[Integrated Engineering Technology](https://bluegrass.kctcs.edu/education-training/program-finder/integrated-engineering-technology.aspx)

Associate in Applied Science

Coordinator: Ralph Potter ([ralph.potter@kctcs.edu](mailto:ralph.potter@kctcs.edu)) 859-246-6770

Student Name: Student ID:

*Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.*

Semester 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| MAT 126 Technical Algebra and Trigonometry OR higher-level Quantitative Reasoning course | 3 |  |  |  | See Note 1 |
| ENG 101 Writing I | 3 |  |  | Placement by KCTCS Assessment and Placement Policy. | See Note 2 |
| IET 111 Lean Safety Culture | 1 |  |  |  |  |
| IET 121 Basic Electricity | 4 |  |  | MAT 126 or higher-level math course |  |
| IET 207 Electro-hydraulics/Pneumatics | 4 |  |  |  |  |
| Total Semester Credit Hours | 15 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| IET 202 Motor Controls and Sensing Devices | 4 |  |  | IET 121 **or** EET 119 **or** ELT 110 **or** IMT 110 **AND** 111 |  |
| IET 208 Mechanical Drive Systems | 4 |  |  |  |  |
| IET 112 Lean Manufacturing Concepts | 1 |  |  |  |  |
| Natural Science - PHY 151 or 152 | 3 |  |  |  |  |
| Total Semester Credit Hours | 15 |  |  |  |  |

Summer 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| IET 104 Blueprint Reading/Schematics | 2 |  |  |  |  |
| IET 128 Machine Tool Operations or CMM 110 Fundamentals of Machine Tools - A | 3 |  |  |  |  |
| IET 113 Lean 5S Methodology | 1 |  |  |  |  |
| Total Semester Credit Hours | 6 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| IET 204 Automated Motor Controls | 6 |  |  | IET 121 **or** ELT 110 **or** EET 119 **or** IMT 110 **and** 111  **AND**  IET 201 **or** EET 270 **and** 271 **or** IMT 220 **and** 221  **or**  Consent of Integrated Engineering Technology Program Coordinator |  |
| IET 114 Lean Problem-Solving Methodology | 1 |  |  |  |  |
| COM 181 - Oral Communications | 3 |  |  |  |  |
| CAD 100 - Introduction to CAD (Serves as the Digital Literacy requirement) | 3 |  |  |  |  |
| Total Semester Credit Hours | 13 |  |  |  |  |

Semester 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| IET 110 Welding and Fabrication | 4 |  |  |  |  |
| IET 205 Robot Maintenance | 4 |  |  |  |  |
| IET 115 Lean Machine Reliability | 1 |  |  |  |  |
| SOC 101 - Social and Behavioral Science- | 3 |  |  |  |  |
| Heritage - HIS 109 | 3 |  |  |  |  |
| Total Semester Credit Hours | 15 |  |  |  |  |
| Total Degree Credit Hours | 64 |  |  |  |  |

**Graduation Requirements:**

* 25% or more of Total Degree Credit Hours must be earned at BCTC.
* Cumulative GPA must be 2.0 or higher.

Advisor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Contact \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Additional Information**

Note 1: **MUST** consult an IET Advisor for appropriate Math placement.

Note 2: (a) credit not available by special examination; (b) English 101 and 102 may not be taken concurrently; (c) AP credit in the English Language and Composition category for ENG 101 awarded as indicated by AP scoring chart in current KCTCS catalog.

**Embedded Credentials**

|  |  |  |  |
| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | Mechanical Engineering Technology | IET 104, IET 110, IET 128 OR CMM 110, IET 207, AND IET 208 | 17 |

**Certificate Requirements:**

* 25% or more of Total Certificate Credit Hours must be earned at BCTC.
* Grade of C or higher in each course required for certificate.

Reviewed by: Ralph Potter Effective Term: Fall 2021

Review Date: 04/10/2021