

School of Technology Graduate Programs New Student Handbook

MISSION. The graduate program in Technology prepares students to become successful leaders in today's technological and global environment. The program is designed to provide students with opportunities for developing advanced professional, technical, and personal competencies in the discipline. It enables students to identify, develop, and implement quality strategies and practices in contemporary organizations.

Additionally, students enhance research and communication skills necessary for technological leadership. They also gain an appreciation of ethical and social implications of technology related to a global and technological society.

Why choose EIU for your Graduate Studies? Because we believe in everything our program offers.

Technological
& Global
Leadership

Successful &
Rewarding
Careers

Enhanced
Marketability

Student
Focused



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Welcome to the Graduate Programs in Technology!

We are pleased to have you in the Graduate Programs in Technology at EIU. We would like to take this opportunity to let you know that we will do our best to help you succeed in your graduate studies. If you have any questions, please feel free to contact us. Here are some useful tips for you:

1. You may come to see me by appointment ONLY. Since we have a large number of students in the programs, you may have to wait if I am with other students. All appointments are scheduled through techgrad@eiu.edu. Provide your name, E#, the topic you are wanting to talk about and provide three (3) times that you can visit.
2. You must keep your contact information updated on your EIU student account through PAWS. If you move, change your phone number, or any contact information, you must update your information on PAWS.
3. All contact between the student and EIU will be through your EIU email account.
4. All Technology graduate students will be enrolled in the “techgrads” listserv email list. This will provide important information regarding the School of Technology Graduate Programs. Be sure to review these emails carefully whenever you receive them.

As always we wish you the best for your studies here at EIU.

Sincerely,

Dr. David Wayne Melton
Coordinator of Graduate Study
School of Technology
Eastern Illinois University
600 Lincoln Avenue
Charleston, IL 61920
Office: 1335 Klehm Hall
techgrad@eiu.edu

School of Technology Graduate Programs

The graduate programs in Technology prepare students to become successful leaders in today's technological and global environment. The programs are designed to provide students with opportunities for developing advanced professional, technical, and personal competencies in the discipline. The programs enable students to identify, develop, and implement quality strategies and practices in contemporary organizations. Additionally, students enhance research and communication skills necessary for technological leadership. They also gain an appreciation of ethical and social implications of technology related to a global and technological society.

The degree program Master of Science in Technology provides students with the following areas of study:

Career and Technical Education - This area of study in Technology prepares students for becoming successful leaders in today's technological and global environment. Study in Career and Technical Education is designed for those individuals who commit to excellence in learning and education in the areas of Business Education, Family and Consumer Science Education, or Technology Education.

Computer Technology - This area of study prepares students to become more effective leaders in today's technological and global environment. Study in Computer Technology provides students with knowledge and skills in current computer technology.

Technology Management - This area of study in Technology prepares students to become successful leaders in today's technological and global environment. Study in Technology Management is suitable for students who desire to be part of effective management teams in industrial-related organizations. The program offers the ideal blend of technical knowledge and management principles needed for effective leadership.

Training and Development - This area of study in Technology prepares students to become more effective leaders in today's technological and global environment. Effective leaders help people perform at a level that can improve an entire organization. Study in Training and Development is suitable for students who aspire to be a part of performance improvement teams in industry and business.

Resource Management Technology - This area of study in technology is designed to prepare students to be part of an effective professional team managing natural and corporate resources using such tools as Geographic Information Systems (GIS), and Enterprise Resource Planning (ERP). The program offers the ideal blend of technical knowledge and management principles needed for effective leadership.

Most graduate courses are offered on evenings or weekends, and some are offered online. Many courses are offered through on/off campus sites close to where students live. Most full-time students complete the 32-hour degree program in three semesters. Typical working students who study on a part-time basis usually finish their degree requirements in about two years.



School of Technology Graduate Certificate Programs

To help Illinois business and industry sustain economic growth, the School of Technology offers the following graduate certificate programs to meet focused needs of students and working professionals in industry, business, education and government agencies.

Computer Technology (18 hours) - This certificate program is designed to provide graduate students and professionals working in various organizations with coursework focused on current state-of-the-art computer technology. Key areas include data communications and networking technology, database technology, multimedia and web technology, management of computer technology, and applications of computer technology.

Quality Systems (18 hours) - This certificate program is designed to provide graduate students and professionals working in industry and business with focused coursework leading to improvement in the quality of products and services to help companies become more competitive in the global market.

Technology Security (18 hours) - This certificate program is designed to provide graduate students and professionals working in industry and business with focused coursework on technology security including facility security, network and database security, as well as management policies on security of technological systems.

Training and Development (18 hours) - This certificate program is designed to prepare professionals who can function as effective trainers in private or public agencies and organizations. Graduates of this certificate will be able to analyze, design, lead, and evaluate learning and performance improvement efforts that contribute to organizational achievement. This certificate aims to employ hands-on experiences that allow students to identify and solve organizational problems related to the effective use of human resources.

Work Performance Improvement (18 hours) - This certificate program is designed to meet the needs of graduate students as well as current training and development practitioners to have their educational preparation in the field of human performance improvement officially endorsed. The certificate in Work Performance Improvement will demonstrate that recipients possess the knowledge and skills needed for performance consulting and training. It will also make them more marketable to potential future employers.

Computer Technology Certificate

The purpose of this certificate program is to provide graduate students and professionals working in industry and related organizations with coursework focused on current computer technology. Key areas include data communications and networking technology, database technology, multimedia and web technology, management of computer technology, and applications of computer technology.

Required Courses - 12 semester hours

- TEC 5313 Networking and Advanced Data Communications
- TEC 5323 Advanced Database Technology
- TEC 5333 Management of Computer Technology
- TEC 5343 Multimedia and Web Technology

Elective Courses - 6 semester hours from the following list:

- AET 4813 Advanced Digital Media Technologies
- AET 4833 Automatic Identification and Data Capture
- MAT 4870 Data Structure and Algorithm Analysis
- MAT 4970 Principles of Operating System
- MAT 5035 Topics in Computer Science: Cryptography
- TEC 5223 Instructional Technology
- TEC 5353 Cyber Security
- TEC 5363 Database Security and Reliability
- TEC 5373 Java Application in Technology
- TEC 5413 Biometric Security
- TEC 5513 Advanced Computer Integrated Manufacturing
- TEC 5523 Systems Simulation

Other special topics OPD4850/AET4970/TEC5970 courses with prior approval of the Graduate Coordinator of Technology.



Technology Security Certificate

The graduate certificate program in Technology Security is designed to provide graduate students and professionals working in industry and business with focused coursework on technology security including facility security, network and database security, as well as management policies on security of technological systems.

Required Courses - 12 semester hours

- AET 4823 Facility Security
- TEC 5333 Management of Computer Technology
- TEC 5353 Cyber Security
- TEC 5363 Database Security and Reliability

Elective Courses - 6 semester hours from the following list:

- AET 4833 Automatic Identification and Data Capture
- MAT 4870 Data Structure and Algorithm Analysis
- MAT 4970 Principles of Operating System
- MAT 5035 Topics in Computer Science: Cryptography
- TEC 5313 Networking and Advanced Data Communications
- TEC 5323 Advanced Database Technology
- TEC 5343 Multimedia and Web Technology
- TEC 5373 Java Application in Technology
- TEC 5413 Biometrics Security
- TEC 5523 Systems Simulation

Other special topics OPD4850/AET4970/TEC5970 courses with prior approval of the Graduate Coordinator of Technology.

Quality Systems Certificate

The graduate certificate program in Quality Systems is designed to provide students and professionals working in industry and business with focused course work leading to improvement in the quality of products and services. This will help organizations become more competitive in the global market.

Required Courses - 12 semester hours

- AET 4843 Statistical Quality Assurance
- TEC 5103 Science and Technology of Leadership
- TEC 5133 Total Quality Systems
- TEC 5243 Design for Quality

Elective Courses - 6 semester hours from the following list:

- AET 4753 Lean Manufacturing
- AET 4773 Safety for Engineering and Technology Professionals
- AET 4803 Plant Layout and Material Handling
- AET 4943 Manufacturing Management
- OPD 4820 Change Strategies in Organizations
- OPD 4845 Improvement in Organizations
- OPD 4850 Quality Processes in the Workplace
- TEC 5123 Industrial Productivity Analysis

Other special topics OPD4850/AET4970/TEC5970 courses with prior approval of the Graduate Coordinator of Technology.

Work Performance Improvement Certificate

The graduate certificate program in Work Performance Improvement is designed to meet the needs of graduate students as well as training and development practitioners to have their educational preparation in the field of work performance improvement officially endorsed. The certificate will signify that recipients possess the knowledge and skills needed for performance improvement initiatives in the workplace. It will also make them more marketable to potential future employers.

Required Courses - 12 semester hours

- OPD 4845 Improvement in Organizations
- TEC 5103 Science and Technology of Leadership
- TEC 5213 Work Performance Technology
- TEC 5293 Strategic Employee Development

Elective Courses - 6 semester hours from the following list:

- OPD 4815 Conflict in Organizations
- OPD 4820 Change in Organizations
- OPD 4825 Ethical Decision Making
- OPD 4860 Facilitating Learning and Project Groups
- OPD 4870 Coaching and Mentoring for Critical Thinking in the Workplace
- OPD 4880 Productive Work Teams

Other special topics OPD4850/AET4970/TEC5970 courses with prior approval of the Graduate Coordinator of Technology.

Training and Development Certificate

The graduate certificate program in Training and Development is designed to prepare professionals who can function as effective trainers in private or public agencies and organizations. Graduates of the certificate program will be able to analyze, design, lead, and evaluate learning and performance improvement efforts that contribute to organizational achievement. This certificate aims to employ hands on experiences that allow students to identify and solve organizational problems related to the effective use of human resources.

Required Courses - 12 semester hours

- TEC 5203 Analysis of Training & Development Issues
- TEC 5283 Instructional Systems Design
- TEC 5293 Strategic Employee Development
- TEC 5443 Assessment and Evaluation in Workforce Preparation

Elective Courses - 6 semester hours from the following list:

- OPD 4800 Strategies and Processes of Teaching and Training
- OPD 4840 Training Program Development
- OPD 4855 Web-Based Training and Instruction
- OPD 4860 Facilitating Learning and Project Groups
- OPD 4890 Accelerated Training and Learning
- TEC 5213 Work Performance Technology
- TEC 5223 Instructional Technology
- TEC 5233 Training Systems Management
- TEC 5343 Multimedia and Web Technology

Other special topics OPD4850/AET4970/TEC5970 courses with prior approval of the Graduate Coordinator of Technology.

Course Selection & Program Options

- Students will select courses on the list specified only for each area of study. For example, a student in “Computer Technology” area will only choose courses on the list for “Computer Technology.”
- Students may change their area of study with the approval from the Graduate Coordinator or Chair of the School of Technology.
- Upon approval, students can design a customized study plan by combining or crossing areas. For example, a student can combine coursework from “Career and Technical Education” and “Computer Technology,” with prior approval from the Graduate Coordinator or Chair of the School of Technology.
- Please note that courses for the graduate programs in Technology are offered on campus and as well as off campus, with some courses offered completely online. When searching the class schedule, pay attention to the different types of course offerings and choose the type(s) of courses which best meet your needs.

Capstone Experience and Program Completion

Candidates for the Master of Science in Technology degree are required to successfully complete a Capstone Experience. Students are expected to begin planning for their Capstone Experience in their first semester of study, to ensure that the process is completed by the time they graduate.

In addition to the Capstone Experience, students must complete the School of Technology Exit Survey during their last semester of study.

There are three ways to satisfy the Capstone Experience Requirement:

- Complete a **certificate program**
- Complete a **thesis**
- Complete a **research project**

Certificate Program

The certificate program option requires completion of 32 credit hours including 18 hours of required and elective coursework for one of the five graduate certificate programs offered by the School of Technology, as well as one hour of independent study course credit in which a project or paper is completed that focuses on the certificate area of study.

Thesis Option

The thesis option requires completion of 30 credit hours including the 3 to 6 hours of thesis course credit. A typical thesis involves literature research, a thesis proposal, conducting a research plan and writing a final defense of the thesis under the guidance of a graduate faculty member.

Research Project

The research project option requires completion of 32 credit hours including the one hour of independent study course credit in which the research project is completed.

Writing Requirement for International Students

As a condition for your admission, you must either attend two workshops through EIU's Writing Center, or complete an English Writing/Composition (ENG 1001) class during the first semester of your graduate program. Here are more details on each option:

- Attend two workshops through EIU's Writing Center: Each workshop lasts one hour. There is no fee for EIU students, so you will not have to pay anything to attend these workshops after you arrive on campus as a student. These workshops are usually taught by a graduate assistant in the English department. Each workshop covers a different writing topic, and the sessions are very informal. Grades are not given; students are given credit just for attending.
- Complete an English Writing/Composition (ENG 1001) class: ENG 1001 is a semester-long class, and students pay tuition to take the course. The course is graded in the usual format, based on a 4-point grading scale.

Of these two options, students overwhelmingly choose to attend the Writing Center workshops, since they are free, and they last only two hours total, instead of taking a semester-long course.

Your admission is considered conditional until you satisfy one of these two requirements after you arrive on campus. This requirement cannot be waived.

For all graduate courses you are taking in Technology, you should seek individual help from the EIU Writing Center. The web address for the writing center is: <http://www.eiu.edu/writing/> .

Class Attendance Policy & Distance Education Policy

Class Attendance Policy

- Class attendance is required.
- Students are required to be on campus while the university is in session.
- **Early departure and/or late arrival is not acceptable.**

Distance Education Policy for International Students

U.S. Immigration maintains a regulation on international students regarding the number of distance-education courses they are allowed to take. This immigration regulation requires international students to take at least six hours of non-distance education courses while maintaining full-time status.

Based on a typical academic load of nine semester hours, an international student can take only one three-credit-hour, internet-delivered course each semester.

Tips for Success

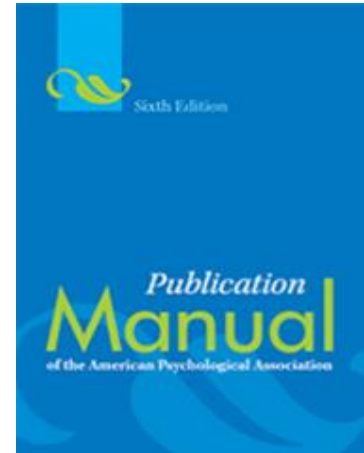
- Attend every class. It is nearly impossible to learn and be a successful student if you do not attend class.
- Play an active role in all classes since that is your opportunity to improve your leadership ability including communication skills.
- Be positive and pleasant. We are here together to learn, not to complain.
- Be adaptive and learn to work with others. Teamwork is a major building block of your leadership.
- Do your hard work and submit your work on time. Any delay is NOT acceptable.
- Cheating and plagiarism will result in dismissal from the program. Direct copy from internet sources or others is NOT acceptable.
- Seek help if necessary from the instructor or other resources such as the EIU Writing Center.

APA Style Format and Avoiding Plagiarism

The *Publication Manual of the American Psychological Association* is the style guide used by the School of Technology faculty and students. It provides invaluable guidance on all aspects of the writing process, from the ethics of authorship to the word choice that best reduces bias in language. The *APA Publication Manual* provides guidelines for formatting, references and citing sources.

The *APA Publication Manual* provides instructions and guidelines on copying, paraphrasing and summarizing information for research papers. Information from any source must be cited according to the APA style format. Citing a source tells readers not only that certain material in your work came from another source, but a citation tells a reader where you got a quote, fact, graphic, or idea. This allows the reader to retrieve the source of your information and verify that you have:

- drawn on authoritative sources
- used them fairly
- copied from them accurately
- included all important details
- interpreted them correctly



A citation also gives your readers the information necessary to find that source again, including:

- information about the author
- the title of the work
- the name and location of the company that published your copy of the source
- the date your copy was published
- the page numbers of the material you are borrowing

Failure to properly cite information is considered plagiarism. For information about how to cite sources, refer to the current edition of the *Publication Manual of the American Psychological Association*.

Plagiarism

Plagiarism is the act of taking or copying another author's words and presenting them as your own without proper citation. This includes quoting, paraphrasing, or summarizing another's words or ideas without citing the source. Whenever you use another's words or ideas, the source(s) must be cited.

According to the Merriam-Webster Online Dictionary, to "plagiarize" means

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

School of Technology Policy on Plagiarism

If a student is found to have plagiarized any portion of an assignment, the university policy on academic integrity will be followed. The student will receive a zero on the assignment at the discretion of the faculty. For more information, refer to the EIU Office of Student Standards web site for the Standards of Student Conduct.

Cheating

Like plagiarism, cheating is not tolerated. According to the EIU Office of Student Standards web site for the Standards of Student Conduct, Eastern students observe the highest principles of academic integrity and support a campus environment conducive to scholarship. Violations of this standard include:

- Conduct in subversion of academic standards, such as cheating on examinations, plagiarism, collusion, misrepresentation or falsification of data.
- Theft or the unauthorized possession of examinations; alteration, theft, or destruction of the academic work of others, or academic records, library materials, laboratory materials, or other University equipment or property related to instructional matters or research.
- Submitting work previously presented in another course unless specifically permitted by the instructor.
- Conduct which disrupts the academic environment; disruption in classes, faculty offices, academic buildings, or computer facilities.
- Complicity with others in violations of this standard.

Graduate Assistantships

Graduate Assistantship Selection in the School of Technology:

- Graduate assistantships are awarded on a competitive basis. We will choose the best candidate for certain functions (lab assistant or research/teaching assistant, etc.).
- We are looking for the best match between the needs of the School of Technology and the applicant's skills and experience. We often consider an applicant's GPA, academic background, and work experience, among other indicators.
- Nomination for assistantship positions is generally made in middle or late March for the upcoming fall and spring semesters.

Graduate Assistantships from Other Sources on Campus:

Graduate students in Technology have sometimes been employed as graduate assistants for EIU departments/areas outside the School of Technology. The following areas have previously hired graduate assistants in Technology:

- Information Technology Services (ITS)
- Center for Academic Technology Support (CATS)
- New Student Programs
- Housing and Dining Services
- Graduate School
- International Students & Scholars

You will need to contact the specific office/area for application details, to find out if they require additional application material besides the online graduate assistantship application.

Additional Information

Listserv

In order to facilitate communications among graduate students and faculty, an automated email listserv (tecgrads) for the graduate students in School of Technology has been established. We will broadcast all the information relevant to our graduate program, our graduate students, and graduate faculty through this listserv. Your EIU email address will be added to the listserv, and you will remain a member of the listserv until you graduate.

PAWS

PAWS is your gateway to your academic needs, where you will register for courses, view your grades, update your contact information, apply to graduate, etc.: <http://www.eiu.edu/pawslogin/>

Communication

When you communicate with faculty, including by email, introduce yourself by providing your name and other related information clearly.

When sending an email to a faculty member or professor, do the following:

- Identify yourself by providing your name, student E-number, and which class you are emailing about.
- Clearly explain the issue or problem.

Important Web Addresses

- Graduate Programs in Technology: <http://www.eiu.edu/techgrad/>
- Graduate School: <http://www.eiu.edu/graduate/>
- International Students and Scholars Office: <http://www.eiu.edu/interntl/>
- Graduate Catalog: <http://catalog.eiu.edu/index.php>
- Health Service: <http://www.eiu.edu/health/>
- Disability Services: <http://www.eiu.edu/disablty/>
- Registrar's Office: <http://www.eiu.edu/registra/>
- Commencement: <http://www.eiu.edu/commence/>