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. The Department of Business and Information Technology has created The Graduate Certificate in Entrepreneurship and Technological Innovation 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 program focuses on the following competencies:

- Recognizing opportunity
- Fostering innovations
- Leveraging resources
- Design thinking
- Assessing opportunity
- Mastering creativity
- Mitigating and managing risk
- Implementing new ideas
- Planning under uncertainty
- Building and managing networks
- Focus and adaptability

Admission requirements

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.

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.
## Required Core Courses

### BUS 5980: Business Models for Entrepreneurship and Innovation
This course provides the material and practice required to develop insights into the nature and application of business models. It will help you to develop skills in improving current models and developing new business models. The course will focus on increasing the skills and knowledge required to generate original and creative models to support value creation.

*Prerequisites: Senior or Graduate standing*

### MKT 5310: Digital Marketing and Promotions
This course will touch on the concepts 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. Students will be asked to work in small groups as they learn to solve marketing problems by thinking outside the box.

*Prerequisites: Psych 1101*

## Elective Courses (Choose Two)

### 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.

*Prerequisite: MKT 3110 or MKT 3105 or Eng Mgt 3510*

### 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*

### IST 5251: Technological Innovation Management and Leadership
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*

### IST 5886: Prototyping Human-Computer Interactions
This course covers designs, methods and tools for creating low and high fidelity prototypes of information technology systems, which is part of the iterative design cycle commonly used for the creation of usable information technologies.

*Prerequisites: Preceded or accompanied by IST 5885*

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

*Prerequisites: IST 3333 or equivalent*

### IST 6654: Advanced Web and Digital Media Development
This course covers advanced techniques and tools for the design and development of web-based media, including text, graphics, animation, audio, and video. This course is an advanced version of Web and Digital Media Development, with additional assignments.

*Prerequisites: Graduate standing*