness – constituents are customers, government, and other business partners). Consequently, this certificate will serve not only information technology practitioners in state government; it will be equally valuable for private sector practitioners as well.

**Target audiences**

Information technology practitioners, from both the public and private sectors, who need to acquire knowledge and skills needed to provide new and emerging technologies to providing services. Within the state government environment, this represents in excess of 1200 employees.

**Proposed curriculum**

The certificate may be taken as a stand-alone piece or may be incorporated into a student’s work on a Master of Science in Management Information Systems degree. The certificate will consist of the three courses listed below. Two of these courses currently exist in the Master of Science in Management Information Systems degree program. The third course, Emerging Technologies and Issues is a new course which will be developed and is a recommended required course for the MSIS 2006 Model Curriculum for Graduate Degree Programs in Information Systems.

MIS 513 – Management Information Systems (4 hours)

Provides a foundation for understanding and analyzing information in organizations. Fundamental concepts of systems and information are covered. Topics include computer-based information systems, user requirements, and analysis and specification of systems requirements, life cycle, and security.

MIS 571 - Electronic Commerce: Business Uses of the Internet (4 hours)

Tools and technologies needed for electronic commerce are reviewed. Business opportunities, challenges, and strategies for use of the information superhighway will be explored, as will strategies and vision on how to leverage the emerging national and global information infrastructure. Other topics include the impact of the emerging electronic market and commerce reengineering in today's corporations.

Emerging Technologies and Issues (new course) (4 hours)

The course provides an understanding of both technical and managerial issues, as well as strategic implications of emerging technologies and issues. Upon completion of the
course, students should be able to (a) understand key enabling technologies and become an effective participant in technology-enabled organization endeavors and initiatives; (b) recognize ways of leveraging the technology to improve intra and inter-organizational processes and enhance a firm’s competitive position; (c) gain skills for building careers and taking advantage of entrepreneurial opportunities through emerging technologies, and (d) understand the factors that influence how relevant an emerging technology will be in the long run.

Certificate total – 12 hours.

**Relation to degree programs**

Two of the three courses that make up this certificate are required courses for the Master of Science in Management Information Systems degree and are offered on a regular basis. The third course, Emerging Technologies and Issues is a new course which will be developed and is a recommended required course for the MSIS 2006 Model Curriculum for Graduate Degree Programs in Information Systems.

**Occupational and/or student demand**

An increasingly competitive and ever-changing work environment provides a compelling reason for public (and private) sector employees to pursue continuing education and/or professional development opportunities. The state has already begun a comprehensive information management metamorphosis including upgrading its infrastructure and establishing an enterprise architecture model. The state must continue to incorporate state-of-the-art technologies and business best practices in order to significantly reduce its operating costs while simultaneously increasing the overall business value and efficiency of its current communications and computing environment. A key to success in this effort is the development of a significant number of employees with skills in the area of digital government. There will be an ongoing need to have employees who have the knowledge and skills to apply new and emerging technologies to providing services.

Through the collective support of the ITBA membership, tuition reimbursement could be promoted as a priority throughout the state to provide assistance to those employees wishing to pursue this certificate.

Additionally, all courses within the certificate will be offered online and on-campus. It is expected that online demand will be greater than on-campus demand. One factor pushing a higher demand for online certificate programs is highlighted in a recent article in The Chronicle of Higher Education. In the article it states, “More employers prefer online training to traditional classroom learning when it comes to college and university certificate programs for their workers, according to a new report from Eduventures Inc. … According to the report, 52 percent of employers surveyed said they would be likely or very likely to purchase, endorse, or support a traditional classroom program at a main college campus, while 64 percent responded the same way regarding an Internet-only format …”
F. Staffing and resource requirements

The implementation of this certificate uses existing courses and a future course which will be taught by existing faculty. These courses are offered on a regular basis and historically seats are available in the two existing courses, particularly for on campus sections. Depending on the success of the Digital Government Certificate program, additional sections may need to be offered.

Administrative issues

1. Responsible Administrative Unit

   College of Business and Management, Management Information Systems Department.

2. Admissions

   a) Eligibility

      Possession of Bachelor’s degree.

   b) Admissions process

      Applicants would follow normal admission procedures.

3. Advising

   An advisor from the Management Information Systems department will be assigned.

4. Tracking

   Files for each student will be kept in the Management Information Systems department central office.

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