## Engineering Technology

**Purdue Polytechnic Anderson**

### Concentration in Technology Integration

120 Credits for graduation

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<th>Name:</th>
<th>PUID:</th>
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### Departmental/Program Major Courses (46 credits)

- **CGT 11000** Technical Graphic Communications OR **CGT 11600** Geometric Modeling for Visualization & Communication
- **ECET Selective**
- **ECET Selective**
- **ENGT 18000** Engineering Technology Foundations
- **ENGT 18100** Engineering Technology Foundations Laboratory
- **MET 11100** Applied Statics
- **MET 14300** Materials & Processes I OR **MET 14400** Materials & Processes II
- **MET 24500** Manufacturing Systems
- **Programming Selective**
- **Global/Professional Selective**
- **Senior Capstone Project Selective**
- **TLI 11100** Introduction to Manufacturing & Supply Chain Systems
- **TLI 11200** Foundation of Organizational Leadership
- **TLI 31600** Statistical Quality Control
- **TLI 33400** Economic Analysis for Tech Systems

### CONCENTRATION: Technology Integration (31 credits)

- **Lab Science Foundation Selective (satisfies Science for core)**

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<tr>
<th>Humanities/Liberal Arts Elective</th>
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### Technical Selectives 24 cr. hrs. *(15 cr. hrs. must be 300/400 level, included in required major credits)*

- **MA 15800** Precalculus – Functions and Trigonometry *(satisfies Quantitative Reasoning for core)*
- **MA 16010** Applied Calculus I
- **PHYS 21800** General Physics *(satisfies Science for core)*
- **TECH 12000** Design Thinking in Technology *(satisfies Science, Technology & Society Selective and Information Literacy for core)*
- **Technical/Management Selective**
- **Senior Capstone Project Selective**
- **ECON 21000** *(satisfies Human Culture Behavioral/Social Science for core)*
- **Humanities Foundation Selective (satisfies Human Cultures Humanities for core)**
- **COM 11400** Fundamentals of Speech Communication *(satisfies Oral Communication for core)*
- **Written Communication Foundation Selective (satisfies Written Communication for core)*
- **Advanced Oral Communication Selective**
- **ENGL 42100** Technical Writing
- **Intercultural Requirement**
- **Professional Requirement**

### Free Electives (6 cr. hrs.)

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<th>Humanities/Liberal Arts Elective</th>
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### Other Departmental /Program Course Requirements (37 credits)

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<th>Humanities/Liberal Arts Elective</th>
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### University Core Requirements

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<tr>
<th>Human Cultures: Behavioral/Social Sciences</th>
<th>Science</th>
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<tr>
<td>Human Cultures: Humanities</td>
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<td>Information Literacy</td>
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<td>Oral Communication</td>
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<td>Quantitative Reasoning</td>
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**The student is ultimately responsible for knowing and completing all degree requirements.**

**Degree Works is knowledge source for specific requirements and completion**

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*Updated 04-21-2017*
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<thead>
<tr>
<th>Fall 1&lt;sup&gt;st&lt;/sup&gt; Year</th>
<th>CR</th>
<th>GR</th>
<th>Sem</th>
<th>Fulfilled by</th>
<th>Spring 1&lt;sup&gt;st&lt;/sup&gt; Year</th>
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<tbody>
<tr>
<td>Written Communication Foundation Selective*</td>
<td>3</td>
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<td>TLI 11200 Foundation of Organizational Leadership</td>
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<tr>
<td>ENGT 18000 – Engineering Technology Foundations</td>
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<td></td>
<td>MA 16010 Applied Calculus I (Prereq: MA 15800 with grade of C- or better or ALEKS score 75)</td>
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<td>ENGT 18100 – Engineering Technology Applications</td>
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<td>MET 14300 – Materials &amp; Processes I OR MET 14400 Materials &amp; Processes II</td>
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<td>MA 15800* - Precalculus – Functions &amp; Trigonometry (Prereq ALEKS score 60)</td>
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<td>MET 11100 Applied Statics (Prereqs: MA 15800 and MET 16200)</td>
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<td>TLI 11100 Introduction to Manufacturing &amp; Supply Chain</td>
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<td>COM 11400 Fundamental of Speech Communication*</td>
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<td>TECH 12000 Design Thinking in Tech.*</td>
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<td>CGT 11000 – Technical Graphic Communications OR CGT 11600 Geometric Model for Visualztn &amp; Comm</td>
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<td>Computer-Aided Design Selective</td>
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<tr>
<td>PHYS 21800 General Physics*</td>
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<td>ECON 21000 – Principles of Economics</td>
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<td>Humanities Foundation Selective*</td>
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<td>Technical Selective</td>
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<td>Technical Selective</td>
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<td>ENGL 42100 Technical Writing (Prereq: ENGL 10600)</td>
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<td>Advanced Oral Communication Selective</td>
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<td>Technical/Management Selective</td>
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<td>Global/Professional Selective</td>
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<td>TLI 31600 or IT 34200 Statistical Quality Control (Prereq: MA 15800)</td>
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<td>Lab Science Foundation Selective*</td>
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<tr>
<td>Technical Selective</td>
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<td>Technical Selective (300- 400 level)</td>
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<td>Senior Capstone Project Selective</td>
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<td>TU 33400 Economic Analysis for Tech Systems or IT 45000 Production Cost Analysis (Prereq: Math/Stat Selective)</td>
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<td>Technical Selective (30000- 40000 level)</td>
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*Fulfills University Core Requirement
1. 120 semester credits and a 2.0 Graduation GPA are required for the Bachelor of Science degree.
2. 2.0 Graduation GPA required for Bachelor of Science degree.
3. 32 credits of upper division courses (30000 level or higher) must be taken at the Purdue University location conferring the degree.
4. Courses at Purdue University may only be attempted a maximum of three (3) times, including W, WF, I, IF and all graded attempts.

The student is ultimately responsible for knowing and completing all degree requirements. Degree Works is knowledge source for specific requirements and completion.

*Updated 03/31/2017*
ET Supplemental Information

All prerequisites must be met

WRITTEN COMMUNICATION FOUNDATION SELECTIVE
ENGL 10600 First Year Composition
ENGL 10800 Accelerated First Year Composition

PROGRAMMING SELECTIVES
CNIT 10500 Introduction to C Programming
CNIT 15501 Introduction to Software Development Concepts
CNIT 17500 Visual Programming
MET 16400 Computing in Engineering Technology

HUMANITIES FOUNDATIONAL SELECTIVE
See approved UCC Humanities list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html
HIST 15100 American History to 1877
PHIL 11000 Intro to Philosophy
HIST 15200 US From 1877
PHIL 11100 Ethics
MUS 25000 Music Appreciation

^BEHAVIORAL/SOCIAL SCIENCES FOUNDATIONAL SELECTIVE: see
http://catalog.purdue.edu/preview_program.php?catoid=7&poid=6694 (Human Cultures: Behavioral/Social Sciences (BSS))
PSY 12000 Elementary Psychology
SOC 10000 Introductory Sociology
ECON 21000 Principles of Economics

ECET SELECTIVES
ECET 22400 Electronics Systems
ECET 17700 DAQ and Systems Control
ECET 17900 Intro to Digital Systems

COMPUTER-AIDED DESIGN SELECTIVES
CGT 22600 Introduction to Constraint-based Modeling
MET 10200 Production Design and Specifications

LAB SCIENCE SELECTIVES
BIOL 11000 Fundamentals of Biology I
BIOL 20300 Human Anatomy and Physiology
CHM 11200 General Chemistry II
PHYS 21900 General Physics II
PHYS 22100 General Physics
PHYS 24100 Electricity and Optics

TECHNICAL/MANAGEMENT SELECTIVES
MGMT 20000 Intro to Accounting
MGMT 45500 Legal Background for Business I
TECH 32000 Technology and the Organization
TLI 23100 Project Management

GLOBAL/PROFESSIONAL SELECTIVES
ECET 38001 Global/Professional Issues in Electrical Engineering Technology
TECH 33000 Technology and the Global Society
TLI 35600 Global Technology Leadership

ADVANCED ORAL COMMUNICAITON SELECTIVE
COM 32000 Small Group Communications
COM 30300 Intercultural Communication OR COM 31400 Adv. Presentational Speaking

TECHNICAL SELECTIVES
At least 15 credit hours must be at the 30000 level or above and at least 6 credit hours must be in the same discipline

CGT 32300 Virtual Product Integration
CGT 32600 Graphics Standards for Product Definition
ECET 17900 Intro to Digital Systems
ECET 27900 Embedded Digital Systems
ECET 30201 Introduction to Industrial Controls
ECET 32100 Introduction to Nanotechnology
ECET 32700 Instrumentation and DAQ Design
ECET 33700 Analog Signal Processing
ECET 38500/ECET 49900 Intro to Automotive Electronics
TLI 23500 Introduction to Lean and Sustainable Systems
TLI 31400 Leading Innovation in Organizations
TLI 31500 Innovative Product Development and Testing
TLI 33520 Human Factors for Technology Systems
TLI 33610 Risk Analysis & Assessment
TLI 33620 Total Production Maintenance
TLI 41400 Financial Analysis for Technology Systems
TLI 43530 Operations Planning and Management
TLI 43540 Facilities Planning
TLI 43640 Lean Six Sigma
TLI 45700 Technology Policy & Law
MET 23000 Fluid Power
MET 30200 CAD in the Enterprise
MET 38200 Controls & Instrumentation
MET 45100 Manufacturing Quality Control
MFET 30000 Applications of Automation in Manufacturing
MFET 31100 Computer-Aided Design in Manufacturing
MFET 34400 Automated Manufacturing Processes
MFET 37400 Manufacturing Integration

HUMANITIES/LIBERAL ARTS ELECTIVES
Any course from the following disciplines: Anthropology, English, History, Philosophy, Political Science, Psychology, Religious Studies, Sociology, Theatre, Women’s Studies, or Foreign Languages (except native language courses)

FREE ELECTIVES
Courses from any discipline at the 20000 – 40000 level.

Courses marked in bold offered at Anderson.