Interest in the use of mobile technology among organizations has seen a strong, upward trend over the past few years. The proliferation of smartphone and tablet devices has presented organizations with new challenges, creating and developing a coherent strategy associated with this new innovation.

In order to create this strategy, organizations will need an understanding of the mobile industry in general and specific technologies supporting the trend. People capable of creating and maintaining mobile technology strategies are needed, but the in-depth education necessary for these people is limited.

The Graduate Certificate in Mobile Business & Technology is designed to cover the mobile industry as well as the technologies, devices, operating systems, user interface design, and tools of mobile applications. The focus will be on the mobile industry and technologies that allow an organization to make decisions in this dynamic domain.

Admission requirements

The graduate certificate program is open to all individuals holding a BS, MS or PhD degree in areas such as business, social sciences, technology, engineering, or related disciplines. In order to receive a Graduate Certificate, the student must have an average graduate cumulative grade point of 3.0 or better on a 4.0 scale in the certificate courses taken. Students admitted only to the certificate program will have non-degree graduate status but will earn graduate credit for the courses they complete. If the four-course sequence approved by the graduate advisor is completed with a grade of B or better in each of the courses taken, the student will, upon application, be admitted to the Master of Business Administration or to the Master of Science in Information Science and Technology. The certificate courses taken by students admitted to the program will count towards the MBA program or the M.S. in Information Science and Technology degree program. Once admitted to the Certificate program, a student will be given three years to complete the program as long as a B or better average is maintained in the courses taken.
COURSE DESCRIPTIONS

REQUIRED CORE COURSES

IST 6335: Mobile Technology for Business
Overview of mobile technology use in business environments. Topics include: mobile industry; mobile network & wireless standards; mobile devices; mobile web design & app development; social & user experience issues; mobile marketing & commerce. Project required.
Prerequisites: IST 3333 or equivalent.

ERP 5240: Enterprise Portal and Mobile Application Development
This course provides conceptual foundation and hands on experience in web based applications development deployed through an Enterprise Portal and Mobile platform. SAP Netweaver Enterprise Portal and tools including Visual Composer, Web Dynpro, and Sybase Unwired Platform will be used for apps.
Prerequisites: Programming knowledge and either ERP 2110 or preceded or accompanied by ERP 5110.

ELECTIVE COURSES (CHOOSE 2)

ERP 5310: Supply Chain Management Systems in an ERP Environment
The course studies the need for supply chain integration and the challenges of managing complex interfaces using the systems approach for the planning, analysis, design, development, and evaluation of supply chain. SAP's ERP ECC, SCM, BW, and Sybase Unwired Platform are used to deploy SCM apps.
Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110.

ERP 5210: Performance Dashboard, Scorecard, and Data Visualization
This course will study different performance management systems including dashboards, management cockpit, scorecards, and strategy maps in an organization. SAP's BW, Business Objects Xcelsius, Crystal Reports, Sybase Unwired Platform will be used to develop the applications.
Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110.

ERP 6610: Advanced Customer Relationship Management in ERP Environment
Identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers. Effective and efficient mgmt of customers, using IT. SAP CRM, SAS BI tools, and Sybase mobile application development are used. Research paper and presentation required.
Prerequisite: ERP 2110 or preceded or accompanied by ERP 5110.

ERP 5652: Advanced Web Development
Advanced Web development techniques to provide dynamic interaction; methods for extracting and delivering dynamic information to/from Web servers - a hands-on approach. Emphasis on interaction with servers; mobile software development; processing of graphics & web video. Project work is required.
Prerequisites: IST 1551 & IST 4654.

IST 5652: Advanced Web Development
Advanced Web development techniques to provide dynamic interaction; methods for extracting and delivering dynamic information to/from Web servers - a hands-on approach. Emphasis on interaction with servers; mobile software development; processing of graphics & web video. Project work is required.
Prerequisites: IST 1551 & IST 4654.

IST 5886: Prototyping Human-Computer Interactions
This course covers methods and tools for creating low and high fidelity prototypes of IT systems as well as design concepts, including best practices and guidelines for different form factors (e.g., desktop vs. mobile).
Preceded or accompanied by IST 5885.