

approved by the graduate program director. May be repeated for credit up to 6 credits. Class open to graduate students.

Information Systems Management (M.S.)

We live in a society that is increasingly dependent upon the exchange of information and information services. More and more organizations recognize that their information resources are high-value assets of strategic significance and they rely upon rapid access and evaluation of accurate information for their survival.

The application of information technology and information systems is changing not only the way organizations do business but also organizational structures. Competition and cooperation in our global, networked, and dynamic environment has created a need for people who can work together in teams and apply information technology and information systems to meet organizations' information requirements.

This program serves managers who want to know how to apply information technology and information systems to solve important problems in organizations. It also serves systems analysts and designers with computer science backgrounds who need to understand the broader role of information systems in organizations. The program prepares a student to integrate information systems and business processes as a project manager, an information manager, and, ultimately, as a CIO.

Seattle Pacific University's School of Business and Economics is committed to providing an applied, experiential, and collaborative learning environment in which information systems and Christian faith, ethics, and character are integrated. A team-centered educational approach provides students with opportunities for extensive group work and group interaction. Hands-on application of information technology is emphasized. The objectives of the information systems management (ISM) program are to develop students' ability to do the following:

- Provide values-based leadership in the planning, development, and management of information systems.
- Effectively integrate information systems with business strategies, processes, and decision making.
- Evaluate the effects of information systems on organizations and personnel, and assist in managing the resultant transitions.
- Communicate effectively, work in teams, and self-assess personal abilities, strengths and weaknesses.

ADMISSION

In addition to general University requirements for admission, applicants must submit a three- to four-page personal essay and a current résumé. Evidence of a minimum of one full year of work experience is a significant factor in the admission decision process. GRE scores above 525 quantitative and 450 verbal minimum are preferred or GMAT scores above 460. A TOEFL score of more than 565 for the paper-based test or 225 for the computer-based test (or equivalent TOEIC scores) is preferred for international ESL applicants.

PRE-QUALIFIED STUDENTS

Qualified individuals may take up to two background courses if they have an undergraduate degree (as evidenced by an official transcript from an accredited institution); a minimum cumulative undergraduate GPA of 3.0; and a minimum of one year full-time work experience (as evidenced by a current résumé). Pre-qualified students may not take advanced or elective courses. If they wish to continue in a graduate program, they must apply for admission. Pre-qualified status does not guarantee full admission at a later date.

APPLICATION DEADLINES

The School of Business and Economics admits students for all four academic quarters. The application for admission, application fee, and personal statement (essay) must be received by the dates listed below.

Recommendation letters, transcripts, and test scores must all arrive before an admission decision can be made.

Quarter/Starting Month	Application Deadline
Autumn/September	August 1
Winter/January	November 1
Spring/March	February 1
Summer/June	May 1

Application Deadlines for International Students

Quarter/Starting Month	Application Deadline
Autumn/September	June 1
Winter/January	September 1
Spring/March	December 1
Summer/June	(Not open to international students)

CONTACTS

Admission into the ISM program at Seattle Pacific University is administered by the School of Business and Economics. All correspondence and admission materials should be directed to the associate graduate director. Questions or requests for an admission application may be directed to the associate graduate director at 206.281.2753, faxed to 206.281.2733, or emailed to ism@spu.edu. For more information, visit www.spu.edu/sbe.

PREREQUISITES

Students must show familiarity with programming or Web development. Skills in word processing, spreadsheets, and databases are also prerequisite. Background courses generally precede and are sometimes prerequisite to other core or elective courses. Background courses (6 credit hours) cover basic business processes that must be understood to achieve the program's objectives. Many students have covered some or all of this subject matter in an undergraduate program. If so, it is possible to waive background courses on the following basis:

1. If the student has a bachelor's degree that was earned within seven years of admission to the ISM program, any courses completed that cover the same body of knowledge as background courses in the ISM program may be waived. To qualify, a minimum grade of B or better must have been received in the undergraduate course. Courses taken pass/no credit will not waive the ISM background course requirement.
2. If the bachelor's degree was completed more than seven years prior to admission, or if the grade in the undergraduate course is below B but not below C+, the student may take a competency examination in the subject. Competency tests must be completed within the year following the student's date of admission to the program. If the competency examination is successfully completed, the applicable ISM course will be waived. If not, the student must take the ISM course as a regular student or successfully complete a credit by examination test for which tuition and an examination fee are charged.

REQUIRED COURSES

Required courses total 36 credit hours. These courses may not be waived and transfer credit from other institutions will be given only for graduate-level courses covering the same body of knowledge. Students may transfer a maximum of three courses (9 credits) from other institutions with the approval of the School of Business and Economics director of graduate studies.

ELECTIVE COURSES

Elective course offerings will vary each year based on student interest and relevance of subject matter to the information systems community.

PROGRAM CURRICULUM

The curriculum consists of prerequisites and background courses (which may be waived by previous coursework), 12 required courses and three elective courses.

Background Courses (6 credits)

BUS 6130 Financial Accounting (3)

BUS 6164 Operations Management (3)

Required Courses (36 credits)

BUS 6201 Christian Values, Ethics, and the Marketplace (3)

BUS 6260 Managerial Communication (3)

BUS 6266 Leadership in Organizations (3)

SM 6211 Introduction to Information Systems Management (3)

ISM 6212 Information Modeling and Database Management (3)

ISM 6213 Enterprise Analysis and Integration (3)

ISM 6225 Ethical, Legal, and Social Environment of Information Management (3)

ISM 6231 Information Systems Project Management I (3)

ISM 6232 Information Systems Project Management II (3)

ISM 6245 Networking and E-Business Infrastructure (3)

ISM 6313 E-Business Models and Strategy (3)

ISM 6331 Information Systems Security (3)

Elective Courses (9 credits)

ISM 6255 Advanced Database (3)

ISM 6335 Software Engineering Management (3)

ISM 6345 Distributed Applications (3)

ISM 6348 End-User Computing (3)

ISM 6910 Seminar in ISM (3)

ISM 6930 ISM Consulting Practicum (3)

ISM 6960 Master's Project (3)

(BUS 6365 and BUS 6390 may be taken.)

ADVISING FOR COURSE SELECTION

To progress through the ISM program in the most efficient manner it is recommended that students follow the curriculum flow model below. ISM students may take one M.B.A. course as an ISM elective. Students should verify that they meet the M.B.A. course prerequisites with their advisor.

Year One

BUS 6130 Financial Accounting (3)

BUS 6164 Operations Management (3)

ISM 6211 Introduction to Information Management (3)

ISM 6212 Information Modeling and Database Management (3)

BUS 6201 Christian Values, Ethics, and the Marketplace (3)

BUS 6266 Leadership in Organizations (3)

ISM 6313 E-Business Models and Strategy (3)

ISM 6245 Networking and E-Business Infrastructure (3)

Year Two

BUS 6260 Managerial Communication (3)

Elective (3)

Elective (3)

ISM 6231 Information Systems Project Management I (3)

ISM 6312 Information Systems Security (3)

ISM 6225 Ethical, Legal, and Social Environment of Information Management (3)

ISM 6232 Information Systems Project Management II (3)

ISM 6213 Enterprise Analysis and Integration (3)

Elective (3)

COURSE DESCRIPTIONS

(See *M.B.A. program for BUS course descriptions.*)

ISM 6211 Introduction to Information Systems Management (3)

Registration approval: Coordinator.

Introduces the key concepts, components, strategies and programs needed to manage information as a strategic resource. Explores the impact of managing information in an environment of constant technological and organizational change. Course equivalent: BUS 6170. Class open to graduate students.

ISM 6212 Information Modeling and Database Management (3)

Registration approval: Coordinator.

Explores the various processes involved in the creation of logical representations of information. Discusses in detail semantic data models, entity-relationship models, relational data models, the object-oriented paradigm, normalization and data flow diagrams. Introduces the use of CASE tools to support modeling activities. Class open to graduate students.

ISM 6213 Enterprise Analysis and Integration (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211, 6212, 6232 and BUS 6130, 6164.

Treats the enterprise as an integrated system. Investigates problems with traditional approaches, identifies issues and potential solutions. Explores techniques for developing information architectures and integrating information strategic and tactical plans with business plans. Addresses managing information systems and organizational changes brought about by information systems. Class open to graduate students.

ISM 6225 Ethical, Legal, and Social Environment of Information Management. (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211 and BUS 6201.

Explores the moral and legal implications of information management issues. Includes topics such as security, privacy, transborder data flow, information ownership and responsibility, information as power, vendor relations, virtual organizations, employee relations, discrimination, behavior in and out of the work place, and other related issues. Class open to graduate students.

ISM 6231 Information Systems Project Management I (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211, 6212 and BUS 6260, 6266.

Introduces the software development life cycle, techniques and tools used, and project management methods. Includes feasibility, analysis and requirements definition. Explores the provision of values-based leadership to IS project teams. Class open to graduate students.

ISM 6232 Information Systems Project Management II (3)

Registration approval: Coordinator.

Prerequisite: ISM 6231

Continues the system development and management practices begun in ISM 6231. Covers the techniques, tools, project management methods and leadership issues related to managing the activities of the design, development, test, implementation and maintenance stages of the software development life cycle. Compares other SDLC approaches including object-oriented and rapid application development. Class open to graduate students.

ISM 6245 Networking and E-Business Infrastructure (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211.

Explores the technologies needed to design, implement and manage effective computer networks. Includes local area network, Internet, intranet, and extranet architectures and issues in e-business systems implementation. Class open to graduate students.

ISM 6255 Advanced Database and Information Management (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211, 6212.

Introduces database concepts from a management perspective. Explores database management and implementation issues relative to technology and the enterprise information architecture and plan. Includes selecting, managing, and using tools to support the data management, functions (structures, standards, languages, dictionaries, measurement, integrity, security, privacy, etc.). Class open to graduate students.

ISM 6313 E-Business Models and Strategy (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211 or BUS 6170.

Provides an overview of the e-business environment. Includes the competitive landscape of e-business, components and appraisal of e-business models, strategies and value configurations. Class open to graduate students.

ISM 6331 Information Systems Security (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211.

Develops an understanding of information systems security issues. Addresses security policy creation, risk evaluation and implementation of security measures in organizations. Examines privacy and ethical issues and legal requirements. Class open to graduate students.

ISM 6335 Software Engineering Management (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211.

Explores issues in software engineering such as programming methodologies, reusability, software quality assurance, CASE tools, software metrics and tools to evaluate, control and estimate the software life cycle. Class open to graduate students.

ISM 6345 Distributed Applications (3)

Registration approval: Coordinator.

Prerequisite: ISM 6245. Examines technical options in computer architectures, servers, operating systems, telecommunication and networks, as well as management and performance issues related to distributed client server, Web-based and mobile/wireless computing. Class open to graduate students.

ISM 6348 End-User Computing and Interface Design (3)

Registration approval: Coordinator.

Prerequisite: ISM 6211.

Explores the establishment of an effective end-user computing environment. Investigates issues of hardware and software acquisitions in light of rapid obsolescence, introduction of new technologies, information centers, communications connectivity, growth of the Internet, information systems architecture, performance measurement, data sharing and work-flow changes. Class open to graduate students.

ISM 6900 Independent Study (3-6)

Registration approval: Independent Study Agreement.

Provides the opportunity for a student to study a topic of special interest under faculty supervision. May be repeated for credit up to 15 credits. Class open to graduate students.

ISM 6910 Seminar in Information Systems Management (1-6)

Registration approval: Coordinator.

Prerequisite: ISM 6211. Explores variable topics related to effective management of information systems. May be repeated for credit up to 6 credits. Class open to graduate students.

ISM 6930 Information Systems Management Consulting Practicum (3-6)

Registration approval: Coordinator.

Prerequisite: ISM 6231.

Provides an opportunity for students to gain practical experience in the information systems management field under instructor supervision. May be repeated for credit up to 6 credits. Class open to information systems management majors. Class open to graduate students.

ISM 6960 Master's Project (3)

Registration approval: Coordinator.

Prerequisite: ISM 6231.

Allows students to complete an independent project designed and driven by the student(s) to demonstrate proficiency in completing an information management project or performing research to further the state of the art in a particular area of ISM. May be repeated for credit one time. Class open to information systems management majors. Class open to graduate students.

FACULTY

Nancy Christie, *Associate Professor of Accounting*; B.A., Marshall University; Master of Accountancy, Virginia Polytechnic Institute and State University, 1986; Ph. D., Virginia Polytechnic Institute and State University, 1990. At SPU since 2003.

Denise Daniels, *Associate Professor of Management*; B.A., Wheaton College, 1991; Ph.D., University of Washington, 1997. At SPU since 1996.

Douglas A. Downing, *Associate Professor of Economics and Undergraduate Director*; B.S., Yale University, 1979; M.A., 1982; Ph.D., 1987. At SPU since 1983.

Albert M. Erisman, *Executive-in-Residence*; B.S., Northern Illinois University, 1962; M.S., Iowa State University, 1967; Ph.D., 1969. At SPU since 1996, 2000.

Randal S. Franz, *Associate Professor of Management*; B.A., California State University-Sacramento, 1982; M.A., 1985; A.M., Stanford University, 1988; Ph.D., 1991. At SPU since 1991.

Dan W. Hess, *Professor of Finance*; B.A., Wheaton College, 1971; M.B.A., University of Washington, 1975; Ph.D., University of Arizona, 1982. At SPU since 1977.

Gary L. Karns, *Associate Dean and Associate Professor of Marketing*; M.B.A./ISM Graduate Director; B.B.A., University of Oklahoma, 1976; M.B.A., 1977; Ph.D., University of Washington, 1987. At SPU since 1979.

Herbert E. Kierulff, *Donald Snellman Chair of Entrepreneurship*; Professor of Finance and Entrepreneurship; B.A., Stanford University, 1959; M.B.A., University of Southern California, 1964; D.B.A., 1967. At SPU since 1980.

Kenneth E. Knight, *Professor of Management and Information Systems*; B.S., Yale University, 1959; M.S., Carnegie-Mellon University, 1961; Ph.D., 1964. At SPU since 1989.

Ryan C. LaBrie, *Associate Professor of Management and Information Systems*; B.S., Seattle Pacific University, 1993; M.S.-ISM, 1997; Ph.D., Arizona State University, 2004. At SPU since 2004.

Henry L. Petersen, *Assistant Professor of Management*; B.S., University of Calgary, 1993; M.S., 1999; Ph.D., 2003. At SPU since 2003.

Joanna K. Poznanska, *Professor of International Business and Economics*; M.A., University of Warsaw, 1970; Ph.D., Technical University of Warsaw, 1976; post-graduate studies at Cornell University; Researcher, Woodrow Wilson School of Public and International Affairs, Princeton University, 1980–1981. At SPU since 1988.

James F. Rand, *Clinical Professor*; B.S., Marquette University, 1963; LL.B., LaSalle University, 1972; Ph.D., California Western University, 1976. At SPU since 1993.

Regina P. Schlee, *Associate Professor of Marketing*; B.A., University of Nevada, 1976; M.A., Washington State University, 1978; Ph.D., 1981. At SPU since 1984.

Gerhard H. Steinke, *Professor of Management and Information Systems*; B.S., University of Alberta, 1975; M.A. Rel., Anderson University, 1984; M. Div., 1985; M.B.A., Ball State University, 1984; Ph.D. University of Passau, 1992. At SPU since 1992.

Ross E. Stewart, *Professor of Accounting*; B.Com., University of Auckland, 1977; M.Com., 1979; Diploma in Christian Studies, Regent College, 1981; M.T.S., 1983; Ph.D., University of Glasgow, 1987. Chartered Accountant, 1980. At SPU since 1986.

Lisa Klein Surdyk, *Associate Professor of Economics*; B.A., Seattle Pacific University, 1987; Ph.D., University of Washington, 1991. At SPU since 1991.

Jeff Van Duzer, Dean; *Associate Professor of Business Law and Ethics*; B.A., University of California-Berkeley, 1976; J.D., Yale School of Law, 1979. At SPU part-time since 1998; full-time since 2001.

Kenman L. Wong, *Associate Professor of Business Ethics*; B.S., Biola University, 1986; M.B.A., University of Washington, 1987; Ph.D., University of Southern California, 1996. At SPU since 1997.