



Department of Business and Information Technology

101 Fulton Hall, 301 West 14th Street
Rolla, MO 65409
573-341-7216 (phone) 573-341-4812 (fax)
email: bit@mst.edu
<http://bit.mst.edu>

Graduate Degrees:

Masters in Business Administration (M.B.A.)
M.S. in Information Science & Technology



grad facts.

\$66,375

Average M.S. IST Starting Salary

\$61,167

Ave MBA Starting Salary

\$54,280

Ave IST Starting Salary

\$44,500

Ave BUS Starting Salary



national recognition.

AACSB Accredited- Associate to Advance Collegiate Schools of Business
Only 5% of business schools in the world are AACSB Accredited



No. 1 "Best Investment" among public universities for out of state students (Newsweek, 2012)

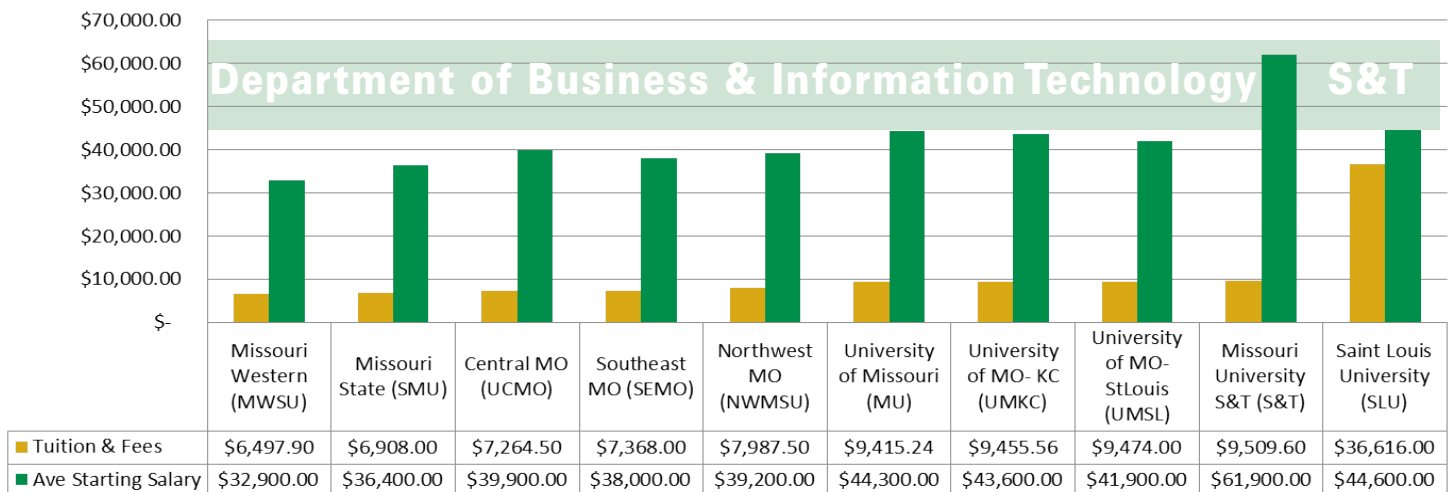
No. 3 "Best Investment" among public universities for in-state students (Newsweek, 2012)

No. 7 "Best college value among national public universities" (U.S. News & World Report, "America's Best Colleges", 2012)

No. 8 "Best Online Graduate Computer Information Technology Programs" (U.S. News & World Report, 2014)

No. 70 "Best Online Graduate Business Programs" (US News & World Report, 2014)

Missouri Schools- Typical Tuition vs Average Starting Salary





by the numbers.

Enrollment by Degree

Business	110
IST	117
MBA	24
MS IST	68
Distance	58

377

Faculty

Full-Time Professors	17
Part-Time Professors	6

Student -to-faculty ratio:

14:1

Student Demographics

Male	268
Female	109

71.1% Male

28.9% Female

small department. **big impact.**

Capitalizing on the strong technological emphasis of Missouri University of Science and Technology (S&T), the Department of Business and Information Technology prepares professionals for careers in modern business organizations. The Department emphasizes management through technology with particular focus on information systems and their application in a fast changing, global and competitive environment.

Admissions

futurestudents.mst.edu
admissions@mst.edu

106 Parker Hall
300 W. 13th Street
Rolla, MO 65409
573-341-4165
800-522-0938

Financial Assistance

sfa.mst.edu
sfa@mst.edu

G-1 Parker Hall
300 W. 13th Street
Rolla, MO 65409
573-341-4282
800-522-0938

Cashier (Tuition & Fees)

cashier.mst.edu
cashier@mst.edu

G-4 Parker Hall
300 W. 13th Street
Rolla, MO 65409
573-341-4195

Registrar

registrar.mst.edu
registrar@mst.edu

103 Parker Hall
300 W. 13th Street
Rolla, MO 65409
573-341-4181

New Student Programs

pro.mst.edu
pro@mst.edu

106 Centennial Hall
300 W. 12th Street
Rolla, MO 65409
573-341-4025

Campus Housing/Dining

reslife.mst.edu
reslife@mst.edu

205 West 12th Street
Rolla, MO 65409
573-341-4218

International Affairs

international.mst.edu
ia@mst.edu

103 Norwood Hall
320 W. 12th Street
Rolla, MO 65409
573-341-4208

Information Technology

it.mst.edu

107 IDE Building
1215 N. Pine Street
Rolla, MO 65409
573-341-4357

Distance & Continuing

Education
dce.mst.edu
dce@mst.edu

216 Centennial Hall
300 W. 12th Street
Rolla, MO 65409
573-341-4025

Career Opportunities &

Employer Relations
career.mst.edu
career@mst.edu

3rd Floor Norwood Hall
320 W. 12th Street
Rolla, MO 65409
573-341-4343

Student Life

studentlife.mst.edu
stulife@mst.edu

1346 N. Bishop
Rolla, MO 65409
573-341-6771

Athletics

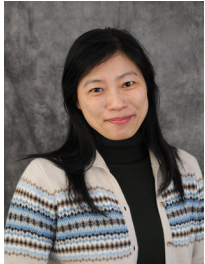
sports.mst.edu

705 West 10th Street
Rolla, MO 65409
573-341-4175

our faculty.



Keng Siau, Ph.D.
Department Chair,
Professor



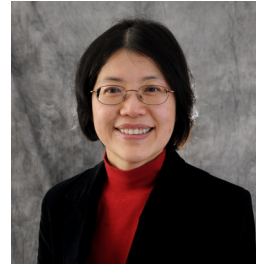
Yu-Hsien Chiu, M.S.
Assistant Teaching
Professor



Craig Claybaugh Ph.D.
Assistant Professor



Cassie Elrod, Ph.D.
Assistant Professor
Interim MBA Director



LiLi Eng, Ph.D.
Assistant Professor



Barry Flachsbart, Ph.D.
Professor



Nobuyuki Fukawa, Ph.D.
Assistant Professor



Richard Hall, Ph.D.
Professor



Ralph Hanke, Ph.D.
Assistant Professor



Michael Hilgers, Ph.D.
Associate Chair
Professor



Bih-Ru Lea, Ph.D.
Associate Professor



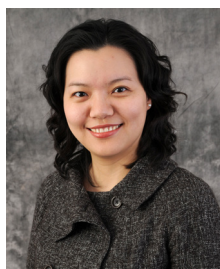
Nick Lockwood, Ph.D.
Assistant Professor



Ying Chou Lin, Ph.D.
Assistant Professor



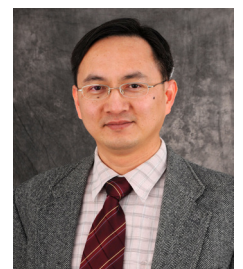
Fiona Nah, Ph.D.
Professor



Hong Sheng, Ph.D.
Assistant Professor



Sarah Stanley, Ph.D.
Assistant Professor



Vincent (Wen-Bin) Yu, Ph.D.
Assistant Chair
Associate Professor

degree programs.

Undergraduate

B.S. Business & Management Systems

B.S. Information Science & Technology

Minors Offered

Business & Management Systems
Digital Supply Chain Management
Electronic & Social Commerce
Enterprise Resource Planning (ERP)
Entrepreneurship

Finance
Information Science & Technology
Marketing
Management
Mobile Business & Technology

4+1 Graduate Program

We are offering graduate degrees customized for our undergraduate students.

This program allows a Senior to complete some graduate coursework as an undergraduate student with dual enrollment status (limited to one semester)!

*The program allows **two advantages**:*

- 1. complete some graduate coursework at undergraduate tuition rates*
- 2. complete your **MBA or M.S. IST in ONE YEAR** after your undergraduate degree!*

Graduate

Master of Business Administration (MBA)

M.S. Information Science & Technology

Graduate Certificates

Business Intelligence
Digital Media
Digital Supply Chain Management
Electronic and Social Commerce
Enterprise Resource Planning

Entrepreneurship and Technological Innovation
Human Computer Interaction
Management & Leadership
Mobile Business Technology
Project Management



Master of Business Administration
(MBA)

Master of Science in
Information Science & Technology



the S&T difference.

The Information Age

Business professionals face the daunting task of sifting through he staggering reams of data produced every moment. They must evaluate and analyze it. They must be able to manage, store, and retrieve it as business needs demand. This requires complex information management systems.

Holistic Approach

BIT views information technology and business as inseparable, each deeply integrated into the other. Education must not draw lines between subjects but rather approach business and information systems in a unified fashion seeking to bring out the benefits of both.

Flexibility

On Campus

You may elect to take your graduate courses directly on campus, whether a full time or part-time student.

Our graduate courses are generally offered once a week for 2 1/2 hours each beginning at 4:00pm, or 7:00pm to allow working professionals the ability to earn their graduate degrees while continuing their careers.

Graduate Course Requirements

MBA
(36 Credit Hours)

Teambuilding & Leadership
International Marketing
Corporate Information Systems Mgmt
Managerial Accounting & Control
Supply Chain and Project Management
Integration of Business Areas
Managerial Finance
Plus- 15 Credit Hours in Electives

M.S. IST
(30 Credit Hours)

Foundations of Internet Computing
Human-Computer Interaction
Information Systems Project Mgmt
Technical Innovation Mgmt & Leadership
Plus- 18 Credit Hours in Electives

Distance- Online



Our on-line graduate programs are nationally ranked, and are among the top in the United States!

Personalize your Degree

Graduate Certificates

(12 Credit Hours)

Business Intelligence
Digital Media
Digital Supply Chain Management
Electronic & Social Commerce
Enterprise Resource Planning
Entrepreneurship & Technological Innovation

Human-Computer Interaction
Management & Leadership
Mobile Business & Technology
Project Management

All of our graduate courses may be taken on-line through distance education. Our classrooms allow interactive streaming whereby you may be actively involved in the classroom discussion in real-time, or you may view the recorded lectures anytime at your convenience. (certain classes may require real-time participation).

flexibility. technology.



4+1 program.

We are offering graduate degrees customized for our S&T undergraduate students. This program allows a Senior to complete some graduate coursework as an undergraduate student with dual enrollment status (limited to one semester)!

The program allows **two advantages**:

1. complete some graduate coursework at undergraduate tuition rates
2. complete your MBA or M.S. IST in **ONE YEAR** after your undergraduate degree!

Do I Qualify?

Senior at Missouri S&T
Available Credit Hours outside your Undergraduate Program

How to apply:

Apply at the admissions office requesting dual enrollment
Submit Three letters of reference with a resume
Submit GMAT test results (a GPA 3.2 or above from S&T can waive this requirement)
Meet with our graduate advisor to plan your degree path
Enroll in classes!

Suggested Course Schedule (MBA)

SPRING (dually enrolled)
BUS 423 Corporate Information Systems Mgmt
BUS 424 Managerial Accounting & Control
BUS 425 Operations and Project Management

SUMMER (graduate status)
Elective #1

FALL
BUS 421 Teambuilding & Leadership
BUS 422 International Marketing
BUS 426 Integration of Business Areas
BUS 427 Managerial Finance

SPRING
Elective #2
Elective #3
Elective #4
Elective #5

Suggested Course Schedule (M.S. IST)

SPRING (dually enrolled)
IST 351 Technical Innovation Mgmt & Leadership
Elective #1

SUMMER (graduate status)
Elective #2

FALL
IST 385 Human Computer Interaction
IST 436 Foundations of Internet Computing
Elective #3
Elective #4

SPRING
IST 461 Advanced Info. Systems Project Mgmt
Elective #5
Elective #6

Master of Business Administration (MBA)

Master of Business Administration

Full-Time

Part-Time

Distance



An AACSB accredited degree that combines core business knowledge with information technology. This 36-credit hour program from a top-tier university in the U.S. is designed to challenge you, enlighten you, educate you, and transform you. You will learn the latest management best practices, develop business and leadership skills to succeed in the global market, discuss current international business issues with faculty members who are experts in their fields, and work with fellow students who are business leaders and management executives from different nations and cultures.

The MBA requires a total of 36 credit hours and is offered in two (2) parts:

Core (21 credit hours)

Focused Area or Broad Spectrum Electives (15 credit hours)

Full-time students may complete the program in 18-24 months depending on course availability and prerequisites required.

Part-time/distance students may complete the program in 24-36 months depending on course availability, prerequisites required, and the student's scheduling and program plan preferences.

MBA INTEGRATED CORE CLASSES

The MBA Core classes totals 21 credit hours and cover Team-building, Leadership, Marketing, Data Analysis, Accounting, Finance, Operations, Project Management, and Management Information Systems. The program is designed so full-time students may complete all Core 21 credit hours in two semesters; part-time students may take one to two classes per semester; they may also take advantage of the distance option.

Instructors collaborate to provide multidisciplinary coverage of course materials. Students work in teams on a comprehensive business cases, live simulations and real company-assigned projects. The MBA student teams compete for the best solutions on all projects assigned.

MBA Core Classes

BUS 421	Team-building and Leadership	3 credit hours
BUS 422	International Marketing	3 credit hours
BUS 423	Corporate Information Systems Management	3 credit hours
BUS 424	Managerial Accounting & Control	3 credit hours
BUS 425	Supply Chain and Project Management	3 credit hours
BUS 426	Integration of Business Areas	3 credit hours
BUS 427	Managerial Finance	3 credit hours

Focus Area with Graduate Certificates

Students wishing to pursue a broad spectrum may select the 15 credit hours of electives in appropriate business and technology related areas to suit their personal focus. Students may also choose to earn a graduate certificate which is comprised of 12 hours of electives to focus their area of expertise. Graduate certificates are offered in:

Business Intelligence	Entrepreneurship & Technological Innovation
Digital Media	Human-Computer Interaction
Digital Supply Chain Management	Management & Leadership
Electronic & Social Commerce	Mobile Business & Technology
Enterprise Resource Planning	Project Management

Each Graduate Certificate requires the completion of four courses. A course may not be used to satisfy the requirements for more than one certificate, but Graduate Certificate courses are often used to create a specialization area beyond the required courses of the MBA.

Master of Business Administration (MBA) cont.

Graduating students will possess:

- Ability to integrate technology throughout an organization.
- Tactical and strategic decision making skills.
- Problem identification and problem solving skills.
- Integrative and critical thinking skills.
- Effective teamwork, leadership, and communication skills.
- Appreciation of global, economic, and cultural forces.
- Awareness of the ethical responsibilities of managers.

Application and Admission Process

Apply

On campus students may apply at any time by completing the Graduate Application for Admission form found on-line at apply.mst.edu. For distance students, apply on-line at apply.mst.edu. The application, along with three letters of reference, a statement of purpose, and a current resume may be sent to the BIT Admissions Specialist or the Admissions office to start the application process.

GMAT

All MBA program applicants are required to take the Graduate Management Admission Test (GMAT) that is administered by the Educational Testing Service, Princeton, U.S.A. The test must have been taken within five years of the term for which the student is applying. <http://www.gmac.com> The GMAT results must be sent officially from ETS.

Official Transcripts

MBA applicants are not required to hold a bachelor's degree in business – many fields are welcome. International applicants must have a degree comparable to an approved U.S. bachelor's degree from a university accredited by the appropriate governmental agency. Applicants must have attained a GPA of at least 3.00/4.00 in their last two years of coursework.

TOEFL/IELTS

All applicants must also demonstrate proficiency in English. Applicants whose first language is not English will be required to submit the score obtained in the Test of English as a Foreign Language (TOEFL) or the International English Language Testing Systems (IELTS) test. Students who have earned a bachelor's or master's degree from a U.S. university will not be required to take the TOEFL or IELTS. The minimum TOEFL score required for admission consideration is 577 (paper based) or 90 (internet based) and the minimum IELTS score required for admission consideration is 6.5.



M.S. Information Science & Technology

M.S. Information Science & Technology



Full-Time Part-Time Distance

Thesis Non-Thesis

Information technology continues to transform every aspect of our economy and society. Rapid spread of the technology has generated the need for highly trained professionals to implement and maintain information systems to support business success. The AACSB Accredited M.S. in Information Science and Technology is designed to educate students in the design, development, and successful application of information systems in organizations. Additional information can be found on the web at <http://bit.mst.edu>.

The MS IST degree requires a total of 30 credit hours and is offered in several parts:

Core Coursework (12 credit hours)

Focused Area or Broad Spectrum Electives (12 Credit Hours with a Thesis, or 18 Credit Hours- Non-Thesis)

Optional Thesis (6 Credit Hours)

Full-time students may complete the program in 12-18 months depending on course availability and prerequisites required.

Part-time/distance students may complete the program in 24-36 months depending on course availability, prerequisites required, and the student's scheduling and program plan preferences.

MS IST CORE Classes All M.S. candidates in IST are required to take the following courses. These courses are designed to ensure that all IST graduate students are exposed to the Web Technology, Human Context, Application Implementation, and Organizational Systems perspectives of information systems.

IST 351 Technical Innovation Management & Leadership

IST 385 Human-Computer Interaction

IST 436 Foundations of Internet Computing (this covers Computer Networks, Web Design & E-Commerce)

IST 461 Information Systems Project Management

Focus Area with Graduate Certificates

The program is designed to be very flexible in order to allow students to pursue interests in many areas beyond the four required core courses. Students wishing to pursue a broad spectrum may select their credit hours of electives in appropriate business and technology related areas to suit their personal focus. Students may also choose to earn a graduate certificate which is comprised of 12 hours of electives to focus their area of expertise.

Graduate certificates are offered in:

Business Intelligence

Digital Media

Digital Supply Chain Management

Electronic & Social Commerce

Enterprise Resource Planning

Entrepreneurship & Technological Innovation

Human-Computer Interaction

Management & Leadership

Mobile Business & Technology

Project Management

Each Graduate Certificate requires the completion of four courses. A course may not be used to satisfy the requirements for more than one certificate, but Graduate Certificate courses are often used to create a specialization area beyond the required courses of the M.S.

M.S. Information Science & Technology

M.S. Entrance Requirements

Applicants are expected to have the following qualifications for admission:

- Complete the general portion of the Graduate Record Examination with a minimum Verbal Score of 370, Quantitative Score of 600, and Analytical Score of 3.5
- OR -
Complete the Graduate Management Admissions Test with a minimum Quantitative score of 35, Verbal score of 21, and Analytical Writing score of 3.5.
- A minimum TOEFL score of 230 (Computer-based), 570 (Paper-based), or 88 (Internet-based) for those students not speaking English as their native language. An IELTS score of 6.5 may be substituted.
- An undergraduate GPA of 3.0/4.0 or better over the last two years, or successful completion of 12 graduate hours in IST as a "Conditional" graduate student at S&T with at least a 3.0 GPA.
- Knowledge of the content of the following courses:

Algorithms & Programming (IST 51 or CSc 53)	Data Structures (IST 151 or CSc 153)
Information Systems (IST 50)	Computer Components & Operation (IST 231)
Database Management Systems (IST 223)	\Statistics
Calculus	

Degree Requirements (continued)

To complete the program, six additional elective courses (18 hours) are required for the non-thesis option; three of the elective courses (9 hours) must be at the 400 level. The M.S. degree with thesis requires four additional elective courses (12 hours) and 6 hours of research (IST 490); two of the elective courses (6 hours) must be at the 400 level. Beyond available Information Science and Technology (IST) courses, the elective courses may be chosen from available graduate-level Business Administration (BUS), Computer Engineering (ECE), Computer Science (CSC), Economics & Finance (ECON), Engineering Management (EMGT), Psychology (PSYCH), or other graduate-level courses, subject to approval by a student's Advisor



Graduate Certificates Offered

Business Intelligence

Interest in business intelligence has been a strong theme among employers. Medium and large-sized businesses are especially interested. In order to make appropriate decisions, upper-level administration of an organization needs to draw data together from different systems in order to get a unified picture of the status and performance of an organization and present it in helpful ways. Examples include the development of organizational scorecards, dashboards and other tools that provide a picture of how an organization is performing. People capable of creating and maintaining such information are needed, but the in-depth education necessary for these people is available in only a few places.

The *Graduate Certificate in Business Intelligence* focuses on the technologies that allow an organization to make effective business decisions based on operational data pulled together from many different sources inside an organization. The target audience consists of any individual who would manage any type of IT professionals, database administrators, business analysts, and any person who would need to understand the technologies behind the capabilities of those technologies.

Required Core Courses:

ERP 345 Use of Business Intelligence
ERP444 Essentials of Data Warehouses

Choose two of the following as elective courses:

ERP 346 ERP Systems Design and Implementation
ERP 348 Performance Dashboard, Scorecard & Data Visualization
ERP 442 Advanced Customer Relationship Mgmt in ERP
IST 443 Information Retrieval & Analysis
IST 445 Database Marketing
ERP 448 Enterprise Performance Dashboard Prototyping

Digital Media

Students will learn creation, design and analysis skills and knowledge, as it applies to digital media. The focus will be on the media, the social/digital network that connects these media, the interfaces that connect these media with users, and the application of these skills in business and other creative contexts. Thus this certificate program will address the pressing demand and opportunities for graduates with advanced knowledge and skills in areas such as networked communication and marketing, web-based media creation and design, and methods for designing and building effective human-media interfaces.

Required Core Course:

IST 354 Advanced Web and Digital Media Development

Digital Media (cont.)

Choose two to complete the core:

IST 385 Human-Computer Interaction
IST 480 Advanced Web and New Media Studies
MKT 331 Digital Marketing and Promotions

Choose one of the following as an elective course:

IST 352 Advanced Web Development
IST 386 Human-Computer Interaction Prototyping

Digital Supply Chain Management

Success in today's marketplace requires that organizations deliver products and services that provide easily identified value for their customers. This Certificate draws on strengths within two departments to integrate source (strategic procurement and supply management), production (manufacturing and service operations), and delivery processes (demand fulfillment), with a focus on the use of information technologies as the critical enabler of supply chain efficiencies and responsiveness.

The Digital Supply Chain Management Graduate Certificate is designed to give the student the tools and ideas that help shape and define the various components of value creation. Students can gain knowledge and skills in the full spectrum of supply chain activities: supplier relationships, purchasing management, operations and inventory management, logistics and transportation, quality management, and information technology.

The graduate certificate in digital supply chain management is a professional development program focused on building competency across the foundations of supply chain management. Students attain new skill sets to help them manage and enhance the value of today's complex supply chains.

Required Core Courses:

ERP 346 Enterprise Resource Planning Systems Design & Implementation
ERP 347 Supply Chain Management Systems in ERP

Choose one to complete the core:

BUS 425- Supply Chain & Project Management
ME 308 Rapid Product Design and Optimization

Choose one of the following as an elective course:

ERP 345 Use of Business Intelligence
ERP 442 Advanced Customer Relationship Mgmt in ERP
ERP 446 ERP Systems Configuration & Integration
ME 357 Integrated Product and Process Design
ME 356 Design for Manufacture
ME 360 Probabilistic Engineering Design
ME 363 Principles and Practice of Computer Aided Design

personalize. specialize.

Electronic and Social Commerce

This program is designed to create successful students by developing skills in technological business practices that will provide opportunities for succeeding in today's fast paced world.

To that end, the program focuses on the following competencies:

- Management concepts applied to IT
- Mgmt concepts applied to support of electronic commerce
- Use of business processes in IT integration
- Competitive advantage through IT
- Electronic commerce through collaborative shopping

Required Core Course:

IST 341 Advanced Electronic & Mobile Commerce

Choose one to complete the core:

BUS 423 Corporate Information Systems Management
IST 351 Technological Innovation Mgmt & Leadership

Choose two of the following as elective courses:

IST 352 Advanced Web Development
IST 368 Law & Ethics in E-Commerce
IST 385: Human-Computer Interaction
IST 386: Human-Computer Interaction Prototyping
IST 435 Mobile Technology for Business
IST 445 Database Marketing
IST 480 Advanced Web and New Media Studies
MKT 331 Digital Marketing & Promotions
MKT 480 Advanced Marketing Strategy

Enterprise Resource Planning (ERP)

Corporations worldwide have focused on improving business processes for the past two decades. In their efforts to use information technology more effectively in enabling business processes, we have seen the emergence and growth of Enterprise Systems, and more recently, Extended Enterprise Systems such as Supply Chain Management (SCM), Customer Relationship Management (CRM), Strategic Enterprise Management (SEM), and Business Intelligence. Most Fortune 500 companies have already adopted Enterprise Resource Planning (ERP) systems and many mid-size companies are also planning ERP implementations. With a commitment to keep pace with these changes in business processes and technology, the University of Missouri system joined SAP's™ University alliance and Microsoft's™ University Alliance programs in order to continue and expand classroom capabilities for integrating ERP software into the curriculum.

ERP systems can be used to reinforce many of the concepts covered in the business discipline. ERP systems incorporate state-of-the-art technology, providing a comprehensive teaching tool for business and for information systems. Universities that have successfully incorporated an ERP system into their curricula find unprecedented student demand for those subjects.

ERP can be viewed as a combination of business management practice and technology, where Information Technology integrates with a company's core business processes to enable the achievement of specific business objectives. The Missouri S&T program prepares undergraduate and graduate students for positions as both technical and business consultants in the ERP field.

Required Core Courses:

ERP 346 ERP Systems Design and Implementation
ERP446 ERP Systems Configuration & Integration

Choose two of the following as elective courses:

ERP 341 Enterprise Portal and Mobile Application Develop.
ERP 345 Use of Business Intelligence
ERP 347 Supply Chain Mgmt Systems in ERP Environ.
ERP 348 Performance Dashboard, Scorecard & Data Visualization
ERP 349 ERP Systems Administration
ERP 442 Advanced Customer Relationship Mgmt in ERP
IST 443 Information Retrieval & Analysis
IST 445 Database Marketing
ERP 448 Enterprise Performance Dashboard Prototyping

Graduate Certificates Offered (cont.)

Entrepreneurship & Technological Innovation

Change and growth in Missouri and America require the training, nourishing, and flourishing of entrepreneurs. Many individuals are unaware of their capacity and ability to develop the mindset and skills required to successfully engage in entrepreneurship and technological innovation. Recent entrepreneurship research, however, indicates that many of the skills and much of the knowledge of successful entrepreneurs can be developed and taught in a classroom setting.

The Graduate Certificate in Entrepreneurship and Technological Innovation is designed to create successful technological entrepreneurs and innovators by developing skills and a mindset that will provide opportunities for succeeding in today's fast paced world.

To that end, the program focuses on the following competencies:

- Recognizing opportunity
- Assessing opportunity
- Planning under uncertainty
- Fostering innovations
- Mastering creativity
- Building and managing networks
- Leveraging resources
- Mitigating and managing risk

Required Core Courses:

BUS 396 Business Models for Entrepreneurship and Innovation
MKT 331 Digital Marketing & Promotions

Choose two of the following as elective courses:

BUS 380 Strategic Management
BUS 450 Advanced Customer Focus & Satisfaction
IST 351 Technological Innovation Mgmt & Leadership
IST 354 Advanced Web and Digital Media Development
IST 386 Human-Computer Interaction Prototyping
IST 435 Mobile Technology for Business



Human Computer Interaction (HCI)

Demand within industry for workers with expertise in human-computer interaction (HCI) is growing. With titles such as interface designer, usability researcher analyst, usability engineer, user experience specialist, and information architect, HCI specialists bridge the gap in organizations between groups who build the technologies and groups who use the technologies. The qualifications for these positions generally fall into the following categories:

- A general knowledge in human-computer interaction,
- Skills in collecting user requirements,
- Skills in developing prototypes,
- Research skills in evaluation of the impact of technologies on humans.

Human-Computer Interaction graduate certificate prepares students for positions as HCI specialists, and provide working IT professionals with additional skills to aid in the design and evaluation of usable systems. The IST department at Missouri S&T includes some of the leading researchers in the field of HCI, with strong ties to industry usability professionals.

Required Core Courses:

IST 385 Human-Computer Interaction
IST 386 Human-Computer Prototyping
IST 387 Human-Computer Interaction Evaluation

Choose one of the following as an elective course:

IST 480 Advanced Web and New Media Studies
IST 487 Research Methods in Human-Computer Interaction

Management & Leadership

Management and leadership are core principles in today's ever growing technological workforce. The Graduate Certificate in Management and Leadership is intended to provide the knowledge required to manage and lead technological enterprises through knowledge of negotiations, strategy, team-building and leadership, and/or project management.

Required Core Course:

BUS 421 Team-building and Leadership

Choose three of the following as elective courses:

BUS 380 Strategic Management
IST 351 Technological Innovation Mgmt & Leadership
IST 461 Advanced Info Systems Project Management
IST 368 Law & Ethics in E-Commerce
BUS 311 Business Negotiations
BUS 450 Advanced Customer Focus & Satisfaction
BUS 370 Human Resource Management
EMGT 361 Project Management

personalize. specialize.

Mobile & Business Technology

Interest in the use of mobile technology among organizations has seen a strong, upward trend over the past few years. The proliferation of smart phone 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 certificate 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.

Required Core Course:

IST 435 Mobile Technology for Business
ERP 341 Enterprise Portal & Mobile Application & Development

Choose two of the following as elective courses:

ERP 347 Supply Chain Mgmt Systems in ERP Environment
ERP 348 Perform. Dashboard, Scorecard & Data Visualization
ERP 442 Ad. Customer Relationship Mgmt in ERP Environ.
IST 352 Advanced Web Development
IST 386 Human-Computer Interaction Prototyping

Project Management

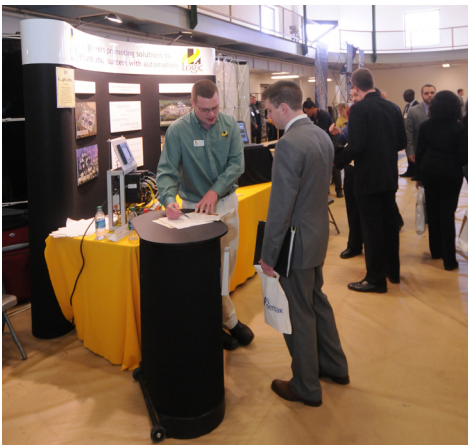
Jointly with the Department of Engineering Management and Systems Engineering

This certificate programs aims to equip students with a set of tools that will allow them to achieve Project Management Institute (PMI) standards in the project management area, to successfully manage projects and human resources, and to analyze, evaluate, and improve systems. Specifically it will give students the ability to:

- Identify operations problems and implement solutions for improved strategic competitiveness,
- Make sound decisions, plan, and control the key resources of an organization – money and people,
- Critically analyze, evaluate, improve, or adapt existing technical and/or managerial systems
- Organize and manage complex projects.

Required Core Courses:

IST 361 Information Systems Project Management
EMGT 361 Project Management
EMGT 458 Case Studies in Project Management
EMGT 461 Global Project Management



core graduate course descriptions.

BUS 421-Team-building and Leadership- MBA Core

This class will teach students how to work well in teams and lead teams and organizations. Management, networking, presentation skills, and sustainable business practices will be covered.

BUS 422 - International Marketing- MBA Core

This course focuses on the challenges faced by business managers as they deal with a competitive global market. The course will examine various topics related to international marketing such as cultural differences, economic differences, differences in product and technical standards, global advertising, and international pricing and segmentation.

BUS 423 - Corporate Information Systems Management- MBA Core

This course is designed primarily for potential managerial end users as managers, entrepreneurs, or business professionals in a technology-enabled business environment; it helps students learn how to use and manage information to revitalize business processes, improve business decision-making, manage IT projects, and gain competitive advantages.

BUS 424 - Managerial Accounting and Control- MBA Core

This course covers managerial accounting and its critical role in decision making, monitoring, and controlling business processes.

BUS 425 – Supply Chain and Project Management- MBA Core

This course covers supply chain management and its critical role in developing and maintaining effective and efficient processes in the organization, including operations and project management processes and principles.

BUS 426 - Integration of Business Areas- MBA Core

Students will acquire knowledge to integrate the business functions to maximize performance efficiency and effectiveness. It will be covered through case studies and readings.

BUS 427 - Managerial Finance- MBA Core

This course covers the use of financial tools to manage the organization. The main focus is the strategic decision-making process of modern managers responsible for major financial decisions. Topics include financial policy, capital investment analysis, dividend policy, capital structure, and other contemporary corporate finance issues.

IST 351-Technical Innovation Management & Leadership- MS IST Core

This course focuses on the knowledge and skills necessary for the development and implementation of effective strategies for the management of technology-based organizations. This involves: developing a general management perspective on technology and innovation, examining the problems of new product development, identifying distinctive technological competencies, licensing and marketing technologies, assessing the organizational and industrial context of technology.

IST 385- Human Computer Interaction- MS IST Core

Students examine issues and challenges related to the interaction between people and technology. The class explores the social and cognitive characteristics of people who use information systems. Students learn techniques for understanding user needs, interface prototyping, and interface evaluation.

IST 436- Foundations of Internet Computing- MS IST Core

The foundations of Internet Computing include computer networks and web sites. Networks are covered thoroughly and research directions for networks are discussed. Web site design and research findings about site usability considerations are examined. Security of communications for computing especially wireless communications, are explored.

IST 461- Information Systems Project Management- MS IST Core

This course covers the use of financial tools to manage the organization. The main focus is the strategic decision-making process of modern managers responsible for major financial decisions. Topics include financial policy, capital investment analysis, dividend policy, capital structure, and other contemporary corporate finance issues.