



# Pittsburg State University College of Technology Program Guide

Degree: Bachelor of Applied Science  
 Major: Technology (Engineering Technology)  
 Emphasis/Option: Electronics, Manufacturing, Mechanical or Plastics  
 Minor (if required):

As of Fall 2017

## Business Support Courses

### Business Courses

MGT 330: Management and Organizational Behavior .....	3
MGMKT 444: Legal and Social Environment of Business .....	3
MGT 540: Human Resource Management .....	3
or MKTG 330: Principles of Marketing .....	3
Approved 300 and above business elective (e.g. TQM) .....	3

### Technical Courses

### Electronics Emphasis Courses

### Workforce Development/Organization and Leadership courses (Electronics Emphasis)

TM 606: Industrial Supervision .....	3
ETECH 400: Cooperative Education (____) .....	3-6
or ETECH 694: Engineering Technology Lab Internship (____) .....	1-4
ETECH 502: Engineering Economy .....	3
TM 520: Leadership in the Workplace .....	3
EST 393: Introduction to Industrial Safety .....	3
or approved substitute safety course	

ETECH 400 Cooperative Education or ETECH 694 Engineering Technology Laboratory Internship must be taken for three hours.

### Technical Specialization, Support and Electives

EET 340: Introduction to Industrial Automation .....	3
EET 344: Microcomputer Systems .....	3
EET 349: Analog Integrated Circuits .....	3
EET 447: Communications Theory and Circuits .....	3
EET 448: Network Systems .....	3
EET 546: Electronic Controls .....	3
EET 649: Advanced Programmable Logic Controllers .....	3

### Manufacturing Emphasis Courses

### Workforce Development/Organization and Leadership courses (Manufacturing Emphasis)

TM 606: Industrial Supervision .....	3
ETECH 400: Cooperative Education (____) .....	3-6
ETECH 502: Engineering Economy .....	3
TM 520: Leadership in the Workplace .....	3
EST 393: Introduction to Industrial Safety .....	3
or approved substitute safety course	

ETECH 400 Cooperative Education must be taken for three hours.

## Technical Specialization, Support and Electives

### Manufacturing Core Courses

MFGET 405: Quality Control .....	3
MFGET 690: Manufacturing Production Control and Management .....	3

### Technical Electives (15 hours) chosen from

MFGET 363: Principles of Tool Design .....	3
MFGET 567: Principles of Metalcasting .....	3
MFGET 568: Metalcasting Processing Laboratory .....	2
MFGET 569: Casting Design and Simulation .....	3
MFGET 661: Computer Aided Manufacturing .....	3
Approved Electives .....	3-6

(Approved Electives depend on mathematics and science prerequisites)

### Mechanical Emphasis Courses

### Workforce Development/Organization and Leadership courses (Mechanical Emphasis)

TM 606: Industrial Supervision .....	3
ETECH 400: Cooperative Education (____) .....	3-6
ETECH 502: Engineering Economy .....	3
TM 520: Leadership in the Workplace .....	3
EST 393: Introduction to Industrial Safety .....	3
or approved substitute safety course	

ETECH 400 Cooperative Education must be taken for three hours.

### Technical Specialization, Support and Electives

### Mechanical Core Courses

MECET 323: Advanced Engineering Graphics .....	3
MECET 528: Computer Aided Modeling .....	3

### Technical Electives (15 hours) chosen from

MFGET 363: Principles of Tool Design .....	3
MFGET 405: Quality Control .....	3
MFGET 567: Principles of Metalcasting .....	3
MFGET 568: Metalcasting Processing Laboratory .....	2
MFGET 569: Casting Design and Simulation .....	3
Approved Electives .....	3-6

(Approved Electives depend on mathematics and science prerequisites)

## Plastics Emphasis Courses

### Workforce Development/Organization and Leadership courses (Plastics Emphasis)

TM 606: Industrial Supervision .....	3
ETECH 400: Cooperative Education (____) .....	3-6
ETECH 502: Engineering Economy .....	3
TM 520: Leadership in the Workplace .....	3
EST 393: Introduction to Industrial Safety .....	3
or approved substitute safety course	

ETECH 400 Cooperative Education must be taken for three hours.

### Technical Specialization, Support and Electives

#### Plastics Core Courses

PET 272: Plastic Processing I Laboratory .....	1
PET 273: Plastic Processing I .....	3
PET 281: Plastics Testing Technology .....	3
CHEM 320: Introductory Organic Chemistry. ....	3
CHEM 326: Organic Chemistry Laboratory. ....	2
PET 370: Thermoplastic Resins Laboratory .....	1
PET 371: Thermoplastic Resins .....	3

#### Technical Electives (Choose 5 hours from the following)

PET 374: Thermoset Resins Laboratory .....	1
PET 375: Thermoset Resins .....	3
PET 376: Plastic Processing II Laboratory .....	1
PET 377: Plastic Processing II .....	3

## GENERAL EDUCATION REQUIREMENTS

### Basic Skills

ENGL	101	English Composition.....	3
ENGL	299	Introduction to Research Writing.....	3
		or ENGL 301 Technical/Professional Writing .....	3
COMM	207	Speech Communication.....	3

COMM 207 as well as ENGL 301 can have other courses substituted in their place.

### Behavioral, Social, History & Political Studies

PSYCH	155	General Psychology .....	3
SOC	100	Introduction to Sociology .....	3
		or POLS 101 U.S. Politics.....	3
		or HIST 201 American History to 1865 .....	3
		or GT 350 Technology and Civilization .....	3
		or TM 350 Societal Influence of Technology .....	3
		or Social Science and/or Political Studies Elective.....	3

### Mathematics

MATH	143	Elementary Statistics .....	3
		or MATH 113 College Algebra.....	3
MATH	114	Elements of Technical Analysis .....	3

MATH 113 as well as MATH 143 can be substituted by another mathematics course.

### Sciences *(Minimum of 6 hours)*

BIOL	113	Environmental Life Science .....	4
PHYS	171	Physical Science .....	3
PHYS	172	Physical Science Laboratory.....	1

BIOL 113 can be substituted by another natural science course.

PHYS 171 can be substituted by another physical science course.

### Producing and Consuming

ACCTG	201	Financial Accounting .....	3
		or Approved business substitute.....	3

### Fine Arts *(Select one)*

ART	178	Introduction to the Visual Arts .....	3
COMM	105	Performance Appreciation .....	3
COMM	205	Performance Studies .....	3
HHP	151	Dance Appreciation .....	3
MUSIC	120	Music Appreciation .....	3
		Approved Humanities (e.g., Ethics) .....	3

### Cultural Studies *(Select one)*

GEOG	300	Elements of Geography .....	3
GEOG	304	Human Geography .....	3
		Approved elective from cultural studies .....	3

### Notes

NOTE: The information contained herein is intended to be used for the planning of a student's academic program and does not constitute a contract. While this guide was prepared with the latest information, courses, graduation requirements, and curricula are subject to change.

When a student attains 85 semester hours of credit (including current enrollment) the student must apply for a degree check in the Office of the Registrar (Degree Checking Section), Room 102 Russ Hall.

**MINIMUM GENERAL REQUIREMENTS:** The minimum requirements for graduation include 124 semester hours of which 60 hours must be from a four year university. In addition, 45 semester hours must be upper division and 30 hours in residence at PSU (including 24 of the last 30). Minimum GPA for non-education degree is 2.0 overall [2.0 in major], secondary education degree is 2.5 overall [2.75 in major], and early/late childhood/unified degree is 2.80 overall [3.0 in major]. A minimum GPA of 2.0 in any minor and in residence coursework is required. General Education and all degree requirements are provided in the online catalog. Refer to individual departments for specific requirements.