ENGINEERING TECHNOLOGY - M.E.T.

College of Aeronautics and Engineering
School of Engineering
www.kent.edu/cae

About This Program

The Master of Engineering Technology degree offers a curriculum that provides students with advanced technical and management knowledge and skills to meet the needs of the technical workforce in industry and business. The program orients and educates students in critical emerging areas of engineering, including additive manufacturing, sustainable energy, materials selection, quality systems, systems engineering, computer aided-manufacturing and design, industrial automation and robotics, information technology and network management and business analytics.

Contact Information

- CAEgraduatestudies@kent.edu | 330-672-2829
- Connect with an Admissions Counselor: U.S. Student | International Student

Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus

Examples of Possible Careers and Salaries*

Aerospace engineering and operations technologists and technicians

- 7.0% faster than the average
- 11,900 number of jobs
- $68,570 potential earnings

Calibration technologists and technicians and engineering technologists and technicians, except drafters, all other

- 2.1% slower than the average
- 91,600 number of jobs
- $64,190 potential earnings

Civil engineering technologists and technicians

- 2.5% slower than the average
- 70,900 number of jobs
- $54,080 potential earnings

Electrical and electronic engineering technologists and technicians

- 1.5% slower than the average
- 125,800 number of jobs
- $67,550 potential earnings

Electro-mechanical and mechatronics technologists and technicians

- 3.0% about as fast as the average
- 14,600 number of jobs
- $59,800 potential earnings

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university[1]
- Minimum 2.750 undergraduate GPA on a 4.000-point scale[1]
- Official transcript(s)
- Goal statement (one page) describing applicant's background, interests, and goals, and how this program will help to achieve those goals
- Three letters of recommendation[2]
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions to waive) by earning one of the following:[3]
  - Minimum 79 TOEFL iBT score
  - Minimum 6.5 IELTS score
  - Minimum 58 PTE score
  - Minimum 110 DET score

An admissions committee of the College of Aeronautics and Engineering graduate faculty review all applications. Admission will be considered by examination of the applicant's background on an individual basis. Applicants with deficiencies may be admitted conditionally, which may include a requirement for completion of appropriate undergraduate coursework that will not count toward the master's degree.

1 In exceptional cases, an applicant without a technical degree or with a composite GPA below 2.750 may be admitted conditionally based on strong letters of recommendation or significant experience related to the intended area of study. These applicants should submit any additional information that may assist the admissions committee in assessing their academic, technical or professional background and abilities. The additional information may include a résumé or professional portfolio summarizing any relevant technical competencies, professional experience, and any academic and professional achievements in areas related to the applicant's intended studies.

2 The letters should come from an individual familiar with the applicant's academic or professional background and abilities. The letters

should attest to the applicant's potential to complete graduate work successfully. Letters of recommendation from persons who are experienced professionals in the applicant's intended field of study or in a closely related area are acceptable. Recommendations from former or current professors are preferred.

[3] International applicants who do not meet the above test scores may be considered for conditional admission.

Application Deadlines

- **Fall Semester**
  - Application deadline: March 1
- **Spring Semester**
  - Application deadline: August 1

All application materials (including applicable fee, transcripts, recommendation letters, etc.) submitted after these deadlines will be considered on a space-available basis.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
ENGR 57200	SYSTEMS ENGINEERING [1]	3
or ENGR 65700	APPLIED RELIABILITY ENGINEERING	
ENGR 57210	SUSTAINABLE ENERGY I [1]	3
ENGR 60000	PROJECT MANAGEMENT IN A TECHNOLOGICAL ENVIRONMENT	3
ENGR 65500	QUALITY SYSTEMS AND INDUSTRIAL PRODUCTIVITY	3
Business or Mathematics Electives, choose from the following:		6
BA 64036 & BA 64060	BUSINESS ANALYTICS and FUNDAMENTALS OF MACHINE LEARNING	
MATH 50012 & MATH 50024	THEORY OF STATISTICS and COMPUTATIONAL STATISTICS	
MATH 50015 & MATH 50024	APPLIED STATISTICS and COMPUTATIONAL STATISTICS [2]	
Major Electives, choose from the following:		9
ENGR 60003	SIX-SIGMA: TOOLS AND APPLICATIONS FOR TECHNOLOGY MANAGEMENT	
Computer Engineering Technology Specialization		
ENGR 56312	WIRELESS NETWORK AND TELECOMMUNICATION SYSTEMS [1]	
ENGR 63010	INFORMATION TECHNOLOGY FUNDAMENTALS	
Manufacturing Specialization		
ENGR 52363	MATERIALS SELECTION IN DESIGN AND APPLICATIONS [1]	
ENGR 52410	ENGINEERING OPTIMIZATION [1]	
ENGR 53550	COMPUTER-AIDED MANUFACTURING [1]	
Robotics Specialization		
ENGR 60092	INDUSTRIAL PRACTICE [3]	
ENGR 62610	INDUSTRIAL ROBOTICS AND VISION SYSTEMS	
ENGR 62611	INDUSTRIAL ROBOTICS AND VISION SYSTEMS LABORATORY	
ENGR 62620	INDUSTRIAL AUTOMATION AND CONTROL	
ENGR 62621	INDUSTRIAL AUTOMATION AND CONTROL LABORATORY	
Quality Specialization		
ENGR 60020	QUALITY STANDARDS	
ENGR 65270	HUMAN FACTORS ENGINEERING	
ENGR 65550	DESIGN AND ANALYSIS OF EXPERIMENTS IN TECHNOLOGY	
ENGR 65700	APPLIED RELIABILITY ENGINEERING	
Culminating Requirement		
Choose from the following:		3-4
ENGR 52710 & ENGR 52711	ADDITIVE MANUFACTURING AND 3D PRINTING and ADDITIVE MANUFACTURING AND 3D PRINTING LABORATORY	
ENGR 60092	INDUSTRIAL PRACTICE	
Minimum Total Credit Hours:		**30**

[1] Students who have completed the undergraduate equivalent of the graduate course may not take the graduate course toward the degree. Example, students who completed ENGR 47200 may not take ENGR 57200.

[2] Students with prior coursework in statistics may be approved to take MATH 50015 as an alternative to MATH 50012. Students must contact the Department of Mathematical Sciences to request a prerequisite override to register for graduate math courses.

[3] Students who want to take both the Industrial Practice and Additive Manufacturing culminating requirements may have ENGR 60092 count as a major elective.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
-	3.000

- No more than one-half of a graduate student's coursework may be taken in 50000-level courses.
- Grades below C are not counted toward completion of requirements for the degree.

Program Learning Outcomes

Graduates of this program will be able to:

1. Apply engineering and technology management principles and practices.
2. Conduct planning, organizing, decision-making and management of technology and complex systems.
3. Apply problem-solving and creative-thinking skills in technical and interdisciplinary settings.
4. Conduct design, business analysis, statistical analysis and the development and implementation of applied engineering and technology in various engineering, science and technology venues.

Dual Degree with Master of Business Administration

Students have the opportunity to complete a dual degree program with the Master of Engineering Technology degree and the Master of Business Administration degree. A separate application must be submitted for each program. Students can view admission requirements for each program on their respective catalog page.

The M.B.A./M.E.T. dual degree is designed for students with the dual goal of pursuing the a highly technical degree while at the same time

preparing for a career that will hold increasing levels of management positions.

Dual Degree Requirements

Code	Title	Credit Hours
Major Requirements		
ACCT 63037	FINANCIAL ACCOUNTING FOR DECISION MAKING	2
ACCT 63038	MANAGERIAL ACCOUNTING FOR DECISION MAKING	2
BA 64026	SUPPLY CHAIN MANAGEMENT	2
BA 64036	BUSINESS ANALYTICS	3
BA 64060	FUNDAMENTALS OF MACHINE LEARNING	3
CIS 64042	GLOBALIZATION AND TECHNOLOGY STRATEGY	2
ECON 62021	MACROECONOMIC ENVIRONMENT OF BUSINESS	2
ECON 62022	MANAGERIAL ECONOMICS	2
ENGR 52363	MATERIALS SELECTION IN DESIGN AND APPLICATIONS	3
ENGR 57200	SYSTEMS ENGINEERING	3
ENGR 57210	SUSTAINABLE ENERGY I	3
ENGR 60000	PROJECT MANAGEMENT IN A TECHNOLOGICAL ENVIRONMENT	3
ENGR 65500	QUALITY SYSTEMS AND INDUSTRIAL PRODUCTIVITY	3
FIN 66050	LAW AND ETHICS	2
FIN 66060	MANAGERIAL FINANCE	2
HRM 64271	HUMAN RESOURCE MANAGEMENT	2
MGMT 64158	LEADERSHIP	2
MGMT 68051	BUSINESS PROFESSIONAL DEVELOPMENT I [1]	1
MKTG 65051	MARKETING MANAGEMENT	2
Engineering Electives, choose from the following:		6
ENGR 52410	ENGINEERING OPTIMIZATION	
ENGR 60003	SIX-SIGMA: TOOLS AND APPLICATIONS FOR TECHNOLOGY MANAGEMENT	
ENGR 60092	INDUSTRIAL PRACTICE	
ENGR 62610	INDUSTRIAL ROBOTICS AND VISION SYSTEMS	
ENGR 62611	INDUSTRIAL ROBOTICS AND VISION SYSTEMS LABORATORY	
ENGR 62620	INDUSTRIAL AUTOMATION AND CONTROL	
ENGR 62621	INDUSTRIAL AUTOMATION AND CONTROL LABORATORY	
ENGR 63010	INFORMATION TECHNOLOGY FUNDAMENTALS	
ENGR 63100	COMPUTER-AIDED DESIGN	
Culminating Experience		
ENGR 52710 & ENGR 52711	ADDITIVE MANUFACTURING AND 3D PRINTING and ADDITIVE MANUFACTURING AND 3D PRINTING LABORATORY	3
or ENGR 60092	INDUSTRIAL PRACTICE	
MGMT 64399	BUSINESS STRATEGY	3
Minimum Total Credit Hours:		**56**

[1] MGMT 68051 may be waived for students with at least two years of full-time work experience. Students waived the course may graduate with 55 credit hours.