# AAS, Manufacturing Industrial Engineering Technology to BS, Engineering Technology, Integrated Engineering Technology Concentration

| Course Subject and Title | Credit  Hours | Upper  Division | Notes on Transfer Coursework to Kent State |
| --- | --- | --- | --- |
| **Semester One: [17 Credit Hours] Cuyahoga Community College** | | | |
| MATH 1530 College Algebra | 4 |  | MATH 11010 Algebra for Calculus (KMCR) |
| MET 1100 Technology Orientation | 2 |  | ENGR 1X000 |
| MET 1230 Drawing & AutoCAD | 3 |  | MERT 12000 Engineering Drawing (Applied Elective) |
| MET 1120 Computer Applications and Programming | 2 |  | ENGR 1X000 |
| MET 1240 Machine Tools and Manufacturing Processes | 3 |  | MERT 12004 Manufacturing Process (Applied Elective) |
| ENG 1010 College Composition I  Or ENG 101H Honors College Composition I | 3 |  | ENG 11011 College Writing I (KCP1) |
| **Semester Two: [15 Credit Hours] Cuyahoga Community College** | | | |
| MATH 1540 Trigonometry | 3 |  | MATH 11022 Trigonometry (KMCR) |
| MET 1300 Engineering Materials and Metallurgy | 3 |  | MERT 12005 Properties of Materials (Applied Elective) |
| MET 1250 Introduction to Additive Manufacturing | 3 |  | MERT 1X000 (Applied Elective) |
| MET 1410 Computer Aided Manufacturing Processes | 3 |  | MERT 22003 Computer Aided Tool Design (Applied Elective) |
| MET 2601 3D Solid Modeling | 3 |  | MERT 12001 Computer Aided Design (Applied Elective) |
| **Semester Three: [16 Credit Hours] Cuyahoga Community College** | | | |
| MET 1261 Product Ideation & Design I | 3 |  | MERT 1X000 (Applied Elective) |
| MET 1270 Additive Manufacturing Processes | 3 |  | MERT 1X000 (Applied Elective) |
| MET 2160 3D Scanning, Reverse Engineering, and Quality Inspection | 3 |  | MERT 2X000 (Applied Elective) |
| PHYS 1210 College Physics I | 4 |  | PHY 13001 General College Physics I and PHY 13021 General College Physics Laboratory I (KBS, KLAB) |
| ENG-1020 College Composition II  or ENG-102H Honors College Composition II  or ENG 2151 Technical Writing | 3 |  | ENG 21011 Research Writing (KCP2)  or ENG 20002 Introduction to Technical Writing (KCP2) |
| **Semester Four: [15 Credit Hours] Cuyahoga Community College** | | | |
| MET 2422 Fundamentals of Engineering Economics | 3 | ■ | ENGT 32006 (Concentration Req.) |
| MET 2410 Quality Control and Lean Manufacturing | 3 | ■ | ENGR 33700 Quality Techniques (Major Req.) |
| MET 2990 Product Development and Manufacture | 3 |  | MERT 2X000 (Applied Elective) |
| Arts & Humanities/Social & Behavioral Sciences requirement | 3 |  | (KHUM/KFA) |
| MET 2151 3D Digital Design & Printing  Or PHYS 1220 College Physics II *(Recommended for transfer)* | 3-4 |  | MERT 2X000  Or PHY 13002 + PHY 13022 (KBS, KLAB) |
| **63-64 Total Credit Hours to Graduate with the AAS Degree from Cuyahoga Community College** | | | |

B.S. in Engineering Technology is offered through the Tuscarawas Campus\*

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| --- | --- | --- | --- |
| **Semester Five: [13 Credit Hours] Kent State University** | | | |
| EERT 32003 Technical Computing | 3 | **■** |  |
| OTEC 26636 Project Management for Administrative Professionals | 1 |  |  |
| ENGT 42003 Lean Manufacturing, Six Sigma and Operations Technology | 3 | ■ |  |
| Concentration Elective | 3 | ■ |  |
| Kent Core Requirement (KSS – Not ECON) | 3 |  | @ |
| **Semester Six: [15 Credit Hours] Kent State University** | | | |
| ENGR 36620 Project Management in Engineering and Technology | 3 | ■ |  |
| MATH 11012 Intuitive Calculus (KMCR) | 3 |  | @MATH 1480 |
| ENGT 43363 Materials Science and Technology | 3 | ■ |  |
| Kent Core Basic Science Requirement (KBS) | 3 |  | @ (Not required if PHYS 1220 is completed in semester four at Tri-C) |
| Concentration Elective | 3 | ■ |  |
| **Semester Seven: [14 Credit Hours] Kent State University** | | | |
| General Elective | 2 |  |  |
| ECON 22060 Principles of Microeconomics (KSS) | 3 |  | @ECON 2000 |
| ENGR 31010 Engineering and Professional Ethics | 3 | ■ |  |
| Kent Core Requirement (KHUM/KFA)\*\* | 3 |  | @ |
| Concentration Elective | 3 | ■ |  |
| **Semester Eight: [15 Credit Hours] Kent State University** | | | |
| ENGR 31000 Cultural Dynamics Technology (DIVD) (WIC)  Or ENGR 33092 Cooperative Education (ELR) (WIC) | 3 | ■ |  |
| ENGR 43080 Industrial and Environmental Safety | 3 | ■ |  |
| ENGT 43099 Engineering Technology Capstone (ELR) | 3 | ■ |  |
| Kent Core Requirement (KHUM/KFA)\*\* | 3 |  | @ |
| General Elective (if needed to reach 120 total credit hours) | 3 |  | @ |
| **120-121 Total Credit Hours to Graduate with the BS, including transfer coursework, from Kent State University** | | | |

Course sequence may change based on the individual needs of the student and schedule type required.

New college students may be required during their first semester to participate in GEN 1070, First Year Success Seminar, a one credit hour course. See a Tri-C Counselor for details.

@ Course may be taken at Cuyahoga Community College and transferred to Kent State. However, please be aware of [Kent State’s residence policy](http://catalog.kent.edu/academic-policies/residence-requirement/). Once an associate degree is earned, additional courses taken at Tri-C may not be eligible for financial aid. Please see Financial Aid for details.

\* Technical classes for the BS degree can be completed online. For more information, [contact the Engineering Technology department](https://www.kent.edu/tusc/engtech).

\*\* Minimum one course must be selected from the Humanities in Arts and Sciences (KHUM) area, and minimum one course must be selected from the Fine Arts (KFA) area.

Students must successfully [complete one domestic diversity course (DIVD) and one global diversity course (DIVG)](http://catalog.kent.edu/academic-policies/diversity-course-requirement/). Please consult with a Kent State Academic Advisor.

# Graduation Requirements

Requirements to graduate with the BS degree program: To graduate, students must have minimum 120 credit hours, 39 upper-division credit hours of coursework, a minimum 2.000 major GPA and minimum 2.000 cumulative GPA. They must also fulfill an approved experiential learning experience, a two-course diversity requirement (domestic and global), complete a writing intensive course with a minimum C (2.000) grade. More specific graduation requirement information can be found in the Academic Policies section of the Kent State University Catalog (www.kent.edu/catalog).

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It is recommended that students intending to pursue the Bachelor of Science degree in Engineering Technology, Integrated Engineering Technology through Kent State University consult with academic advisors at both Cuyahoga Community College and Kent State University.

**Contact Information:**

Cuyahoga

Community College

Campus Counseling Center

[www.tri-c.edu/counseling-center](http://www.tri-c.edu/counseling-center)

**Kent State** **University**Academic Partnerships  
330-672-7341  
[pathways@kent.edu](mailto:pathways@kent.edu)

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