29. Change in Curriculum

**Dwight Look College of Engineering**
Department of Engineering Technology and Industrial Distribution
BS in Engineering Technology
Manufacturing and Mechanical Engineering Technology Option
CHANGE IN CURRICULA
CHANGE IN CURRICULUM

DWIGHT LOOK COLLEGE OF ENGINEERING
DEPARTMENT OF ENGINEERING TECHNOLOGY AND INDUSTRIAL DISTRIBUTION
BS IN ENGINEERING TECHNOLOGY
MANUFACTURING AND MECHANICAL ENGINEERING TECHNOLOGY OPTION
Texas A&M University
Request for a Change in Curriculum
Undergraduate • Graduate • Professional

1. Program request type: ☑ Undergraduate  □ Graduate  □ First Professional (e.g., EVM, JD, MD, etc.)
2. Request change for: ☑ Degree Program  □ Minor  □ Certificate
3. Request submitted by (Department or Program Name): ETID

Program Designation and Name
(e.g., B.A. in History, Minor in History, Certificate in European Union): BS Engineering Technology - Manufacturing and Mechanical

5. Brief description of change: Requesting changes due to the term CBK being removed from all Engineering curriculum.

6. Rationale for change: Updates to catalog requested as CBK no longer term in Engineering Curriculum.

Use the checkboxes below to make sure that all information is included.

7. a. Proposed curriculum attached. ☑ Yes  □ No
    b. Current catalog curriculum with handwritten edits attached. ☑ Yes  □ No
    c. Current Howdy degree evaluation with handwritten edits attached. ☑ Yes  □ No

Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.

8. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes? □ Yes  ☑ No
    b. If yes, degree program hours will change from: _________ to: _________
    c. If yes, is the Texas Higher Education Coordinating Board form attached? □ Yes  ☑ No

http://www.thceb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBF01D60

9. If proposed changes affect other unit(s), are letters of support attached? ☑ Yes  □ No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and fully approved by February (December-UCC/VC, January-Faculty Senate, February-President) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Dr. Reza Langari  
Department Head or Program Chair (Type Name & Sign)  Date  10/17/14

Dean of College  Date  11/20/14

Chair, College Review Committee  Date  11/26/14

Chair, GC or UCC  Date  11/26/14

Questions regarding this form should be directed to Curricular Services at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 04/14
Program Mission
The mission of the Manufacturing and Mechanical Engineering Technology (MMET) program at Texas A&M University is to provide a high-quality, application-oriented education producing professionals who can effectively contribute to leadership, the advancement of manufacturing and mechanical engineering technology, and improved performance of industrial endeavors. The educational mission is complemented by applied research and the development of new interdisciplinary technology that mutually benefits the university and its industrial, governmental, and academic collaborators. The people in the program are committed to providing service and leadership in the promotion and advancement of the University and the profession.

Program Educational Objectives
The MMET program prepares students who after a few years after graduation:
1. Demonstrate manufacturing and mechanical technical knowledge, problem solving skills, and implementation skills for careers in design, installation, operations, technical sales, or service functions in industry;
2. Demonstrate increasing level of leadership and responsibility;
3. Exhibit both immediate and sustainable productivity in a dynamic work environment.

Engineering Technology Academic Policies
The Department of Engineering Technology and Industrial Distribution (ETID) imposes the following academic requirements in addition to those imposed by the University (Texas A&M University Student Rules) and college. For complete details concerning these and other ENTC academic policies, students should contact the ETID Undergraduate Advising Office and are referred to the ETID website (engineering.tamu.edu/etid).

The academic policies apply to any student who is identified as a Manufacturing and Mechanical Engineering Technology major and to any student who seeks admission to the MMET program. Students are encouraged to use these academic policies, along with other important information sources, for guidance in their undergraduate programs. Official information sources include the Texas A&M University Undergraduate Catalog, the Texas A&M University Student Rules, the Texas A&M University online course schedule, howdy.tamu.edu system, departmental academic policies, academic advisors, program coordinators, faculty advisors, the ETID website, and University and departmental distribution lists.

Transfer students, regardless of transfer hours must meet the same standards and criteria for admission to a major degree sequence as shown above. Students currently enrolled in another major at Texas A&M University who desire to change their major field of study to Manufacturing and Mechanical Engineering Technology must fill out a Change of Curriculum application. The program will admit the best-qualified applicants based on the number of spaces available. Applicants will be evaluated on the basis of academic achievement and potential. Students must earn grades of C or better in major (ENTC) courses, required and elective technical courses, Common Body of Knowledge (CBK) courses, and any prerequisites for these courses. If a student earns a grade of D or F in any of these courses, the student is required to repeat the course before enrolling in a more advanced course that has the D/F course as a prerequisite. A student may attempt a course no more than three times, including courses graded Q or W but excluding those
Program Educational Objectives

The Electronic Systems Engineering Technology Program at Texas A&M has as its primary educational objectives to produce graduates who, after three to five years:

1. possess the technical skills to be immediately productive and have successful careers in regional, state or national electronic product and system development industries,
2. demonstrate increasing levels of leadership and responsibility during their careers,
3. exhibit a commitment to professional ethics in their professional career,
4. display a desire for life-long learning through continued education, technical training, and/or professional development.

A continuous cycle of assessment and program improvement is used to ensure that these objectives are being met. Through interactions with industry and academic partners, the Electronic Systems Engineering Technology program continues to offer a state-of-the-art curriculum that produces successful graduates.

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The academic policies apply to any student who is identified as an Electronic Systems Engineering Technology (ESET) major and to any student who seeks admission to the ESET program. Students are encouraged to use these academic policies, along with other important information sources, for guidance in their undergraduate programs. Official information sources include the Texas A&M University Undergraduate Catalog, the Texas A&M University Student Rules, the Texas A&M University online course schedule, howdy.tamu.edu system, departmental academic policies, academic advisors, program coordinators, faculty advisors, the ETID website, and University and departmental distribution lists.

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Curricula in Engineering Technology

The mission of the Department of Engineering Technology and Industrial Distribution is to: 1) maintain nationally recognized programs in engineering technology and industrial distribution; 2) focus on educating highly-qualified students with hands-on skills, providing them with experiences in advanced integration of both conventional and emerging technologies, a unique understanding of management and business practices, and an entrepreneurial point of view; 3) provide leadership within the COE and university in interdisciplinary applied research, to include the development and deployment of new technology; and 4) promote and develop long term partnerships with industry and government that foster enhancements and interactions in education, research, and professional development. The department offers a specialty in Manufacturing and Mechanical Engineering Technology.

Manufacturing and Mechanical Engineering Technology Option

Manufacturing and mechanical engineering technology prepares students for dynamic careers in industry. Graduates are versatile and effective in diverse areas that require understanding of the dependencies among material properties, product design, costs, manufacturing systems, and process technologies. The student views manufacturing from an enterprise and system perspective, recognizing the importance of customer and supplier interactions. To meet these diverse needs, this specialty provides a foundation of mathematics, science, and specialized technical courses, as well as preparation in oral and written communication. The three main areas of concentration are product design, manufacturing systems integration and automation, and manufacturing competitiveness. Studies in these areas are supported by a solid foundation in materials and manufacturing processes. Graduates of this program are awarded a Bachelor of Science Degree in Engineering Technology. The Manufacturing and Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.
Program Mission
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### SENIOR YEAR

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<th>(Th-P)</th>
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<td>ENTC 412 Product and Inventory Plan. 4</td>
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<td><strong>Total hours</strong></td>
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**NOTES:**

1. To be selected from the University Core Curriculum. (See page 17). Of the 18 hours shown as University Core Curriculum electives, 3 must be from creative arts, 3 from social and behavioral sciences, 6 from American history, and 6 from government/political science. The required 6 hours from international and cultural diversity may be met by courses satisfying the creative arts, social and behavioral sciences, and American history requirements if they are also on the approved list of international and cultural diversity courses.

2. Entering students will be given a placement test in mathematics. Test results will be used in selecting the appropriate starting course which may be at a higher or lower level.

3. Must be approved by an advisor. Students interested in C"-O may use ENGR 385 for up to 3 credit hours. ENTC 485 Directed Studies is not for general use as a technical elective.

4. Must be an ENTC or other technical 300- or 400-level course and approved by advisor.

5. General Body of Knowledge (GBK) courses required for admission to degree sequence.

6. Courses used to calculate in-major GPR. Grade of C or better is required for each of the courses.

7. Must be selected from ENGL 210.

8. ENTC 429 is taken the fall semester before graduation if the student is graduating in the spring or summer semester. It is taken in the spring semester before graduation if the student is graduating in the fall semester.

9. ENTC 412 is taken the semester of graduation if the student is graduating in the spring or fall semester. It is taken in the spring semester before graduation if the student is graduating in the fall semester.

10. Must be selected from COMM 203 or COMM 205.

The curriculum lists the minimum number of classes required for graduation. Additional courses may be taken.

The following certificates from the Dwight Look College of Engineering are available for students pursuing this degree: Business Management, Energy Engineering, Engineering Project Management, Engineering Honors, International Engineering, Polymer Specialty and Safety Engineering (see descriptions beginning on page 357).

### Curriculum in Industrial Distribution

The mission of the Department of Engineering Technology and Industrial Distribution is to: 1) maintain nationally recognized programs in engineering technology and industrial distribution; 2) focus on educating highly-qualified students with hands-on skills, providing them with experiences in advanced integration of both conventional and emerging technologies, a unique understanding of management and business practices, and an entrepreneurial point of view; 3) provide leadership within the COE and university in interdisciplinary applied research, to include the development and deployment of new technology; and 4) promote and develop long term partnerships with industry and government that foster enhancements and interactions in education, research, and professional development.

Industrial distribution prepares men and women for sales engineering, sales management and mid-management positions with manufacturers who sell through distributors and with wholesale distributors who purchase, warehouse, sell, distribute and service a wide variety of industrial products. Industry segments include: automation solutions; general line; building materials; chemical and petrochemical; electrical; electronics; semiconductor; fluid power; heating, ventilation and air conditioning; mechanical power; metals; plastics; plumbing; safety equipment; specialty tools; and welding. The day-to-day challenges faced by the industrial distributor or the manufacturer's representative require the person to be a professional with many capabilities. To fulfill this demand, the