**California University of Pennsylvania**
250 University Avenue
California, PA 15419-1394
www.cup.edu

OFFICE OF ARTICULATION AND TRANSFER EVALUATION

Building Character. Building Careers.

724-938-5939 ¦ 724-938-4564 FAX

March 28, 2008

**CCAC**
**ATTN: Frances K. Dice**
College Office
800 Allegheny Avenue
Pittsburgh, PA 15233-1895

RE: **TED** *Agreement*

Dear Fran:

Enclosed is a fully executed agreement between California University of Pennsylvania and CCAC.

Sincerely,

Belinda L. Smith
Director, Articulation
and Transfer Evaluation

Enclosures

BLS/mas

*Regional academic SVP 4-1-8*

## COMMUNITY COLLEGE OF ALLEGHENY COUNTY
## AND
## CALIFORNIA UNIVERSITY OF PENNSYLVANIA
## ARTICULATION AGREEMENT

**THIS AGREEMENT,** dated this 1st day of March, 2008, is made by and between, the Community College of Allegheny County, hereinafter called, "CCAC", and California University of Pennsylvania, hereinafter called "CAL U".

CCAC and CAL U acknowledge their shared mission to provide quality higher education programs, which meet the needs of the region and provide a workforce of highly trained residents.

## I. PURPOSE

The primary purpose of this Agreement is to enhance the transferability between CCAC's Associate of Science Degree Programs in Architectural Drafting and Design Technology, Civil Engineering Technology, Computer-Aided Drafting and Design Technology, Manufacturing Technology (Controls, Machining, Nanofabrication or Welding track), Mechanical Drafting and Design Technology, Microcomputer Electronics Technology, Robotics and Automated Systems Technology, or Science and Engineering Technology and CAL U's Bachelor of Science in Education with certification in Technology Education. A secondary purpose is to provide faculty and administration of both institutions with more precise guidelines for advising students interested in pursuing a Bachelor of Science in Education with certification in Technology Education.

Exhibit A, consisting of eleven (11) pages, attached hereto and incorporated herein, outlines the courses that will be accepted from CAL U. Exhibit B, consisting of twenty-two pages (22), attached hereto and incorporated herein, outlines the courses necessary for the Bachelor of Science in Education Degree with Certification in Technology Education from CAL U.

## II. MUTUAL TERMS AND CONDITIONS

A. **Term of the Agreement.** This Agreement shall be in effect for five (5) years from the date of signature and will be reviewed annually for accuracy.

B. **Termination of the Agreement.** CCAC and CAL U may terminate this Agreement for any reason or no reason with ninety (90) days written notice from either party. Either party may terminate this Agreement in the event of a substantial breach. However, should either party terminate this Agreement, all students enrolled at that time may continue their educational experience until it would have been concluded absent the termination.

C. **Non-discrimination.** The parties agree to continue their respective policies of non-discrimination based on Title VI of the Civil Rights Act of 1964 in regard to sex, age, race, color, creed, national origin, Title IX of the Education Amendments of 1972 and other applicable laws, as well as the provisions of the Americans with Disabilities Act.

**D. Interpretation of the Agreement.** The laws of the Commonwealth of Pennsylvania shall govern this Agreement.

**E. Modification of Agreement.** This Agreement shall only be modified in writing with the same formality as the original Agreement.

**F. Relationship of Parties.** The relationship between the parties to this Agreement to each other is that of independent contractors. The relationship of the parties to this contract to each other shall not be construed to constitute a partnership, joint venture or any other relationship, other than that of independent contractors.

**G. Liability.** Neither of the parties shall assume any liabilities to each other. As to liability to each other or death to persons, or damages to property, the parties do not waive any defense as a result of entering into this contract. This provision shall not be construed to limit the Commonwealth's rights, claims or defenses which arise as a matter of law pursuant to any provisions of this contract. This provision shall not be construed to limit the sovereign immunity of CCAC or that of the Commonwealth, or the State System of Higher Education, or CAL U.

**H. Entire Agreement.** This Agreement represents the entire understanding between the parties. No other prior or contemporaneous oral or written understandings or promises exist in regards to this relationship. Any changes, corrections or additions to this contract shall be in writing in the form of a supplemental agreement signed by all necessary parties and setting forth therein the proposed change, correction, or addition.

      **IN WITNESS WHEREOF, the authorized representatives of the parties have executed this Agreement as of the date previously indicated.**
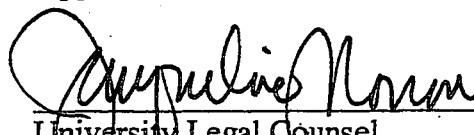
| Community College of Allegheny County | California University of Pennsylvania |
|---|---|
| *[signature: Michael Murphy]* | *[signature: Sean C. Madden]* |
| Dr. Michael Murphy | Dr. Sean C. Madden, Provost and |
| Interim President | Vice President for Academic Affairs |
| Community College of Allegheny County | California University of Pennsylvania |

Approved as to form and legality:

*[signature]*

University Legal Counsel
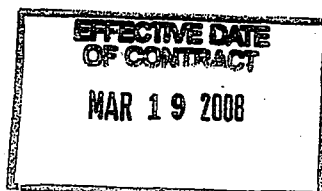
# ATTACHMENT A

CCAC

| Architectural Drafing & Design | Cr | Cal U | | Application at Cal U for | |
|---|---|---|---|---|---|
| | | Cal U Equivalent | Cr | Technology Ed | Cr |
| **First Semester** | | | | | |
| EDD 101 Engineering Drawing I | 3 | ITE 110 Technical Drawing 1 | 3 | use for TED 105 | 3 |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD 1 | 4 | Technical Elective | 4 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| MAT 114 Math for Technologies 1 | 4 | College Algebra | 4 | use for Math | 4 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 102 Engineering Drawing 2 | 3 | Technical Elective | 3 | Free Elective | 3 |
| EDD 121 CAD Applications | 4 | ITE 162 Industrial Tech Elective | 4 | Technical Elective | 4 |
| MAT 116 Math for Technologies 2 | 4 | MAT 191 College Trig | 4 | use for Major Requirement | 4 |
| MET 115 Architectural Sys Design | 3 | Technical Elective | 3 | | |
| Soc Sci Elect: PSY 101 Int to Psych | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Third Semester** | | | | | |
| CET 201 Materials of Construction | 3 | | 3 | | |
| EDD 141 Structural Drafting | 3 | Technical Elective | 3 | | |
| EDD 230 Architectural Drafting | 4 | Technical Elective | 4 | | |
| ENG 101 English Composition 1 | 3 | ENG 101 English Composition I | 3 | use for Comm Skills | 3 |
| MET 150 Statics | 4 | Technical Elective | 4 | | |
| | | | | | |
| **Fourth Semester** | | | | | |
| EDD 245 Adv Engineering Draw | 4 | Technical Elective | 4 | | |
| ENG 103 Technical Communications | 3 | ENG 217 Science & Tech Writing | 3 | sub for Eng Comp II | 3 |
| MET 211 Strength of Materials | 4 | ITE 325 Statics & Strengths | 4 | Technical Elective | 4 |
| Humanties - Literature requirement | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| | 63 | | 63 | | 42 |

CCAC

| Civil Engineering Technology | Cr | Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EDD 101 Engineering Drawing 1 | 3 | ITE 110 Technical Drawing I | 3 | use for TED 105 | 3 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| EGR 110 Engineering Surveying | 4 | TLC 162 Technology Elective | 4 | Technical Elective | 4 |
| MAT 114 Math for Technologies 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| Engineering Elective | 3 | Technology Elective | 3 | | |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD 1 | 4 | Technical Elective | 4 |
| PHY 141 Physics 1 | 4 | PHY 121 General Physics | 4 | use for Natural Science | 4 |
| MAT 116 Math for Technologies 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| Engineering Elective | 3 | Technology Elective | 3 | | |
| Engineering Elective | 3 | Technology Elective | 3 | | |
| | | | | | |
| **Third Semester** | | | | | |
| ENG 101 English Comp 1 | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| CET 202 Soils in Construction | 4 | ELC 162 Free Elective | 4 | use for Free Elective | 4 |
| MET 150 Statics | 4 | TLC 162 Technology Elective | 4 | | |
| PHY 142 Physics 2 | 4 | PHY 122 General Physics 2 | 4 | use for Natural Science | 4 |
| Soc Sci Elect: PSY 101 Int to Psych | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| CET 201 Mats of Construction  OR | 3 | ELC 162 Free Elective  OR | 3 | | |
| CET 205 Bldg Constr & Steel Des | 3 | ELC 162 Free Elective | 3 | | |
| ENG 102 English Comp 2 | 3 | ENG 102 English Comp II | 3 | use for Comm Skills | 3 |
| MET 211 Strength of Materials | 4 | ITE 325 Statics & Strength | 4 | Technical Elective | 4 |
| Humanities | 3 | HLC 162 Humanities Elective | 3 | use for Humanities | 3 |
| Engineering Electives | 3 | Technology Elective | 3 | | |
| | 67 | | 67 | | 48 |

CCAC

| Computer-Aided Drafting & Design Technology | Cr | Cal U / Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EDD 101 Engineering Drawing 1 | 3 | ITE 110 Technical Drawing 1 | 3 | use for TED 105 | 3 |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD I | 4 | Technical Elective | 4 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Comp 1 | 3 | ENG 101 English Comp 1 | 3 | use for Commm Skills | 3 |
| MAT 114 Math for Technologies 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 102 Engineering Drawing 2 | 3 | ITE 210 Technical Drawing 2 | 3 | Technical Elective | 3 |
| EDD 121 CAD Applications | 4 | ITE 162 Indust Tech Elective | 4 | | |
| ENG 103 Technical Commun | 3 | ENG 217 Science & Tech Writing | 3 | sub for ENG 102 | 3 |
| MAT 116 Math for Technologies 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prg Const | 3 | Free Elective | 3 |
| | | | | | |
| **Third Semester** | | | | | |
| EDD 130 Solid Modeling Techn | 3 | ITE 162 Indus Tech Elective | 3 | | |
| EDD 222 Customizing the CAD env | 3 | TLC 162 Technology Elective | 3 | | |
| EDD Adv Drafting Elective | 3 | TLC 162 Technology Elective | 3 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| EDD 135 Intro to Parmetric Mod 1 | 3 | TLC 162 Technology Elective | 3 | | |
| | | | | | |
| **Fourth Semester** | | | | | |
| EDD 221 Parmetric Mod 2 | 3 | ITE 215 CAD I | 3 | Technical Elective | 3 |
| Humanities - Literature Course | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| Social Science - take PSY 101 Intro | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| Technical Elective | 3 | Technical Elective | 3 | | |
| Technical Elective | 3 | Technical Elective | 3 | | |
| | 62 | | 62 | | 40 |

CCAC

| Manufacturing Technology | Cr | Cal U | | Application at Cal U for | |
|---|---|---|---|---|---|
| Controls | | Cal U Equivalent | Cr | Technology Ed | Cr |
| **First Semester** | | | | | |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| MAT 114 Math for the Techno 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | TLC 164 Technology Elective | 3 | Technical Elective | 3 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| EDD 101 Engineering Drawing 1 | 3 | ITE 110 Technical Drawing I | 3 | use for TED 105 | 3 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD I | 4 | Technical Elective | 4 |
| MAT 116 Math for the Techno 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| MET 112 Engineering Materials | 4 | PHS 135 Chem of Materials | 4 | use for Natural Science | 4 |
| ENG 103 Technical Communic | 3 | ENG 217 Science & Tech Writing | 3 | sub for Comp II | 3 |
| MIT 107 Electronic Fabrication | 3 | TLC 164 Technology Elective Lab | 3 | | |
| | | | | | |
| **Third Semester** | | | | | |
| MET 200 Metrology | 3 | TLC 162 Technology Elective | 3 | | |
| MET 106 Geometrtic Dimen & Toler | 1 | ELC 162 Free Elective | 1 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| MIT 103 Fund of Microprocessors | 3 | ELC 162 Free Elective | 3 | Free Elective | 3 |
| RBT 235 Programmable Logic Cont | 4 | ITE 267 Program Control Systems | 4 | | |
| | | | | | |
| **Fourth Semester** | | | | | |
| MET 212 Manufact Processes | 3 | TLC 162 Technology Elective | 3 | | |
| RBT 225 Robotic Controls | 4 | TLC 162 Technology Elective | 4 | sub for ITE 250 | 4 |
| EDD 135 Intro to Parametric Mod | 3 | TLC 162 Technology Elective | 3 | | |
| Humanities - Literature | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| Social Science - PSY 101 Intro to Ps | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | 65 | | 65 | | 48 |

CCAC

| Manufacturing Technology | Cr | Cal U | | Application at Cal U for | |
|---|---|---|---|---|---|
| Machining | | Cal U Equivalent | Cr | Technology Ed | Cr |
| **First Semester** | | | | | |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| MAT 114 Math for the Techno 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prog Cons | 3 | Free Elective | 3 |
| MFT 141 Intro to Machining | 3 | ITE 165 Maching Processing I | 3 | Technical Elective | 3 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD I | 4 | use for TED 105 | 4 |
| MAT 116 Math for the Techno 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| EDD 101 Engineering Drawing 1 | 3 | ITE 110 Technical Drawing I | 3 | Technical Elective | 3 |
| MFT 143 Intro to Lathe | 3 | TLC 162 Technical Elective | 3 | | |
| | | | | | |
| **Third Semester** | | | | | |
| MET 200 Metrology | 3 | TLC 162 Technology Elective | 3 | | |
| MET 106 Geometrtic Dimen & Toler | 1 | ELC 162 Free Elective | 1 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| MFT 145 Intro to Milling | 3 | TLC 162 Technology Elective | 3 | | |
| MFT 147 Intro to Grinding | 3 | TLC 162 Technology Elective | 3 | | |
| Social Science - take PSY 101 Intro to | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| MFT 149 Intro to CNC | 3 | ITE 236 Numerical Controls | 3 | | |
| MET 112 Engineering Materials | 4 | PHS 135 Chemical of Materials | 4 | use for Natural Science | 4 |
| EDD 135 Intro to Parametric Mod | 3 | TLC 162 Technology Elective | 3 | | |
| Humanities - Literature course | 3 | HLC Humanities Elective | 3 | use for Lit requirement | 3 |
| ENG 103 Technical Communications | 3 | ENG 217 Sci and Tech Writing | 3 | sub for ENG 102 | 3 |
| | 63 | | 63 | | 44 |

**CCAC**

| Manufacturing Technology Nanofabrication | Cr | Cal U / Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| MAT 114 Math for the Techno 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prog Cons | 3 | Free Elective | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| CHM 109 Intro to Chemistry | 4 | CHE 100 Intro to Chemistry | 4 | | |
| ENG 103 Technical Commun | 3 | ENG 217 Science & Tech Writing | 3 | Sub ENG 217 for Comp 2 | 3 |
| MAT 116 Math for the Techno 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| MIT 107 Electronic Fabrication | 3 | TLC 164 Technology Elective | 3 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics | 3 | Natural Science | 3 |
| | | | | | |
| **Third Semester** | | | | | |
| MET 106 Geometrtic Dimen & Toler | 1 | ELC 162 Free Elective | 1 | | |
| MET 112 Engineering Materials | 4 | PHS 135 Chem of Materials | 4 | Natural Science | 4 |
| MET 200 Metrology | 3 | TLC 162 Technology Elective | 3 | | |
| PHY 114 Technical Physics 2 | 3 | PHY 121 General Physics II | 3 | | |
| Social Science - take PSY 101 Intro | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| MFT 211 Material Safety & Equip | 3 | NMT 311 Mat, Safety & Equip in NM | 3 | | |
| MFT 212 Basic Nanofabric Proc | 3 | NMT 312 Basic NMT Process | 3 | | |
| MFT 213 Thin Films in Nanofabric | 3 | NMT 313 Thin Films in NMT | 3 | | |
| MFT 214 Lithography for Nanofabric | 3 | NMT 314 Adv Lith & Dielectrics | 3 | | |
| MFT 215 Material Modification | 3 | NMT 315 Materials Modific in NMT | 3 | | |
| MFT 216 Characterization & Packag | 3 | NMT 316 Charac Packg Test NMT | 3 | | |
| | 63 | | 63 | | 31 |

CCAC

| Manufacturing Technology | Cr | Cal U | | Application at Cal U for | |
|---|---|---|---|---|---|
| Welding | | Cal U Equivalent | Cr | Technology Ed | Cr |
| **First Semester** | | | | | |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| MAT 114 Math for the Techno 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prg Const | 3 | | |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| WLD 101 Welding Fundamentals | 3 | Free Elective | 3 | Free Elective | 3 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD I | 4 | use for TED 105 | 4 |
| MAT 116 Math for the Techno 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| EDD 101 Engineering Drawing 1 | 3 | ITE 110 Technical Drawing I | 3 | Technical Elective | 3 |
| WLD 102 Advanced Welding | 3 | ELC 162 Free Elective | 3 | | |
| | | | | | |
| **Third Semester** | | | | | |
| MET 200 Metrology | 3 | TLC 162 Technology Elective | 3 | Technical Elective | 3 |
| MET 106 Geometrtic Dimen & Toler | 1 | ELC 162 Free Elective | 1 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| MET 112 Engineering Materials | 4 | PHS 135 Chem of Materials | 4 | use for Natural Science | 4 |
| WLD 201 Prep for Welding Cert | 3 | ELC 162 Free Elective | 3 | | |
| Social Science - Intro to Psychology | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| WLD 202 MIG & TIG | 3 | ELC 162 Free Elective | 3 | | |
| MIT 212 Engineering Materials | 4 | TLC 162 Technology Elective | 4 | | |
| EDD 135 Intro to Parametric Mod | 3 | TLC 162 Technology Elective | 3 | | |
| Humanities - Literature | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| ENG 103 Technical Communications | 3 | ENG 217 Sci & Tech Writing | 3 | sub for Eng Comp II | 3 |
| | 64 | | 64 | | 44 |

CCAC

| Mechanical Drafting and Design Technology | Cr | Cal U / Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EDD 101 Engineering Drawing I | 3 | ITE 110 Technical Drawing 1 | 3 | use for TED 105 | 3 |
| EDD 120 Introduction to CAD | 4 | ITE 215 CAD 1 | 4 | Technical Elective | 4 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| MAT 114 Math for Technologies 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prg Const | 3 | Free Elective | 3 |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 102 Engineering Drawing 2 | 3 | ITE 210 Technical Drawing 2 | 3 | | |
| EDD 121 CAD Applications | 4 | ITE 162 Industrial Tech Elective | 4 | | |
| EDD 135 Intro to Parametric Modl | 3 | TLC 162 Technical Elective | 3 | | |
| MAT 116 Math for Technologies 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| MET 112 Engineering Materials | 4 | PHS 135 Chemisty of Materials | 4 | use for Natural Science | 4 |
| | | | | | |
| **Third Semester** | | | | | |
| EDD 240 Mechanical Drafting | 4 | ITE 162 Industrial Tech Elective | 4 | | |
| ENG 101 English Comp 1 | 3 | ENG 101 English Comp 1 | 3 | use for Comm Skills | 3 |
| MET 106 Geometric Dimens/Toler | 1 | ELC 162 Free Elective | 1 | | |
| MET 150 Statics | 4 | TLC 162 Statics & Strength | 4 | Technical Elective | 4 |
| Social Science - take PSY 101 Intro | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| EDD 245 Adv Engineering Draw | 4 | TLC 162 Technical Elective | 4 | | |
| ENG 103 Technical Communications | 3 | ENG 217 Science & Tech Writing | 3 | sub for Comp II | 3 |
| MET 211 Strength of Materials | 4 | ITE 325 Statics & Strengths | 4 | Technical Elective | 4 |
| PHY 114 Technical Physics 2 | 3 | Technical Elective | 3 | | |
| Humanties - Literature | 3 | HLC 162 Humanities Elective | 3 | Literature requirement | 3 |
| | 68 | | 68 | | 46 |

CCAC

| Microcomputer Electronics Technology | Cr | Cal U — Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | | |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| MAT 114 Math for the Techno 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics 1 | 3 | Natural Science | 3 |
| SET 105 Technical Computing | 3 | CSC 120 Probl Solv/Prog Const | 3 | Free Elective | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| MAT 116 Math for the Techno 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| MIT 103 Fundamentals of Microproc | 3 | EET 270 Intro Microprocess Design | 3 | | |
| MIT 110 Electrical Engineering Circu | 4 | EET 110 DC Circuits | 4 | | |
| MIT 208 Digital Electronics | 3 | EET 170 Digital Electr Des | 3 | | |
| PHY 114 Technical Physics 2 | 3 | PHY 122 General Physics 2 | 3 | use for Natural Science | 3 |
| | | | | | |
| **Third Semester** | | | | | |
| EET 201 Electronics 1 | 4 | EET 210 Linear Electronics I | 4 | | |
| MIT 201 Microcomuter Technology 1 | 4 | CSC 162 Computer Transfer Cours | 4 | | |
| MIT 210 Electrical Engineering Circu | 4 | EET 160 AC Circuits | 4 | | |
| Social Science - take PSY 101 Intro | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| ENG 106 Report Writing | 3 | ENG 162 English Elective | 3 | sub for Comp II | 3 |
| MIT 202 Microcomputer Tech 2 | 4 | TLC 162 Technology Elective | 4 | | |
| Technical Elective | 3 | Technical Elective | 3 | Technical Elective | 3 |
| Technical Elective | 3 | Technical Elective | 3 | Technical Elective | 3 |
| Humanities - Literature | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| | 65 | | 65 | | 36 |

**CCAC**

| Robotics and Automated Systems Technology | Cr | Cal U / Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| EET 103 Introduction to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| EGR 100 Engineering Seminar | 1 | UNI 100 First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Composition 1 | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| MAT 114 Mathematics for Techn 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics I | 3 | use for Natural Science | 3 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Solv/Prog Cons | 3 | Free Elective | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| MAT 116 Mathematics for Techn 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| MET 112 Engineering Materials | 4 | PHS 135 Chem of Materials | 4 | | |
| MIT 208 Digital Electronics | 3 | EET 170 Digital Electr Design | 3 | | |
| PHY 114 Technical Physics 2 | 3 | PHY 122 General Physics II | 3 | use for Natural Science | 3 |
| RBT 225 Robotics Control Systems | 4 | TLC 162 Technology Elective | 4 | Technical Elective | 4 |
| | | | | | |
| **Third Semester** | | | | | |
| MET 170 Fluid Power Systems | 4 | TLC 162 Technology Elective | 4 | Technical Elective | 4 |
| MIT 103 Fundamentals of Microproc | 3 | EET 270 Intro Microprocess Des | 3 | | |
| RBT 235 Programmable Logic Contr | 4 | ITE 267 Prog Control Systems | 4 | | |
| Technical Elective | 3 | Technical Elective | 3 | | |
| Social Science - take PSY 101 Intro | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| ENG 106 Report Writing | 3 | ENG 162 English Transfer Course | 3 | sub English Comp 2 | 3 |
| RBT 230 Automated Equipment | 3 | TLC 162 Technology Elective | 3 | | |
| Humanities - Literature | 3 | HLC 162 Humanities Elective | 3 | use for Lit requirement | 3 |
| Technical Elective | 3 | Technology Elective | 3 | | |
| Technical Elective | 3 | Technology Elective | 3 | | |
| | 67 | | 67 | | 41 |

CCAC

| Science and Engineering Technology | Cr | Cal U — Cal U Equivalent | Cr | Application at Cal U for Technology Ed | Cr |
|---|---|---|---|---|---|
| **First Semester** | | | | | |
| CHM 109 Intro to Chemistry | 4 | CHE 100 Intro to Chemistry | 4 | use for Natural Science | 4 |
| EGR 100 Engineering Seminar | 1 | UNI First Year Seminar | 1 | use for First Year Seminar | 1 |
| ENG 101 English Comp I | 3 | ENG 101 English Comp I | 3 | use for Comm Skills | 3 |
| MAT 114 Math for the Techn 1 | 4 | MAT 181 College Algebra | 4 | use for Math | 4 |
| SET 105 Technical Computing | 3 | CSC 120 Prob Slv/Prog Constr | 3 | Free Elective | 3 |
| | | | | | |
| **Second Semester** | | | | | |
| EDD 101 Engeering Drawing 1 | 3 | ITE 110 Technical Drawing I | 3 | use for TED 105 | 3 |
| EET 103 Intro to Electronics | 3 | ITE 130 Intro Circuit Analysis | 3 | Technical Elective | 3 |
| MAT 116 Mathem for Techn 2 | 4 | MAT 191 College Trig | 4 | use for Major requirement | 4 |
| ENG 102 English Composition 2 | 3 | ENG 102 English Composition 2 | 3 | use for Comm Skills | 3 |
| OR ENG 106 Report Writing | | OR ENG 162 English Elective | | sub for ENG 102 | |
| Humanities | 3 | HLC 162 Humanities Elective | 3 | use for Humanities | 3 |
| | | | | | |
| **Third Semester** | | | | | |
| EDD 120 Intro to CAD | 4 | ITE 215 CAD I | 4 | Technical Elective | 4 |
| MET 112 Engineering Materials | 4 | TED 226 Applic & Process Mater | 4 | use for TED 226 | 4 |
| MIT 208 Digital Electronics | 3 | EET 235 Digital Electr Design | 3 | | |
| PHY 113 Technical Physics 1 | 3 | PHY 121 General Physics | 3 | use for Natural Science | 3 |
| Soc Sci: PSY 101 Int to Psych | 3 | PSY 100 General Psychology | 3 | use for Soc Sci | 3 |
| | | | | | |
| **Fourth Semester** | | | | | |
| MAT 241 Technical Calculus 1 | 3 | MAT 281 Calculus I | 3 | | |
| MIT 240 Scientific & Indust Instrume | 3 | EET 325 Intro Electric Power | 3 | | |
| PHY 114 Technical Physics 2 | 3 | PHY 122 General Physics 2 | 3 | | |
| SET 110 Project Fabrication | 3 | TLC 162 Technical Elective | 3 | Technical Elective | 3 |
| Technical Elective | 3 | Technical Elective | 3 | | |
| | 63 | | 63 | | 48 |

**ATTACHMENT B**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Arch Draft & Design to Technology Education - Bachelor of Science in Education (120 credits)

ame: _____  Entry: _____  ID: _____

Email: _____  Phone: _____

| GENERAL EDUCATION (50-51 Credits): | Crs | Grade |
|---|---|---|
| **Building a Sense of Community - 1 credit** | | |
| EGR 100 Engineering Seminar | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | |
| TED 426 Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | |
| ENG 101 Composition I * | 3 | CCAC |
| ENG 103 Technical Communications | 3 | CCAC |
| **Public Speaking - 3 credits** | | |
| _____ | 3 | Cal U |
| **Mathematics - 3 credits** | | |
| MAT 114 Math for Technologies 1 | 4 | CCAC |
| **Natural Sciences - 7-8 credits**** | | |
| PHY 113 Tech Physics 1 | 3 | CCAC |
| _____ SCIENCE | 3-4 | Cal U |
| **Social Sciences - 6 credits** | | |
| PSY 101 Intro to Psychology | 3 | CCAC |
| PSY 208 Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | |
| _____ Humanities - Literature | 3 | CCAC |
| **Fine Arts - 3 credits** | | |
| _____ | 3 | Cal U |
| **Multicultural Awareness - 3 credits** | | |
| EDU 310 Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | |
| TED 210 Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | |
| TED 302 Energy & Control Systems * | 3 | Cal U |
| TED 316 Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | |
| HPE 314 First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
ED 450 and TED 451 listed below in the Professional Preparation
ock are designated Upper-Division Writing Component Courses.

| ROFESSIONAL PREPARATION (28 Credits) | | |
|---|---|---|
| EDU 340 Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 Introduction to Technology Education | 3 | Cal U |
| TED 300 Assessment & Instruction in TED | 3 | Cal U |
| TED 450 Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 Technology Education Student Teach | 10 | Cal U |
| TE___ Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | Crs | Grade |
|---|---|---|
| **Required Courses:** | | |
| ITE 250 Introduction to Automation | 3 | Cal U |
| MAT 116 Math for Technologies 2 | 4 | CCAC |
| EDD 101 Engineering Drawing 1 | 3 | CCAC |
| TED 111 Information Systems | 3 | Cal U |
| TED 126 Engineering Materials & Product Design | 3 | Cal U |
| TED 226 Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 Transportation Systems | 3 | Cal U |
| TED 346 Digital Communications | 3 | Cal U |
| TED 436 Engineering Design & Development | 3 | Cal U |
| **Technical/Technological Electives - 9 credits** | | |
| EDD 120 Intro to CAD | 4 | CCAC |
| EDD 121 CAD Applications | 4 | CCAC |
| MET 211 Strength of Materials | 4 | CCAC |

| ELECTIVE (3 Credits) | | |
|---|---|---|
| EDD 102 Engineering Drawing 2 | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by
the major, or any other courses approved by the advisor

*Required courses that must be completed.

**Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

**Admission to Teacher Education - must be approved at 48 - 65 credits**
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

**Recommendation for Student Teaching - required 1 semester prior**
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**
ELC 162   Free Electives                    21 CCAC

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | Total | 16 |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | Total | 15 |

**SOPHOMORE** *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | Total | 15 |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching In Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | Total | 16 |

\*Praxis exams should be taken during or immediately following the third semester.
\*\*Students should apply for Admission to Teacher Education during the fourth semester.

**JUNIOR** *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

**SENIOR** *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | Total | 13 |

Total = 120 Credit Hours (BS Degree)

# California University of Pennsylvania
## College of Education and Human Services
### Applied Engineering and Technology Department
Civil Engineering - Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____
Email: _____  Phone: _____

## GENERAL EDUCATION (50-51 Credits): Crs Grade

**Building a Sense of Community - 1 credit**

| EGR 100 | Engineering Seminar | 1 | CCAC |
|---|---|---|---|

**Critical Thinking Skills - 3 credits**

| TED 426 | Manufacturing Enterprise* | 3 | Cal U |
|---|---|---|---|

**Communication Skills - 6 credits**

| ENG 101 | Composition I * | 3 | CCAC |
|---|---|---|---|
| ENG 102 | Composition II * | 3 | CCAC |

**Public Speaking - 3 credits**

| | | 3 | Cal U |
|---|---|---|---|

**Mathematics - 3 credits**

| MAT 114 | Math for the Technologies 1 | 4 | CCAC |
|---|---|---|---|

**Natural Sciences - 7-8 credits\*\***

| PHY 141 | Physics 1 | 4 | CCAC |
|---|---|---|---|
| PHY 142 | Physics 2 | 4 | CCAC |

**Social Sciences - 6 credits**

| PSY 101 | Intro to Psychology * | 3 | CCAC |
|---|---|---|---|
| PSY 208 | Educational Psychology* | 3 | Cal U |

**Humanities - 3 credits**

| | Any Humanites Elective | 3 | CCAC |
|---|---|---|---|

**Fine Arts - 3 credits**

| | | 3 | Cal U |
|---|---|---|---|

**Multicultural Awareness - 3 credits**

| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |
|---|---|---|---|

**Values - 3 credits**

| TED 210 | Design & Appropriate Technology * | 3 | Cal U |
|---|---|---|---|

**Technological Literacy - 6 credits**

| TED 302 | Energy & Control Systems * | 3 | Cal U |
|---|---|---|---|
| TED 316 | Structural Design * | 3 | Cal U |

**Health & Wellness - 3 credits**

| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |
|---|---|---|---|

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

## PROFESSIONAL PREPARATION (28 Credits)

| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
|---|---|---|---|
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 462 | Professional Practices in TED | 3 | Cal U |

## MAJOR (39 Credits) Crs Grade

**Required Courses:**

| ITE 250 | Introduction to Automation | 3 | Cal U |
|---|---|---|---|
| MAT116 | Math for the Technologies 2 | 4 | CCAC |
| EDD 101 | Engineering Drawing 1 | 3 | CCAC |
| TED 111 | Information Systems | 3 | Cal U |
| TED 126 | Engineering Materials & Product Design | 3 | Cal U |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 | Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 | Transportation Systems | 3 | Cal U |
| TED 346 | Digital Communications | 3 | Cal U |
| TED 436 | Engineering Design & Development | 3 | Cal U |

**Technical/Technological Electives - 9 credits**

| EGR 110 | Engineering Surveying | 4 | CCAC |
|---|---|---|---|
| EDD 120 | Intro to CAD | 4 | CCAC |
| MET 211 | Strength of Materials | 4 | CCAC |

## ELECTIVE (3 Credits)

| CET 202 | Soils in Construction | 4 | CCAC |
|---|---|---|---|

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

## EXTRA COURSES

| ELC 162 | Free Electives | 19 CCAC |
|---|---|---|

TED BS SP07

# College of Education and Human Services
# Technology Education
## Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN**     *Semester 1*                     *Semester 2*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| ENG | 101 | English Composition I | 3 | ENG | 102 | English Composition II | 3 |
| MAT | 181 | College Algebra | 3 | MAT | 191 | College Trigonometry | 3 |
| TED | 105 | Communicating Technical Designs | 3 | TED | 111 | Information Systems | 3 |
| TED | 100 | Intro to Technology Education | 3 | TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 | TED | 210 | Design & Appropriate Technology | 3 |
| UNI | 100 | First Year Seminar | 1 | | | | |
| | | Total | 16 | | | Total | 15 |

**SOPHOMORE**     *Semester 3\**                     *Semester 4\*\**

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| ITE | 250 | Intro to Automation | 3 | EDU | 310 | Teaching In Multicultural Society | 3 |
| PSY | 100 | General Psychology | 3 | PSY | 208 | Educational Psychology | 3 |
| | | General Education | 9 | TED | 300 | Assessment & Instruction in TED | 3 |
| | | | | | | General Education | 7 |
| | | Total | 15 | | | Total | 16 |

**\*Praxis exams should be taken during or immediately following the third semester.**
**\*\*Students should apply for Admission to Teacher Education during the fourth semester.**

**JUNIOR**     *Semester 5*                     *Semester 6*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 | HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 302 | Energy & Control Systems | 3 | TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 316 | Structural Design | 3 | TED | 346 | Digital Communications | 3 |
| TED | 335 | Transportation Systems | 3 | | | General Education | 3 |
| | | Technical/Technological Elective | 3 | | | Technical/Technological Elective | 3 |
| | | Total | 15 | | | Total | 15 |

**SENIOR**     *Semester 7*                     *Semester 8*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| TED | 426 | Manufacturing Enterprise | 3 | TED | 461 | Technology Education Stud Teach | 10 |
| TED | 436 | Engineering Design & Develop | 3 | TED | 462 | Prof Practices in Tech Ed | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 | | | | |
| TED | 500 | Teach. Tech-Elementary Sch | 3 | | | | |
| | | Technical/Technological Elective | 3 | | | | |
| | | Total | 15 | | | Total | 13 |

Total =    120    Credit Hours (BS Degree)

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### CADD to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____ Entry: _____  ID: _____

Email: _____ Phone: _____

## GENERAL EDUCATION (50-51 Credits):

**Building a Sense of Community - 1 credit**

| | | Crs | Grade |
|---|---|---|---|
| EGR 100 | Engineering Seminar | 1 | CCAC |

**Critical Thinking Skills - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| TED 426 | Manufacturing Enterprise* | 3 | Cal U |

**Communication Skills - 6 credits**

| | | Crs | Grade |
|---|---|---|---|
| ENG 101 | Composition I * | 3 | CCAC |
| ENG 103 | Technical Communications | 3 | CCAC |

**Public Speaking - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| | | 3 | Cal U |

**Mathematics - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| MAT 114 | Math for Technologies 1 | 4 | CCAC |

**Natural Sciences - 7-8 credits\*\***

| | | Crs | Grade |
|---|---|---|---|
| PHY 113 | Technical Physics 1 | 3 | CCAC |
| | SCIENCE | 3-4 | Cal U |

**Social Sciences - 6 credits**

| | | Crs | Grade |
|---|---|---|---|
| PSY 101 | Intro to Psychology | 3 | CCAC |
| PSY 208 | Educational Psychology* | 3 | Cal U |

**Humanities - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| | Humanities - Literature | 3 | CCAC |

**Fine Arts - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| | | 3 | Cal U |

**Multicultural Awareness - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |

**Values - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| TED 210 | Design & Appropriate Technology * | 3 | Cal U |

**Technological Literacy - 6 credits**

| | | Crs | Grade |
|---|---|---|---|
| TED 302 | Energy & Control Systems * | 3 | Cal U |
| TED 316 | Structural Design * | 3 | Cal U |

**Health & Wellness - 3 credits**

| | | Crs | Grade |
|---|---|---|---|
| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

## PROFESSIONAL PREPARATION (28 Credits)

| | | Crs | Grade |
|---|---|---|---|
| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 462 | Professional Practices in TED | 3 | Cal U |

## MAJOR (39 Credits)

**Required Courses:**

| | | Crs | Grade |
|---|---|---|---|
| ITE 250 | Introduction to Automation | 3 | Cal U |
| MAT 116 | Math for Technologies 2 | 4 | CCAC |
| EDD 101 | Engineering Drawing 1 | 3 | CCAC |
| TED 111 | Information Systems | 3 | Cal U |
| TED 126 | Engineering Materials & Product Design | 3 | Cal U |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 | Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 | Transportation Systems | 3 | Cal U |
| TED 346 | Digital Communications | 3 | Cal U |
| TED 435 | Engineering Design & Development | 3 | Cal U |

**Technical/Technological Electives - 9 credits**

| | | Crs | Grade |
|---|---|---|---|
| EDD 120 | Intro to CAD | 4 | CCAC |
| EDD 102 | Engineering Drawing 2 | 3 | CCAC |
| EDD 221 | Parametric Modeling II | 3 | CCAC |

## ELECTIVE (3 Credits)

| | | Crs | Grade |
|---|---|---|---|
| SET 105 | Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB & one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English literature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

## EXTRA COURSES

| | | | |
|---|---|---|---|
| ELC 162 | Free Electives | | 22 CCAC |

TED BS SP 07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN**    *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | Total | 16 |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | Total | 15 |

**SOPHOMORE**    *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | Total | 15 |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | Total | 16 |

**\*Praxis exams should be taken during or immediately following the third semester.**
**\*\*Students should apply for Admission to Teacher Education during the fourth semester.**

**JUNIOR**    *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

**SENIOR**    *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | Total | 13 |

Total =    120    Credit Hours (BS Degree)

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Manuf Tech Controls to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____

Email: _____  Phone: _____

| GENERAL EDUCATION (50-51 Credits): | Crs | Grade |
|---|---|---|
| **Building a Sense of Community - 1 credit** | | |
| EGR 100 Engineering Seminar | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | |
| TED 426 Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | |
| ENG 101 Composition I * | 3 | CCAC |
| ENG 103 Technical Communications | 3 | CCAC |
| **Public Speaking - 3 credits** | | |
| _____ | 3 | Cal U |
| **Mathematics - 3 credits** | | |
| MAT 114 Math for Technologies 1 | 4 | CCAC |
| **Natural Sciences - 7-8 credits** ** | | |
| PHY 113 Technical Physics 1 | 3 | CCAC |
| MET 112 Engineering Materials | 4 | CCAC |
| **Social Sciences - 6 credits** | | |
| PSY 101 Intro to Psychology | 3 | CCAC |
| PSY 208 Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | |
| Humanities - Literature | 3 | CCAC |
| **Fine Arts - 3 credits** | | |
| _____ | 3 | Cal U |
| **Multicultural Awareness - 3 credits** | | |
| EDU 310 Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | |
| TED 210 Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | |
| TED 302 Energy & Control Systems * | 3 | Cal U |
| TED 316 Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | |
| HPE 314 First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

| PROFESSIONAL PREPARATION (28 Credits) | | |
|---|---|---|
| EDU 340 Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 Introduction to Technology Education | 3 | Cal U |
| TED 300 Assessment & Instruction in TED | 3 | Cal U |
| TED 450 Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 Technology Education Student Teach | 10 | Cal U |
| TED 462 Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | Crs | Grade |
|---|---|---|
| **Required Courses:** | | |
| RBT 225 Robotic Controls | 4 | CCAC |
| MAT 116 Math for Technologies 2 | 4 | CCAC |
| EDD 101 Engineering Drawing 1 | 3 | CCAC |
| TED 111 Information Systems | 3 | Cal U |
| TED 126 Engineering Materials & Product Design | 3 | Cal U |
| TED 226 Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 Transportation Systems | 3 | Cal U |
| TED 346 Digital Communications | 3 | Cal U |
| TED 436 Engineering Design & Development | 3 | Cal U |
| **Technical/Technological Electives - 9 credits** | | |
| EET 103 Intro to Electronics | 3 | CCAC |
| SET 105 Technical Computing | 3 | CCAC |
| EDD 120 Intro to CAD | 4 | CCAC |

| ELECTIVE (3 Credits) | | |
|---|---|---|
| MIT 103 Fund of Microprocessors | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required
by the major, or any other courses approved by the advisor

*Required courses that must be completed.

**Natural Science: Complete one 4-credit LAB & one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**
ELC 162   Free Electives                    17 CCAC

TED BS SP 07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | Total | 16 |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | Total | 15 |

**SOPHOMORE** *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | Total | 15 |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | Total | 16 |

*Praxis exams should be taken during or immediately following the third semester.
**Students should apply for Admission to Teacher Education during the fourth semester.

**JUNIOR** *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

**SENIOR** *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | Total | 13 |

**Total = 120 Credit Hours (BS Degree)**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Manuf Tech Machining to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____
Email: _____  Phone: _____

## GENERAL EDUCATION (50-51 Credits): Crs Grade

**Building a Sense of Community - 1 credit**

| | | | |
|---|---|---|---|
| EGR 100 | Engineering Seminar | 1 | CCAC |

**Critical Thinking Skills - 3 credits**

| | | | |
|---|---|---|---|
| TED 426 | Manufacturing Enterprise* | 3 | Cal U |

**Communication Skills - 6 credits**

| | | | |
|---|---|---|---|
| ENG 101 | Composition I * | 3 | CCAC |
| ENG 103 | Technical Communications | 3 | CCAC |

**Public Speaking - 3 credits**

| | | | |
|---|---|---|---|
| | | 3 | Cal U |

**Mathematics - 3 credits**

| | | | |
|---|---|---|---|
| MAT 114 | Math for Technologies 1 | 4 | CCAC |

**Natural Sciences - 7-8 credits\*\***

| | | | |
|---|---|---|---|
| PHY 113 | Technical Physics 1 | 3 | CCAC |
| MET 112 | Engineering Materials | 4 | CCAC |

**Social Sciences - 6 credits**

| | | | |
|---|---|---|---|
| PSY 101 | Intro to Psychology | 3 | CCAC |
| PSY 208 | Educational Psychology* | 3 | Cal U |

**Humanities - 3 credits**

| | | | |
|---|---|---|---|
| | Humanities - Literature | 3 | CCAC |

**Fine Arts - 3 credits**

| | | | |
|---|---|---|---|
| | | 3 | Cal U |

**Multicultural Awareness - 3 credits**

| | | | |
|---|---|---|---|
| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |

**Values - 3 credits**

| | | | |
|---|---|---|---|
| TED 210 | Design & Appropriate Technology * | 3 | Cal U |

**Technological Literacy - 6 credits**

| | | | |
|---|---|---|---|
| TED 302 | Energy & Control Systems * | 3 | Cal U |
| TED 316 | Structural Design * | 3 | Cal U |

**Health & Wellness - 3 credits**

| | | | |
|---|---|---|---|
| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation
block are designated Upper-Division Writing Component Courses.

## PROFESSIONAL PREPARATION (28 Credits)

| | | | |
|---|---|---|---|
| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 452 | Professional Practices in TED | 3 | Cal U |

## MAJOR (39 Credits) Crs Grade
**Required Courses:**

| | | | |
|---|---|---|---|
| ITE 250 | Intro to Automation | 3 | Cal U |
| MAT 116 | Math for Technologies 2 | 4 | CCAC |
| EDD 120 | Intro to CAD | 4 | CCAC |
| TED 111 | Information Systems | 3 | Cal U |
| TED 126 | Engineering Materials & Product Design | 3 | Cal U |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 | Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 | Transportation Systems | 3 | Cal U |
| TED 346 | Digital Communications | 3 | Cal U |
| TED 436 | Engineering Design & Development | 3 | Cal U |

**Technical/Technological Electives - 9 credits**

| | | | |
|---|---|---|---|
| EET 103 | Intro to Electronics | 3 | CCAC |
| MET 141 | Intro to Machining | 3 | CCAC |
| EDD 101 | Engineering Drawing 1 | 3 | CCAC |

## ELECTIVE (3 Credits)

| | | | |
|---|---|---|---|
| SET 105 | Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by
the major, or any other courses approved by the advisor

*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**
ELC 162    Free Electives                    19 CCAC

TED BS SP07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** *Semester 1*                    *Semester 2*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 | ENG | 102 | English Composition II | 3 |
| MAT | 181 | College Algebra | 3 | MAT | 191 | College Trigonometry | 3 |
| TED | 105 | Communicating Technical Designs | 3 | TED | 111 | Information Systems | 3 |
| TED | 100 | Intro to Technology Education | 3 | TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 | TED | 210 | Design & Appropriate Technology | 3 |
| UNI | 100 | First Year Seminar | 1 | | | | |
| | | **Total** | **16** | | | **Total** | **15** |

**SOPHOMORE** *Semester 3\**                    *Semester 4\*\**

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 | EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 100 | General Psychology | 3 | PSY | 208 | Educational Psychology | 3 |
| | | General Education | 9 | TED | 300 | Assessment & Instruction in TED | 3 |
| | | | | | | General Education | 7 |
| | | **Total** | **15** | | | **Total** | **16** |

\*Praxis exams should be taken during or immediately following the third semester.
\*\*Students should apply for Admission to Teacher Education during the fourth semester.

**JUNIOR** *Semester 5*                    *Semester 6*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 | HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 302 | Energy & Control Systems | 3 | TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 316 | Structural Design | 3 | TED | 346 | Digital Communications | 3 |
| TED | 335 | Transportation Systems | 3 | | | General Education | 3 |
| | | Technical/Technological Elective | 3 | | | Technical/Technological Elective | 3 |
| | | **Total** | **15** | | | **Total** | **15** |

**SENIOR** *Semester 7*                    *Semester 8*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 | TED | 461 | Technology Education Stud Teach | 10 |
| TED | 436 | Engineering Design & Develop | 3 | TED | 462 | Prof Practices in Tech Ed | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 | | | | |
| TED | 500 | Teach. Tech-Elementary Sch | 3 | | | | |
| | | Technical/Technological Elective | 3 | | | | |
| | | **Total** | **15** | | | **Total** | **13** |

Total =    120    Credit Hours (BS Degree)

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Manuf Tech Nano to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____
Email: _____  Phone: _____

## GENERAL EDUCATION (50-51 Credits): Crs Grade

**Building a Sense of Community - 1 credit**

| | | Crs | Grade |
|---|---|---|---|
| EGR 100 | Engineering Seminar | 1 | CCAC |

**Critical Thinking Skills - 3 credits**

| | | | |
|---|---|---|---|
| TED 426 | Manufacturing Enterprise* | 3 | Cal U |

**Communication Skills - 6 credits**

| | | | |
|---|---|---|---|
| ENG 101 | Composition I * | 3 | CCAC |
| ENG 103 | Technical Communications | 3 | CCAC |

**Public Speaking - 3 credits**

| | | | |
|---|---|---|---|
| | | 3 | Cal U |

**Mathematics - 3 credits**

| | | | |
|---|---|---|---|
| MAT 114 | Math for Technologies 1 | 4 | CCAC |

**Natural Sciences - 7-8 credits\*\***

| | | | |
|---|---|---|---|
| PHY 113 | Technical Physics 1 | 3 | CCAC |
| MET 112 | Engineering Materials | 4 | CCAC |

**Social Sciences - 6 credits**

| | | | |
|---|---|---|---|
| PSY 101 | Intro to Psychology | 3 | CCAC |
| PSY 208 | Educational Psychology* | 3 | Cal U |

**Humanities - 3 credits**

| | | | |
|---|---|---|---|
| | Humanities - Literature | 3 | CCAC |

**Fine Arts - 3 credits**

| | | | |
|---|---|---|---|
| | | 3 | Cal U |

**Multicultural Awareness - 3 credits**

| | | | |
|---|---|---|---|
| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |

**Values - 3 credits**

| | | | |
|---|---|---|---|
| TED 210 | Design & Appropriate Technology * | 3 | Cal U |

**Technological Literacy - 6 credits**

| | | | |
|---|---|---|---|
| TED 302 | Energy & Control Systems * | 3 | Cal U |
| TED 316 | Structural Design * | 3 | Cal U |

**Health & Wellness - 3 credits**

| | | | |
|---|---|---|---|
| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**

TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

## PROFESSIONAL PREPARATION (28 Credits)

| | | | |
|---|---|---|---|
| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 462 | Professional Practices in TED | 3 | Cal U |

## MAJOR (39 Credits)

**Required Courses:**

| | | Crs | Grade |
|---|---|---|---|
| ITE 250 | Intro to Automation | 3 | Cal U |
| MAT 116 | Math for Technologies 2 | 4 | CCAC |
| TED 105 | Communicating Technical Designs | 3 | Cal U |
| TED 111 | Information Systems | 3 | Cal U |
| TED 126 | Engineering Materials & Product Design | 3 | Cal U |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 | Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 | Transportation Systems | 3 | Cal U |
| TED 346 | Digital Communications | 3 | Cal U |
| TED 436 | Engineering Design & Development | 3 | Cal U |

**Technical/Technological Electives - 9 credits**

| | | | |
|---|---|---|---|
| EET 103 | Intro to Electronics | 3 | CCAC |
| | | 3 | Cal U |
| | | 3 | Cal U |

## ELECTIVE (3 Credits)

| | | | |
|---|---|---|---|
| SET 105 | Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**

| | | | |
|---|---|---|---|
| ELC 162 | Free Electives | 32 CCAC |

TED BS SP07

# College of Education and Human Services
# Technology Education
## Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN**     *Semester 1*                      *Semester 2*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| ENG | 101 | English Composition I | 3 | ENG | 102 | English Composition II | 3 |
| MAT | 181 | College Algebra | 3 | MAT | 191 | College Trigonometry | 3 |
| TED | 105 | Communicating Technical Designs | 3 | TED | 111 | Information Systems | 3 |
| TED | 100 | Intro to Technology Education | 3 | TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 | TED | 210 | Design & Appropriate Technology | 3 |
| UNI | 100 | First Year Seminar | 1 | | | | |
| | | Total | 16 | | | Total | 15 |

**SOPHOMORE**     *Semester 3\**                      *Semester 4\*\**

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| ITE | 250 | Intro to Automation | 3 | EDU | 310 | Teaching In Multicultural Society | 3 |
| PSY | 100 | General Psychology | 3 | PSY | 208 | Educational Psychology | 3 |
| | | General Education | 9 | TED | 300 | Assessment & Instruction in TED | 3 |
| | | | | | | General Education | 7 |
| | | Total | 15 | | | Total | 16 |

**\*Praxis exams should be taken during or immediately following the third semester.**
**\*\*Students should apply for Admission to Teacher Education during the fourth semester.**

**JUNIOR**     *Semester 5*                      *Semester 6*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 | HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 302 | Energy & Control Systems | 3 | TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 316 | Structural Design | 3 | TED | 346 | Digital Communications | 3 |
| TED | 335 | Transportation Systems | 3 | | | General Education | 3 |
| | | Technical/Technological Elective | 3 | | | Technical/Technological Elective | 3 |
| | | Total | 15 | | | Total | 15 |

**SENIOR**     *Semester 7*                      *Semester 8*

| Prefix | Number | Course | Cr. | Prefix | Number | Course | Cr. |
|---|---|---|---|---|---|---|---|
| TED | 426 | Manufacturing Enterprise | 3 | TED | 461 | Technology Education Stud Teach | 10 |
| TED | 436 | Engineering Design & Develop | 3 | TED | 462 | Prof Practices in Tech Ed | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 | | | | |
| TED | 500 | Teach. Tech-Elementary Sch | 3 | | | | |
| | | Technical/Technological Elective | 3 | | | | |
| | | Total | 15 | | | Total | 13 |

Total =    120    Credit Hours (BS Degree)

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Manuf Tech Weld to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____ Entry: _____ ID: _____
Email: _____ Phone: _____

| GENERAL EDUCATION (50-51 Credits): | Crs | Grade |
|---|---|---|
| **Building a Sense of Community - 1 credit** | | |
| EGR 100 Engineering Seminar | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | |
| TED 426 Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | |
| ENG 101 Composition I * | 3 | CCAC |
| ENG 103 Technical Communication | 3 | CCAC |
| **Public Speaking - 3 credits** | | |
| _____ _____ | 3 | Cal U |
| **Mathematics - 3 credits** | | |
| MAT 114 Math for the Technologies 1 | 4 | CCAC |
| **Natural Sciences - 7-8 credits**** | | |
| PHY 113 Technical Physics 1 | 3 | CCAC |
| MET 112 Engineering Materials | 4 | CCAC |
| **Social Sciences - 6 credits** | | |
| PSY 101 Intro to Psychology * | 3 | CCAC |
| PSY 208 Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | |
| _____ Any Humanities Literature Course | 3 | CCAC |
| **Fine Arts - 3 credits** | | |
| _____ _____ | 3 | Cal U |
| **Multicultural Awareness - 3 credits** | | |
| EDU 310 Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | |
| TED 210 Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | |
| TED 302 Energy & Control Systems * | 3 | Cal U |
| TED 316 Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | |
| HPE 314 First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

| PROFESSIONAL PREPARATION (28 Credits) | | |
|---|---|---|
| EDU 340 Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 Introduction to Technology Education | 3 | Cal U |
| TED 300 Assessment & Instruction in TED | 3 | Cal U |
| TED 450 Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 Technology Education Student Teach | 10 | Cal U |
| TED 462 Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | Crs | Grade |
|---|---|---|
| **Required Courses:** | | |
| ITE 250 Introduction to Automation | 3 | Cal U |
| MAT116 Math for the Technologies 2 | 4 | CCAC |
| EDD 120 Intro to CAD | 4 | CCAC |
| TED 111 Information Systems | 3 | Cal U |
| TED 126 Engineering Materials & Product Design | 3 | Cal U |
| TED 226 Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 Transportation Systems | 3 | Cal U |
| TED 346 Digital Communications | 3 | Cal U |
| TED 436 Engineering Design & Development | 3 | Cal U |
| **Technical/Technological Electives - 9 credits** | | |
| EET 130 Intro to Electronics | 3 | CCAC |
| EDD 101 Engineering Drawing 1 | 3 | CCAC |
| MET 200 Meteorology | 3 | CCAC |

| ELECTIVE (3 Credits) | | |
|---|---|---|
| WLC 101 Welding Fundamentals | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

**Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**

| | | |
|---|---|---|
| ELC 162 Free Electives | 20 | CCAC |

TED BS SP07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | **Total** | **16** |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | **Total** | **15** |

**SOPHOMORE** *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | **Total** | **15** |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | **Total** | **16** |

*\*Praxis exams should be taken during or immediately following the third semester.*
*\*\*Students should apply for Admission to Teacher Education during the fourth semester.*

**JUNIOR** *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

**SENIOR** *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | **Total** | **13** |

**Total = 120 Credit Hours (BS Degree)**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Mech Drf & Des to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____   Entry: _____   ID: _____

Email: _____   Phone: _____

## GENERAL EDUCATION (50-51 Credits):

**Building a Sense of Community - 1 credit**

| | | Crs | Grade |
|---|---|---|---|
| EGR 100 | Engineering Seminar | 1 | CCAC |

**Critical Thinking Skills - 3 credits**

| | | | |
|---|---|---|---|
| TED 426 | Manufacturing Enterprise* | 3 | Cal U |

**Communication Skills - 6 credits**

| | | | |
|---|---|---|---|
| ENG 101 | Composition I * | 3 | CCAC |
| ENG 103 | Technical Communication | 3 | CCAC |

**Public Speaking - 3 credits**

| | | | |
|---|---|---|---|
| _____ | _____ | 3 | Cal U |

**Mathematics - 3 credits**

| | | | |
|---|---|---|---|
| MAT 114 | Math for the Technologies 1 | 4 | CCAC |

**Natural Sciences - 7-8 credits****

| | | | |
|---|---|---|---|
| PHY 113 | Technical Physics 1 | 3 | CCAC |
| MET 112 | Engineering Materials | 4 | CCAC |

**Social Sciences - 6 credits**

| | | | |
|---|---|---|---|
| PSY 101 | Intro to Psychology * | 3 | CCAC |
| PSY 208 | Educational Psychology* | 3 | Cal U |

**Humanities - 3 credits**

| | | | |
|---|---|---|---|
| _____ | Any Humanities Literature Course | 3 | CCAC |

**Fine Arts - 3 credits**

| | | | |
|---|---|---|---|
| _____ | _____ | 3 | Cal U |

**Multicultural Awareness - 3 credits**

| | | | |
|---|---|---|---|
| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |

**Values - 3 credits**

| | | | |
|---|---|---|---|
| TED 210 | Design & Appropriate Technology * | 3 | Cal U |

**Technological Literacy - 6 credits**

| | | | |
|---|---|---|---|
| TED 302 | Energy & Control Systems * | 3 | Cal U |
| TED 316 | Structural Design * | 3 | Cal U |

**Health & Wellness - 3 credits**

| | | | |
|---|---|---|---|
| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**

TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

## PROFESSIONAL PREPARATION (28 Credits)

| | | | |
|---|---|---|---|
| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 462 | Professional Practices in TED | 3 | Cal U |

## MAJOR (39 Credits)
### Required Courses:

| | | Crs | Grade |
|---|---|---|---|
| ITE 250 | Introduction to Automation | 3 | |
| MAT116 | Math for the Technologies 2 | 4 | CCAC |
| EDD 101 | Engineering Drawing 1 | 3 | CCAC |
| TED 111 | Information Systems | 3 | |
| TED 126 | Engineering Materials & Product Design | 3 | |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | |
| TED 304 | Designs in Bio-Related Technology | 3 | |
| TED 335 | Transportation Systems | 3 | |
| TED 346 | Digital Communications | 3 | |
| TED 436 | Engineering Design & Development | 3 | |

**Technical/Technological Electives - 9 credits**

| | | | |
|---|---|---|---|
| EDD 120 | Intro to CAD | 4 | CCAC |
| MET 150 | Statics | 4 | CCAC |
| MET 211 | Strength of Materials | 4 | CCAC |

## ELECTIVE (3 Credits)

| | | | |
|---|---|---|---|
| SET 105 | Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

**Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**

| | | | |
|---|---|---|---|
| ELC 162 | Free Electives | | 22 ccac |

**TED BS SP07**

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** — *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | Total | 16 |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | Total | 15 |

**SOPHOMORE** — *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | Total | 15 |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching In Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | Total | 16 |

**\*Praxis exams should be taken during or immediately following the third semester.**
**\*\*Students should apply for Admission to Teacher Education during the fourth semester.**

**JUNIOR** — *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

**SENIOR** — *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | Total | 13 |

**Total = 120 Credit Hours (BS Degree)**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Microcomp Electronics to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____
Email: _____  Phone: _____

| GENERAL EDUCATION (50-51 Credits): | | Crs | Grade |
|---|---|---|---|
| **Building a Sense of Community - 1 credit** | | | |
| EGR 100 | Engineering Seminar | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | | |
| TED 426 | Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | | |
| ENG 101 | Composition I * | 3 | CCAC |
| ENG 106 | Report Writing | 3 | CCAC |
| **Public Speaking - 3 credits** | | | |
| | | 3 | Cal U |
| **Mathematics - 3 credits** | | | |
| MAT 114 | Math for Technologies 1 | 4 | CCAC |
| **Natural Sciences - 7-8 credits**\*\* | | | |
| PHY 113 | Technical Physics 1 | 3 | CCAC |
| PHY 114 | Technical Physics 2 | 3 | CCAC |
| **Social Sciences - 6 credits** | | | |
| PSY 101 | Intro to Psychology | 3 | CCAC |
| PSY 205 | Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | | |
| | Humanities - Literature | 3 | CCAC |
| **Fine Arts - 3 credits** | | | |
| | | 3 | Cal U |
| **Multicultural Awareness - 3 credits** | | | |
| EDU 310 | Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | | |
| TED 210 | Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | | |
| TED 302 | Energy & Control Systems * | 3 | Cal U |
| TED 316 | Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | | |
| HPE 314 | First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

| PROFESSIONAL PREPARATION (28 Credits) | | | |
|---|---|---|---|
| EDU 340 | Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 | Introduction to Technology Education | 3 | Cal U |
| TED 300 | Assessment & Instruction in TED | 3 | Cal U |
| TED 450 | Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 | Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 | Technology Education Student Teach | 10 | Cal U |
| TED 462 | Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | | Crs | Grade |
|---|---|---|---|
| **Required Courses:** | | | |
| ITE 250 | Introduction to Automation | 3 | Cal U |
| MAT 116 | Math for Technologies 2 | 4 | CCAC |
| TED 105 | Communicating Technical Designs | 3 | Cal U |
| TED 111 | Information Systems | 3 | Cal U |
| TED 126 | Engineering Materials & Product Design | 3 | Cal U |
| TED 226 | Apps.& Processing of Engineering Materials | 3 | Cal U |
| TED 304 | Designs in Bio-Related Technology | 3 | Cal U |
| TED 335 | Transportation Systems | 3 | Cal U |
| TED 346 | Digital Communications | 3 | Cal U |
| TED 436 | Engineering Design & Development | 3 | Cal U |
| **Technical/Technological Electives - 9 credits** | | | |
| | Technical Elective | 3 | CCAC |
| | Technical Elective | 3 | CCAC |
| | | 3 | Cal U |

| ELECTIVE (3 Credits) | | | |
|---|---|---|---|
| SET 105 | Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English literature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**
ELC 162  Free Electives  29 CCAC

TED BS SP07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN**      *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | **Total** | **16** |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | **Total** | **15** |

**SOPHOMORE**      *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | **Total** | **15** |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | **Total** | **16** |

**\*Praxis exams should be taken during or immediately following the third semester.**
**\*\*Students should apply for Admission to Teacher Education during the fourth semester.**

**JUNIOR**      *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

**SENIOR**      *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | | |
| | | | |
| | | **Total** | **13** |

**Total =**    **120**    **Credit Hours (BS Degree)**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Robotics to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____  Entry: _____  ID: _____

Email: _____  Phone: _____

| GENERAL EDUCATION (50-51 Credits): | Crs | Grade |
| --- | --- | --- |
| **Building a Sense of Community - 1 credit** | | |
| EGR 100  Engineering Seminar | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | |
| TED 426  Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | |
| ENG 101  Composition I * | 3 | CCAC |
| ENG 105  Report Writing | 3 | CCAC |
| **Public Speaking - 3 credits** | | |
| | 3 | |
| **Mathematics - 3 credits** | | |
| MAT 114  Math for Techologies 1 | 4 | CCAC |
| **Natural Sciences - 7-8 credits**\*\* | | |
| PHY 113  Technical Physics 1 | 3 | CCAC |
| PHY 114  Technical Physics 2 | 3 | CCAC |
| **Social Sciences - 6 credits** | | |
| PSY 101  Intro to Psychology | 3 | CCAC |
| PSY 208  Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | |
| Humanities - Literature | 3 | CCAC |
| **Fine Arts - 3 credits** | | |
| | 3 | |
| **Multicultural Awareness - 3 credits** | | |
| EDU 310  Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | |
| TED 210  Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | |
| TED 302  Energy & Control Systems * | 3 | Cal U |
| TED 316  Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | |
| HPE 314  First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

| PROFESSIONAL PREPARATION (28 Credits) | | |
| --- | --- | --- |
| EDU 340  Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100  Introduction to Technology Education | 3 | Cal U |
| TED 300  Assessment & Instruction in TED | 3 | Cal U |
| TED 450  Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451  Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461  Technology Education Student Teach | 10 | Cal U |
| TED 462  Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | Crs | Grade |
| --- | --- | --- |
| **Required Courses:** | | |
| ITE 250  Introduction to Automation | 3 | Cal U |
| MAT 116  Math for Techologies 2 | 4 | CCAC |
| TED 105  Communicating Technical Designs | 3 | |
| TED 111  Information Systems | 3 | |
| TED 126  Engineering Materials & Product Design | 3 | |
| TED 226  Apps.& Processing of Engineering Materials | 3 | |
| TED 304  Designs in Bio-Related Technology | 3 | |
| TED 335  Transportation Systems | 3 | |
| TED 346  Digital Communications | 3 | |
| TED 436  Engineering Design & Development | 3 | |
| **Technical/Technological Electives - 9 credits** | | |
| EET 103  Intro Electronics | 3 | CCAC |
| RBT 225  Robotics Control Systems | 4 | CCAC |
| MET 170  Fluid Power Systems | 4 | CCAC |

| ELECTIVE (3 Credits) | | |
| --- | --- | --- |
| SET 105  Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

\*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB and one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education - must be approved at 48 - 65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34, 114 & 151 clearances, valid thru student teaching
$1 million liability insurance policy

**EXTRA COURSES**

| ELC 162 | Free Electives | 26 CCAC |
| --- | --- | --- |

TED BS SP07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN** — *Semester 1*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | **Total** | **16** |

*Semester 2*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | **Total** | **15** |

**SOPHOMORE** — *Semester 3\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | **Total** | **15** |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | **Total** | **16** |

*\*Praxis exams should be taken during or immediately following the third semester.*
*\*\*Students should apply for Admission to Teacher Education during the fourth semester.*

**JUNIOR** — *Semester 5*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 6*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

**SENIOR** — *Semester 7*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | **Total** | **15** |

*Semester 8*

| Prefix | Number | Course | Cr. |
|--------|--------|--------|-----|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | **Total** | **13** |

**Total =  120  Credit Hours (BS Degree)**

# California University of Pennsylvania
## College of Education and Human Services
## Applied Engineering and Technology Department
### Sci & Tech to Technology Education - Bachelor of Science in Education (120 credits)

Name: _____ Entry: _____ ID: _____

Email: _____ Phone: _____

| GENERAL EDUCATION (50-51 Credits): | Crs | Grade |
|---|---|---|
| **Building a Sense of Community - 1 credit** | | |
| EGR 100 Engineering Seminar * | 1 | CCAC |
| **Critical Thinking Skills - 3 credits** | | |
| TED 426 Manufacturing Enterprise* | 3 | Cal U |
| **Communication Skills - 6 credits** | | |
| ENG 101 Composition I * | 3 | CCAC |
| ENG 102 Composition II OR ENG 106 Report Writ* | 3 | CCAC |
| **Public Speaking - 3 credits** | | |
| _____ | 3 | Cal U |
| **Mathematics - 3 credits** | | |
| MAT 114 Math for the Technologies 1 * | 4 | CCAC |
| **Natural Sciences - 7-8 credits**\*\* | | |
| CHM 109 Intro to Chem | 4 | CCAC |
| PHY 113 Technical Physics 1 | 3 | CCAC |
| **Social Sciences - 6 credits** | | |
| PSY 101 Intro to Psychology * | 3 | CCAC |
| PSY 208 Educational Psychology* | 3 | Cal U |
| **Humanities - 3 credits** | | |
| # Any Humanites Elective | 3 | CCAC |
| **Fine Arts - 3 credits** | | |
| _____ | 3 | Cal U |
| **Multicultural Awareness - 3 credits** | | |
| EDU 310 Teaching in a Multicultural Society * | 3 | Cal U |
| **Values - 3 credits** | | |
| TED 210 Design & Appropriate Technology * | 3 | Cal U |
| **Technological Literacy - 6 credits** | | |
| TED 302 Energy & Control Systems * | 3 | Cal U |
| TED 316 Structural Design * | 3 | Cal U |
| **Health & Wellness - 3 credits** | | |
| HPE 314 First Aid & Personal Safety * | 3 | Cal U |

**Writing Component Courses - 2 courses**
TED 450 and TED 451 listed below in the Professional Preparation block are designated Upper-Division Writing Component Courses.

| PROFESSIONAL PREPARATION (28 Credits) | | |
|---|---|---|
| EDU 340 Mainstreaming Exceptional Learners | 3 | Cal U |
| TED 100 Introduction to Technology Education | 3 | Cal U |
| TED 300 Assessment & Instruction in TED | 3 | Cal U |
| TED 450 Teach Technology in Secondary Sch | 3 | Cal U |
| TED 451 Teach Technology in Elementary Sch | 3 | Cal U |
| TED 461 Technology Education Student Teach | 10 | Cal U |
| TED 462 Professional Practices in TED | 3 | Cal U |

| MAJOR (39 Credits) | Crs | Grade |
|---|---|---|
| **Required Courses:** | | |
| ITE 250 Introduction to Automation | 3 | Cal U |
| MAT 116 Math for the Technologies 2 | 4 | CCAC |
| EDD 101 Engineering Drawing I | 3 | CCAC |
| TED 111 Information Systems | 3 | |
| TED 126 Engineering Materials & Product Design | 3 | |
| MET 112 Engineering Materials | 4 | CCAC |
| TED 304 Designs in Bio-Related Technology | 3 | |
| TED 335 Transportation Systems | 3 | |
| TED 346 Digital Communications | 3 | |
| TED 436 Engineering Design & Development | 3 | |
| **Technical/Technological Electives - 9 credits** | | |
| EET 103 Intro to Electronics | 3 | CCAC |
| EDD 120 Intro to CAD | 4 | CCAC |
| SET 110 Project Fabrication | 3 | CCAC |
| **ELECTIVE (3 Credits)** | | |
| SET 105 Technical Computing | 3 | CCAC |

**Approved Technical/Technological Electives:**
COM 141, 142, 241, 242, THE 141, CSC 120 or above
Any CET, EET, GCT, GET, ITE, MMT or TED course not already required by the major, or any other courses approved by the advisor

\*Required courses that must be completed.

\*\*Natural Science: Complete one 4-credit LAB & one LAB or SCIENCE.
LAB (4 crs): BIO 115, BIO 206, CHE 101, PHY 121
SCIENCE (3 crs) EAS 163, ENS 101, PHS 120, PHS 137

Admission to Teacher Education-must be approved at 48-65 credits
2.80 GPA overall
C or better grades in 6 credits of math
C or better grades in 6 credits of composition/English liteature
C or better grade in TED 100
Speech and hearing test
Document Act 34, Act 114 and Act 151 clearances
Pass Praxis exams in Reading, Writing, Math

Recommendation for Student Teaching - required 1 semester prior
Due Jun. 1 for Fall, Nov. 1 for Spring
3.00 GPA overall (at time of application & start of student teaching)
C or better grade in each TED course
TB test
Pass Praxis II TED exam and Fundamental Subjects exam
Current Act 34,114 & 151 clearances,valid thru student teaching
$1 million liability insurance policy

#-If ENG 106 is taken, Humanities must be a literature.

| EXTRA COURSES | | |
|---|---|---|
| ELC 162 Free Electives | 15 | CCAC |

TED BS SP07

# College of Education and Human Services
## Technology Education
### Bachelor of Science in Education Degree (123 credits)
### Eight Semester Course Sequence

**FRESHMAN**   *Semester 1*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| ENG | 101 | English Composition I | 3 |
| MAT | 181 | College Algebra | 3 |
| TED | 105 | Communicating Technical Designs | 3 |
| TED | 100 | Intro to Technology Education | 3 |
| TED | 126 | Engineer. Materials & Prod. Design | 3 |
| UNI | 100 | First Year Seminar | 1 |
| | | Total | 16 |

*Semester 2*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| ENG | 102 | English Composition II | 3 |
| MAT | 191 | College Trigonometry | 3 |
| TED | 111 | Information Systems | 3 |
| TED | 226 | Apps. & Process Engineer. Mats. | 3 |
| TED | 210 | Design & Appropriate Technology | 3 |
| | | Total | 15 |

**SOPHOMORE**   *Semester 3\**

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| ITE | 250 | Intro to Automation | 3 |
| PSY | 100 | General Psychology | 3 |
| | | General Education | 9 |
| | | Total | 15 |

*Semester 4\*\**

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| EDU | 310 | Teaching in Multicultural Society | 3 |
| PSY | 208 | Educational Psychology | 3 |
| TED | 300 | Assessment & Instruction in TED | 3 |
| | | General Education | 7 |
| | | Total | 16 |

*\*Praxis exams should be taken during or immediately following the third semester.*
*\*\*Students should apply for Admission to Teacher Education during the fourth semester.*

**JUNIOR**   *Semester 5*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| EDU | 340 | Mainstreaming Exceptional Learn | 3 |
| TED | 302 | Energy & Control Systems | 3 |
| TED | 316 | Structural Design | 3 |
| TED | 335 | Transportation Systems | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 6*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| HPE | 314 | First Aid & Personal Safety | 3 |
| TED | 304 | Designs in Bio-Related Tech | 3 |
| TED | 346 | Digital Communications | 3 |
| | | General Education | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

**SENIOR**   *Semester 7*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| TED | 426 | Manufacturing Enterprise | 3 |
| TED | 436 | Engineering Design & Develop | 3 |
| TED | 450 | Teach. Tech-Secondary Sch | 3 |
| TED | 500 | Teach. Tech-Elementary Sch | 3 |
| | | Technical/Technological Elective | 3 |
| | | Total | 15 |

*Semester 8*

| Prefix | Number | Course | Cr. |
|---|---|---|---|
| TED | 461 | Technology Education Stud Teach | 10 |
| TED | 462 | Prof Practices in Tech Ed | 3 |
| | | Total | 13 |

Total =   120   Credit Hours (BS Degree)