



**California State Polytechnic University, Pomona  
Degree Curriculum Sheet**

Plan (Major) **CONSTRUCTION ENGINEERING TECHNOLOGY, B.S.**

Catalog Year **2017-2018**

Name \_\_\_\_\_

Subplan/Option \_\_\_\_\_

Minimum Units Required **193**

Student ID \_\_\_\_\_

| <b>Required Core Courses</b>  |
|---|
| ETC 130/130L - Construction Drafting I/Laboratory (1/1)                           |
| ETC 131/131L - Construction Surveying I/Laboratory (2/2) *                        |
| ETC 132/132L - Construction Surveying II/Laboratory (2/2) **                      |
| ETC 140L - Construction Drafting II Laboratory (1)                                |
| ETC 202 - Construction Materials (3)  |
| ETC 202L - Construction Materials Laboratory (1)                                  |
| ETC 204 - Construction Inspection (3)   |
| ETC 230/230L - Construction Drawings and Specifications/Laboratory (2/1)          |
| ETC 250/250L - Advanced Computer Applications and E-Construction/Laboratory (2/1) |
| ETC 270 - Mechanical, Electrical and Plumbing Systems (3)                         |
| ETC 279/279L - Construction Accounting/Laboratory (2/1)                           |
| ETC 304 - Construction Estimating I (4)   |
| ETC 305 - Construction Estimating II (3)  |
| ETC 311 - Structural Theory (4)   |
| ETC 312 - Construction Equipment and Methods (3)                                  |
| ETC 312L - Construction Equipment and Methods Laboratory (1)                      |
| ETC 315 - Timber and Formwork Design (3)  |
| ETC 315L - Timber and Formwork Design Laboratory (1)                              |
| ETC 316 - Steel Design (4)  |
| ETC 317 - Design of Reinforced Concrete (4)                                       |
| ETC 401 - Construction Cost Control (3)   |
| ETC 402 - Contracts and Specifications (3)  |
| ETC 403 - Construction Safety (3)   |
| ETC 405 - Construction Planning and Scheduling (3)                                |
| ETC 405L - Construction Planning and Scheduling Laboratory (1)                    |
| ETC 406 - Construction Organization and Management (3)                            |
| ETC 411/411L - Foundations and Soil Mechanics/Laboratory (3/1)                    |
| ETC 431/431L - Concrete Mix Design/Laboratory (1/1)                               |
| <br>  |
| ETC 461 - Senior Project I (2) and  |
| ETC 462 - Senior Project II (2)   |
| <br>  |
| * CE 134/134L may be substituted for ETC 131/131L.                                |
| ** CE 220/220L may be substituted for ETC 132/132L.                               |
| <b>Total Units 83</b>   |

| <b>Required Support Courses</b>   |
|---|
| The following major support courses should be used to satisfy the indicated GE requirements. If these courses are not used to satisfy GE, the total units to degree may be more than 198 units. |
| CHM 121 - General Chemistry (3) and   |
| CHM 121L - General Chemistry Laboratory (1) (B3)  |
| <br>  |
| ETT 210 - Applied Statics (3) *   |
| ETT 220/220L - Strength of Materials for Engineering Technology/Laboratory (3/1) **   |
| ETT 305 - Engineering Economics Analysis for Engineering Technology (4)   |
| ETT 310/310L - Applied Fluid Mechanics I/Laboratory (3/1)   |
| MAT 130 - Technical Calculus I (4) (B4) ***   |
| MAT 131 - Technical Calculus II (4) ****  |
| <br>  |
| PHY 121 - College Physics (3) (B1) and  |
| PHY 121L - College Physics Laboratory (1) (B3)  |
| <br>  |
| PHY 122 - College Physics (3) and   |
| PHY 122L - College Physics Laboratory (1)   |
| <br>  |
| PHY 123 - College Physics (3) and   |
| PHY 123L - College Physics Laboratory (1)   |
| <br>  |
| * ME 214 may be substituted for ETT 210.  |
| ** ME 218 may be substituted for ETT 220/220L (Lecture only).   |
| *** MAT 114 and MAT 115 may be substituted for MAT 130.   |
| **** MAT 114, MAT 115 and MAT 116 may be substituted for MAT 130 and MAT 131.   |
| <b>Total Units 39</b>   |

| <b>Elective Support Courses</b>  |
|----------------------------------|
| Technical Electives              |
| *Consult with Department Advisor |
| <b>Total Units 12</b>            |

| <b>Interdisciplinary General Education</b>   |
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| See Interdisciplinary General Education Courses on the back of the Curriculum Sheet. |
| <b>Total Units 32</b>  |

| <b>General Education Requirements</b>                                 |
|---|
| <b>Area A Communication &amp; Critical Thinking (12 units)</b>        |
| 1. Oral Communication   |
| 2. Written Communication  |
| 3. Critical Thinking  |
| <b>Area B Mathematics &amp; Natural Sciences (16 units)</b>           |
| 1. Physical Science   |
| 2. Biological Science   |
| 3. Laboratory Activity  |
| 4. Math/Quantitative Reasoning  |
| 5. Science & Technology Synthesis                                     |
| <b>Area C Humanities (16 units)</b>                                   |
| 1. Visual and Performing Arts   |
| 2. Philosophy and Civilization  |
| 3. Literature and Foreign Language                                    |
| 4. Humanities Synthesis   |
| <b>Area D Social Sciences (20 units)</b>                              |
| 1. U.S. History, Constitution, American Ideals                        |
| a. United States History  |
| b. Introduction to American Government                                |
| 2. History, Economics and Political Science                           |
| 3. Sociology, Anthropology, Ethnic & Gender Studies                   |
| 4. Social Science Synthesis   |
| <b>Area E Lifelong Understanding &amp; Self Development (4 units)</b> |
| <b>Total Units 68</b>   |

|   |          |
|---|----------|
| <b>American Institutions</b><br>Courses that satisfy this requirement may also satisfy GE Area D1 | <b>8</b> |
|---|----------|

|  |          |
|--|----------|
| <b>American Cultural Perspectives Requirement</b><br>Refer to the University Catalog General Education Program section for a list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements. | <b>4</b> |
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All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.

### **Interdisciplinary General Education**

An alternate pattern for partial fulfillment of GE Areas A, C, D, and E available for students is the Interdisciplinary General Education (IGE) program. Students should see an advisor for specific GE coursework required by their major. Students must be exempt from or score at least 147 on the EPT to qualify for IGE. Please refer to the University Catalog General Education Program section for additional information.

#### **How IGE fulfills General Education Requirements:**

| <b>Year</b> | <b>Completion of IGE Courses</b> | <b>Satisfies GE Requirements</b>       |
|-------------|----------------------------------|--|
| Freshman    | IGE 120, IGE 121, IGE 122        | A2 as well as any 2 courses from C1-C3 |
| Sophomore   | IGE 220, IGE 221, IGE 222        | D1 (8 units) and D3                    |
| Junior      | IGE 223, IGE 224                 | D2 and Area E                          |