Change and growth in Missouri and America require the training, nourishing, and flourishing of entrepreneurs. Many college students, however, do not yet recognize the entrepreneurial spirit in themselves.

While these students are not sure if they have what it takes to drive innovation, recent entrepreneurship research indicates that many of the skills and much of the knowledge of successful entrepreneurs can be developed and taught in the classroom. Therefore, the department of business and information technology has created this graduate certificate to spark the entrepreneurial spirit in the students of Missouri S&T, and provide them with a solid foundation on which to build.

To that end, the graduate certificate in Entrepreneurship and Technological Innovation 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
- Focus and adaptability
- Design thinking
- Implementing new ideas

**Admission requirements**

Prospective students may apply at any time by completing the Graduate Application for Admission found online at apply.mst.edu.

The graduate certificate program is open to all individuals holding a bachelor’s, master’s or Ph.D. degree in areas such as business, social sciences, technology, engineering, or related disciplines. Students must also have the required prerequisites for the courses in the program.

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. Students will be given three years to complete the certificate as long as a B or better average is maintained in the courses taken.

If a student completes the four graduate certificate courses 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 toward the student’s MBA or M.S. degree.
**REQUIRED CORE COURSES**

**BUS 5980 Business Models for Entrepreneurship and Innovation**
This course uses problem-based learning to expand student insight into the nature, development, and application of business models. It increases the practical skills and knowledge required to generate original models of value creation for both entrepreneurial start-ups and corporate innovation.

*Prerequisite: Senior or graduate standing.*

**MKT 5310 Digital Marketing and Promotions**
A managerial examination of integrated marketing communication (IMC) and creativity, with a focus on digital media and new marketing concepts. Specifically, we will look at innovative marketing techniques such as viral marketing, brand communities, experiential marketing and guerilla tactics.

*Prerequisites: At least Junior standing.*

**ELECTIVE COURSES (CHOOSE TWO)**

**BUS 5580 Strategic Management**
Study of the formulation and implementation of corporate, business, and functional strategies designed to achieve organizational objectives. Case studies and research reports may be used extensively.

*Prerequisites: MKT 3110 or Eng Mgt 3510; Finance 2150 or Eng Mgt 3200; Senior standing.*

**BUS 6150 Advanced Customer Focus and Satisfaction**
Major emphasis is given to the concept of customer focus, with coverage of techniques for obtaining customer needs, measuring customer satisfaction, developing products and services to satisfy customers, and maximizing the benefits of customer feedback. Individual focused research is included. (Co-listed with MKT 6150)

*Prerequisite: MKT 3110 or MKT 3105 or ENG MGT 3510.*

**IS&T 5251 Technological Innovation Management**
The 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.

*Prerequisite: Senior or Graduate Standing.*

**IS&T 5335 Fundamentals of Mobile Technology for Business**
A broad overview of mobile technology use in business environments. Topics include the mobile industry; mobile network and wireless standards; mobile devices; mobile web design and app development; social and user experience issues; mobile marketing and commerce.

*Prerequisite: Junior standing or above.*

**IS&T 5886 Prototyping Human-Computer Interactions**
This course explores novel HCI and UX technologies as well as methods and tools for creating system prototypes, including best practices and guidelines for optimal user experiences. Example concepts include mobile applications, behavioral monitoring, gamification, natural user interfaces, haptics, and computers as social actors.

*Prerequisite: Preceded or accompanied by IS&T 5885.*

**IS&T 6654 Advanced Web Design and Digital Media Studies**
The course covers web design and digital media, including topics such as social media, cyberculture, service design thinking, citizen journalism, crowd intelligence, brain-computer interfaces, privacy, and copyright. This course is an advanced version of Web Design and Digital Media Studies.

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*Curriculum is subject to change. Please contact the department for up-to-date information on courses. Other courses approved by the department may be substituted for any of the above listed courses on a case-by-case basis. The administrative coordinators must approve the substitution prior to enrolling in the course.*