## Roadmap: Applied Engineering - Mechanical Engineering Technology - Bachelor of Science





College of Applied Engineering, Sustainability and Technology

Catalog Year: 2014-2015

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

| Critical    | Course Subject and Title  | Credit | Upper | Min.  | Major | Туре   | Term Taken |
|-------------|---|--------|-------|-------|-------|--------|------------|
|             |   | Hours  | Div.  | Grade | GPA   | Type   | Term Taken |
|             | ter One [16 Credits]  |        |       |       |       |        |            |
|             | MATH 11010 Algebra for Calculus                                     | 3      |       |       |       | KMC    |            |
| !           | TECH 10001 Information Technology                                   | 3      |       |       |       |        |            |
| !           | TECH 13580 Engineering Graphics I                                   | 3      |       |       |       |        |            |
|             | US 10097 Destination Kent State: First Year Experience <sup>1</sup> | 1      |       |       |       |        |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
|             | ter Two [16 Credits]  |        |       |       |       |        |            |
|             | MATH 11022 Trigonometry   | 3      |       |       |       | KMC    |            |
| !           | PHY 13001 General College Physics I                                 | 4      |       |       |       | KBS    |            |
| !           | TECH 23581 Computer-Aided Engineering Graphics                      | 3      |       |       |       |        |            |
|             | COMM 15000 Introduction to Human Communication                      | 3      |       |       |       | KAD    |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
| emest       | ter Three [16 Credits]  |        |       |       |       |        |            |
| !           | TECH 20002 Materials and Processes                                  | 3      |       |       |       |        |            |
|             | MATH 12002 Analytic Geometry and Calculus I                         | 5      |       |       |       | KMC    |            |
|             | PHY 13002 General College Physics II                                | 4      |       |       |       | KBS    |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
|             | Kent Core Basic Sciences Laboratory                                 | 1      |       |       |       |        |            |
| emest       | ter Four [16 Credits]   |        |       |       |       |        |            |
| !           | TECH 21021 Survey of Electricity and Electronics                    | 4      |       |       |       |        |            |
|             | ACCT 23020 Introduction to Financial Accounting                     | 3      |       |       |       |        |            |
|             | ENG 20002 Introduction to Technical Writing                         | 3      |       |       |       |        |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
|             | Kent Core Requirement   | 3      |       |       |       |        |            |
| emest       | ter Five [15 Credits]   |        |       |       |       |        |            |
| !           | TECH 33111 Strength of Materials                                    | 3      |       |       |       |        |            |
| !           | TECH 33031 Programmable Logic Controllers                           | 3      |       |       |       |        |            |
| -           | CHEM 10050 Fundamentals of Chemistry                                | 3      |       |       |       | KBS    |            |
|             | ECON 22060 Principles of Microeconomics                             | 3      |       |       |       | KSS    |            |
|             | MIS 24163 Principles of Management <sup>2</sup>                     | 3      |       |       |       |        |            |
| emesi       | ter Six [15 Credits]  | ū      |       |       | _     |        |            |
| !           | TECH 31000 Cultural Dynamics of Technology                          | 3      |       | С     |       | WIC/DD |            |
| į           | TECH 33033 Hydraulics/Pneumatics                                    | 3      | -     | _     |       |        |            |
| -           | TECH 31065 Cast Metals  |        | _     |       |       |        |            |
| !           | or TECH 33363 Metallurgy and Materials Science                      | 3      |       |       |       |        |            |
| •           | or TECH 43700 Computer Integrated Manufacturing                     |        | _     |       | _     |        |            |
| !           | TECH 34002 Advanced CAD II  | 3      |       |       |       |        |            |
| -           | CS 10061 Introduction to Computer Programming                       | 3      | _     |       |       |        |            |
| emesi       | ter Seven [14 Credits]  | Ü      |       |       | _     |        |            |
| 1           | TECH 43080 Industrial and Environmental Safety                      | 3      |       |       |       |        |            |
| ÷           | TECH 43550 Computer-Aided Manufacturing                             | 3      |       |       | -     |        |            |
| •           | MIS 24056 Fundamentals of Business Statistics                       | 3      | -     |       | -     |        |            |
|             | MIS 34180 Human Resource Management                                 | 3      |       |       |       |        |            |
|             | General Electives   | 2      | -     |       | -     | 1      |            |
| omoei       | ter Eight [12 Credits]  |        |       |       |       |        |            |
| नाम्ह       | TECH 43580 Computer-Aided Machine Design                            | 3      |       |       |       |        |            |
| <del></del> | TECH 43800 Applied Engineering Technology Seminar                   | 3      | -     |       | -     |        |            |
| !           |   |        | -     |       |       |        |            |
| !           | TECH 46330 Visual Basic Programming in Engineering Technology       | 3      | •     |       |       |        |            |
|             | MIS 34060 Operations Management                                     | 3      |       |       |       |        |            |

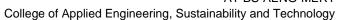
**Graduation Requirements Summary** 

|   | Minimum Total Hours  | Minimum Upper-Division Hours    | Minimum Kent Core Hours  | Min       | imum        |
|---|----------------------|---------------------------------|--------------------------|-----------|-------------|
|   | Willimum Total Hours | willilliam opper-bivision nours | Willimum Kent Core Hours | Major GPA | Overall GPA |
| ſ | 120                  | 39                              | 36                       | 2.250     | 2.000       |

- 1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
- 2. Equivalent to BMRT 11009 Introduction to Management Technology

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**University Requirements Summary** 

| Туре | Categories Course(s) Satisfying Category   |   | Remaining<br>Requirements |
|------|--|---|---------------------------|
| ксм  | Kent Core I. Composition Enrollment based on placement test  | visit www.kent.edu/catalog/kent-core          | 6                         |
| KMC  | Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test  | MATH 11010                                    | fulfilled                 |
| KHU  | Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement                             | visit <u>www.kent.edu/catalog/kent-core</u>   | 3                         |
| KFA  | Kent Core IV. Fine Arts Minimum one course from the fine arts; may fulfill diversity requirement   | visit www.kent.edu/catalog/kent-core          | 3                         |
| KFH  | Kent Core V. Humanities or Fine Arts  One additional course from either the humanities or fine arts category, may fulfill diversity requirement. |   | 3                         |
|      | Kent Core VI. Social Sciences  Must be selected from two curricular areas; may fulfill diversity requirement                                     | ECON 22060                                    | 3                         |
| KBS  | Kent Core VII. Basic Sciences Must include one laboratory  | CHEM 10050, PHY 13001                         | fulfilled                 |
|      | Kent Core VIII. Additional<br>May fulfill diversity requirement  | COMM 15000, MATH 11022, MATH 12002, PHY 13002 | fulfilled                 |
| DD   | Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core   | visit www.kent.edu/catalog/kent-core          | one course                |
|      | Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core   | visit www.kent.edu/catalog/kent-core          | one course                |
| ELR  | Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member.                             | visit www.kent.edu/catalog/elr                | one course or activity    |
| WIC  | Writing-Intensive Course Requirement<br>Minimum C (2.000) grade  | TECH 31000                                    | one course                |