CGS Agenda Item: 18-33 Effective Fall 2018

Proposal: Addition of an Accelerated Graduate Program for Computer & Information Technology undergraduate majors to pursue the M.S. in Technology. Effective Date: Fall, 2018

Rationale: As a result of the newly approved Accelerated Graduate Programs at EIU, the addition of an accelerated graduate program option is requested for undergraduate majors to accelerate pursuit of an M.S. in Technology (TEC). The following catalog changes are required.

Current Catalog:

Technology: Master of Science

Program Mission: The purpose of the Master of Science in Technology program is to develop advanced knowledge and skills in those responsible for the leadership and management of technological issues and resources. The program is designed to:

- provide learning opportunities for developing advanced professional, technical, and personal competencies in the discipline;
- identify, develop, and implement quality strategies in today's organizations;
- develop research and communication skills necessary for technological leadership; and
- provide an understanding of ethical and social implications related to global technological societies. The master's program places special emphasis on quality systems, work performance improvement, and computer technology. The graduate program offers certificates in these specialized areas.

Admission Requirements: To be eligible for degree candidacy, applicants must meet all of the requirements for admission to the Graduate School (see "Admission to Degree and Certificate Programs"). In addition to the published university graduate degree status requirements, the School of Technology requires that applicants demonstrate significant relevant educational background and/or work experience or training when determining admission classification (degree, non-degree, or provisional). Provisionally admitted students may be required to complete course work in technology or a related field to meet admission requirements established by the School of Technology's Graduate Committee.

Degree Audit: The graduate plan of study is the EIU Degree Audit, which is generated automatically in the Degree Audit Reporting System (DARS) at the time of degree or certificate candidacy. Modifications of the standard EIU Degree Audit are submitted by the graduate coordinator to the certification officer in the Graduate School at the time modifications are approved. The Degree Audit serves as an unofficial summary of requirements for the program. Degree and certificate candidates are advised to review the comprehensive summary of the Degree Audit process specified on the "Requirements for All Degree and Certificate Candidates" section of the *Graduate Catalog*. Individual programs may require candidates to submit plans of study in addition to the Degree Audit, candidates should consult with the program coordinator.

Degree Requirements

Degree requirements include those outlined for the master's degree by the Graduate School (see "Requirements for the Master's Degree").

Students must complete a minimum of 26 semester hours of course work exclusive of internship, independent study, and workshop credit.

In addition, the Master of Science in Technology degree requires this core:

- TEC 5001 Seminar in Technology Credits: 1
- TEC 5103 Leadership in Technology Credits: 3
- TEC 5133 Total Quality Systems. Credits: 3
- <u>TEC 5143 Research in Technology</u> Credits: 3
- TEC 5173 Global Technology. Credits: 3

The Degree Program Allows Focus in the Following Four Areas

Career and Technical Education: The curriculum is designed for individuals who are committed to excellence in learning and education in the areas of Business Education, Family and Consumer Sciences Education, and Technology Education. Studies include curriculum development, social foundations of education, principles of career development, occupational perspectives, training program development, accelerated training and learning, administration and coordination techniques of cooperative occupational education, and instructional technology.

Computer Technology: The curriculum provides students with knowledge and skills in current computer technology. Key areas include data communications and networking technology, advanced database technology, multimedia and web technology, management of computer technology, data acquisition, industrial system simulation, advanced computer integrated manufacturing, automatic identification, and other industrial applications of computer technology.

Technology Management: The curriculum is suitable for students who desire to be part of an effective management team in industrial related organizations. The program offers the ideal blend of technical knowledge and management principles needed for effective leadership. Key areas include total quality systems, statistical quality assurance, design for quality, advanced manufacturing management, industrial productivity analysis, industrial simulation, advanced computer integrated manufacturing, plant layout and material handling technology, problem solving techniques for manufacturing, reliability, and product innovation.

Training and Development: This cluster of courses is suitable for students who aspire to be part of performance improvement teams in industry and business. It focuses on helping people in the organization to reach their excellence in their respective capacity. Studies include work performance technology, leadership, training systems management, instructional technology, conflict in the workplace, productive work teams, and accelerated training and learning.

In addition to the credit hour requirements, students with non-thesis options are required to be certified with comprehensive knowledge pertaining to their graduate study. Students are required to provide a satisfactory written report and an oral presentation under the guidance of a faculty mentor and the certification committee, during the graduating semester.

Detailed procedure of the certification and requirements for the written report and oral presentation are available at:

Elective Course Work

Elective course work in the School of Technology includes senior-graduate and graduate courses with the prefixes of TEC, INT (Industrial Technology) COS (Career and Organizational Studies), and CTE (Career and Technical Education).

Elective course work from other academic disciplines may be included on the student's study plan with the written permission of the Graduate Coordinator or Chair, School of Technology.

Graduate Assistantships

Information on graduate assistantships may be obtained by contacting the Coordinator of Graduate Studies or Chair, School of Technology, 1014 Klehm Hall, EIU.

New Catalog:

Technology: Master of Science

Program Mission: The purpose of the Master of Science in Technology program is to develop advanced knowledge and skills in those responsible for the leadership and management of technological issues and resources. The program is designed to:

- provide learning opportunities for developing advanced professional, technical, and personal competencies in the discipline;
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Certificate Candidates" section of the *Graduate Catalog*. Individual programs may require candidates to submit plans of study in addition to the Degree Audit, candidates should consult with the program coordinator.

Degree Requirements

Degree requirements include those outlined for the master's degree by the Graduate School (see "Requirements for the Master's Degree").

Students must complete a minimum of 26 semester hours of course work exclusive of internship, independent study, and workshop credit.

In addition, the Master of Science in Technology degree requires this core:

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workplace, productive work teams, and accelerated training and learning.

In addition to the credit hour requirements, students with non-thesis options are required to be certified with comprehensive knowledge pertaining to their graduate study. Students are required to provide a satisfactory written report and an oral presentation under the guidance of a faculty mentor and the certification committee, during the graduating semester.

Detailed procedure of the certification and requirements for the written report and oral presentation are available at:

http://www.eiu.edu/~tech/CertificateofComprehensiveKnowledge-Approved11-06-03.pdf

Elective Course Work

Elective course work in the School of Technology includes senior-graduate and graduate courses with the prefixes of TEC, AET (Applied Engineering & Technology), CIT (Computer & Information Technology), CMG (Construction Management), CTE (Career and Technical Education), DGT (Digital Media), EGT (Engineering Technology) and OPD (Organizational Development).

Elective course work from other academic disciplines may be included on the student's study plan with the written permission of the Graduate Coordinator or Chair, School of Technology.

Graduate Assistantships

Information on graduate assistantships may be obtained by contacting the Graduate Coordinator or Chair, School of Technology, 1014 Klehm Hall, EIU.

Accelerated Graduate Program

An accelerated graduate degree option is available to students at EIU. Admission to the accelerated graduate program in Technology requires that students have a minimum undergraduate cumulative GPA of 3.25 and have completed a minimum of 60 hours of undergraduate course credit. In addition, applicants must have completed a minimum of 30 hours of courses in their undergraduate major.

All applicants must submit two letters of reference, a resume, and a statement of purpose essay, which should include academic background, related work experience, personal and professional goals, and reasons to pursue graduate study in Technology.

Shared Credit Courses:

- TEC 5103Z Leadership in Technology. Credits: 3
- TEC 5133Z Total Quality Systems. Credits: 3
- TEC 5173Z Global Technology, Credits: 3
- TEC 5313Z Networking & Advanced Data Communications. Credits: 3
- TEC 5323Z Advanced Database Technology. Credits: 3
- TEC 5333Z Management of Computer Technology. Credits: 3
- TEC 5343Z Multimedia & Web Technology. Credits: 3

Approved:

SOT Curriculum Committee: 02/08/2018 LCBAS Curriculum Committee: 02/20/18

Council of Academic Affairs: