## Table 5-1 Curriculum of Civil Engineering Technology Program

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course (Department, Number, Title) List all courses in the program by term starting with first term of the first year and ending with the last term of the final year. | Indicate Whether Course is Required, Elective, or a Selective Elective by an R, an E or an SE2 | *Curricular Area (Credit Hours)* | Last Two Terms the Course was Offered: Year and, Semester, or Quarter  | Average Section Enrollment for the Last Two Terms the Course was Offered1 |
| Math and Physical/Natural Sciences | Discipline Specific Content | General Education/General Studies | Other |
| Freshman Year (1st Year) - Semester 1 (F) |   |   |   |   |   |   |   |
| CIE 111 | Technical drawing & CAD | R |   | 3 |   |   | FA-2021-2022FA-2020-2021 | 4853 |
| COM 101 | Professional Speaking | R |   |   | 2 |   | FA-2021-2022FA-2020-2021 | 4350 |
| DTE-CIE 102 | Career Orientation 1 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4253 |
| MTH 103 | Advanced Mathematics A1 | R | 3 |   |   |   | FA-2021-2022FA-2020-2021 | 4050 |
| PHI 100 | Critical Thinking (including Scientific Research Methodology) | R |  |   | 2 |   | FA-2021-2022FA-2020-2021 | 4855 |
| POS 351 | Scientific Socialism | R |   |   | 2 |   | FA-2021-2022FA-2020-2021 | 4456 |
| Freshman Year (1st Year) - Semester 2 (S) |   |   |   |   |   |   |   |
| CIE 211 | Advanced CAD in Civil Engineering | R |   | 2 |   |   | SP-2021-2022SP-2020-2021 | 4254 |
| CS 201 | Basic Software Applications | R |  |   | 3 |   | SP -2021-2022SP -2020-2021 | 4942 |
| DTE-CIE 152 | Career Orientation 2 | R |   |   | 2 |   | SP -2021-2022SP -2020-2021 | 4343 |
| ENG 116 | Reading - Level 1 | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4043 |
| ENG 117 | Writing - Level 1 | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4840 |
| MEC 201 | Theoretical Mechanic 1 | R |   | 2 |   |   |  SP -2021-2022SP -2020-2021 | 4643 |
| MTH 104 | Advanced Mathematics A2 | R | 3 |   |   |   | SP -2021-2022SP -2020-2021 | 4742 |
| PHY 101 | Introduction to Physics 1 | R | 3 |   |   |   | SP -2021-2022SP -2020-2021 | 5053 |
| Sophomore Year (2nd Year) - Semester 1 (F) |   |   |   |   |   |   |   |
| CIE 248 | Cognitive Internship | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4845 |
| CIE 260 | Geodesy | R |   | 3 |   |   | FA-2021-2022FA-2020-2021 | 4343 |
| CIE 296 | CDIO Project | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4253 |
| COM 102 | Professional Writing | R |   |   | 2 |   | FA-2021-2022FA-2020-2021 | 5246 |
| ENG 118 | Listening - Level 1 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 5042 |
| ENG 119 | Speaking - Level 1 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4553 |
| ENG 166 | Reading - Level 2 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 5253 |
| MEC 211 | Material Strength 1 | R |   | 3 |   |   | FA-2021-2022FA-2020-2021 | 4845 |
| PHI 150 | Marxism-Leninism | R |  |   | 3 |   | FA-2021-2022FA-2020-2021 | 4354 |
| Sophomore Year (2nd Year) - Semester 2 (S) | R |   |   |   |   |   |   |
| ARC 392 | Architectural Design for Building | R |   | 3 |   |   | SP -2021-2022SP -2020-2021 | 4953 |
| CIE 321 | Building Materials | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4353 |
| CIE 322 | Experimental Testing of Building Materials | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 4253 |
| GLY 291 | Geology | R |   | 3 |   |   | SP -2021-2022SP -2020-2021 | 4853 |
| HYD 201 | Hydraulics | R |   | 3 |   |   | SP -2021-2022SP -2020-2021 | 5348 |
| MEC 212 | Material Strength 2 | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4845 |
| MEC 306 | Structural Mechanics 1 (including SAP) | R |   | 4 |   |   | SP -2021-2022SP -2020-2021 | 4445 |
| Junior Year (3rd Year) - Semester 1 (F) | R |   |   |   |   |   |   |
| *Selected Elective course, 2 out of 5 below:* |  |  |  |  |  |  |  |
| AHI 391 | History of Vietnamese and East Asian Architecture | SE |  |  | 2 |  | FA-2021-2022FA-2020-2021 | 4342 |
| AHI 392 | History of Western Architecture |   |  | 2 |   | FA-2021-2022FA-2020-2021 | 4342 |
| EVR 205 | Environmental Health |  |  | 2 |  | FA-2021-2022FA-2020-2021 | 4842 |
| HIS 221 | World Civilizations 1 |  |  | 2 |  | FA-2021-2022FA-2020-2021 | 4342 |
| HIS 222 | World Civilizations 2 |  |  | 2 |  | FA-2021-2022FA-2020-2021 | 4842 |
| CIE 376 | Reinforced Concrete Structures | R |   | 3 |   |   | FA-2021-2022FA-2020-2021 | 4253 |
| CIE 377 | Reinforced Concrete Structures Project | R |   | 1 |   |   | FA-2021-2022FA-2020-2021 | 4353 |
| CIE 378 | Steel Structures | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 4855 |
| ENG 167 | Writing - Level 2 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4457 |
| ENG 168 | Listening - Level 2 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 4553 |
| MEC 307 | Structural Mechanics 2 | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 4841 |
| MEC 316 | Soil Mechanics | R |   | 3 |   |   | FA-2021-2022FA-2020-2021 | 4843 |
| POS 151 | Political Economics of Marxism and Leninism | R |  |   | 2 |   | FA-2021-2022FA-2020-2021 | 4441 |
| Junior Year (3rd Year) - Semester 2 (S) | R |   |   |   |   |   |   |
| CIE 323 | Foundation & Footing | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4241 |
| CIE 324 | Foundation & Footing Project | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 4540 |
| CIE 396 | CDIO Project | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4651 |
| CIE 403 | Construction Techniques | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4641 |
| CIE 426 | Reinforced Concrete Building Structure | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 5235 |
| CIE 427 | Reinforced Concrete Building Structure Project | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 3441 |
| ENG 169 | Speaking - Level 2 | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 3840 |
| ENG 216 | Reading - Level 3 | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4143 |
| FST 342 | Computer Science in Construction | R |  |   | 3 |   | SP -2021-2022SP -2020-2021 | 4543 |
| HYD 341 | Water supply and drainage | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 3432 |
| *Selected Elective course, 1 out of 3 below:* |  |  |  |  |  |  |  |
| DTE 201 | Business Ethics | SE |   |   | 2 |   | SP -2021-2022SP -2020-2021 | 3235 |
| LAW 201 | Basic Principles of Law |  |  | 2 |  | SP -2021-2022SP -2020-2021 | 3335 |
| MED 268 | Medical Ethics |  |  | 2 |  | SP -2021-2022SP -2020-2021 | 2832 |
| Senior Year (4th Year) - Semester 1 (F) | R |   |   |   |   |  |   |
| CIE 371 | Advanced Building Materials | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3533 |
| CIE 404 | Construction Management | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3833 |
| CIE 428 | Steel Building Structure | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3834 |
| CIE 429 | Steel Building Structure Project | R |   | 1 |   |   | FA-2021-2022FA-2020-2021 | 3532 |
| CIE 450 | Occupational Safety and Health | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3132 |
| CIE 475 | High-rise Building Structure | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3035 |
| CIE 477 | Prestressed Reinforced Concrete Structure | E |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3631 |
| CIE 486 | Integrated Concrete Construction Technical Project | R |   | 1 |   |   | FA-2021-2022FA-2020-2021 | 3636 |
| ENG 217 | Writing - Level 3 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 3539 |
| ENG 218 | Listening - Level 3 | R |   |   | 1 |   | FA-2021-2022FA-2020-2021 | 3139 |
| ENG 330 | Technical English for Building and Construction | R |   |   | 2 |   | FA-2021-2022FA-2020-2021 | 4843 |
| Senior Year (4th Year) - Semester 2 (S) | R |   |   |   |   |   |   |
| CIE 431 | Assembly Techniques for Civil & Industrial Building | R |   | 3 |   |   | SP -2021-2022SP -2020-2021 | 4843 |
| CIE 432 | Assembly Techniques for Civil & Industrial Building Projects | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 4845 |
| CIE 433 | Civil and Industrial Construction Management | R |   | 3 |   |   | SP -2021-2022SP -2020-2021 | 4447 |
| CIE 434 | Civil and Industrial Construction Management Project | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 4348 |
| CIE 435 | Construction Machinery | R |   | 1 |   |   | SP -2021-2022SP -2020-2021 | 4843 |
| CIE 446 | CDIO Project | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4835 |
| CIE 478 | Advanced Steel Structures | E |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4846 |
| ENG 219 | Speaking - Level 3 | R |   |   | 1 |   | SP -2021-2022SP -2020-2021 | 4837 |
| FIN 442 | Construction Estimation | R |   | 2 |   |   | SP -2021-2022SP -2020-2021 | 4635 |
| HIS 362 | History of the Communist Party of Vietnam | R |   |   | 2 |   | SP -2021-2022SP -2020-2021 | 3940 |
| Senior Year (5th Year) - Semester 1 (F) | R |   |   |   |   |  |  |
| CIE 441 | Construction Project Management | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 3836 |
| CIE 462 | Geodetic Surveying Practice | R |   | 1 |   |   | FA-2021-2022FA-2020-2021 | 4343 |
| CIE 483 | Specialized Construction Techniques | E |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 4345 |
| CIE 497 | Graduation Project | R |   | 8 |   |   | FA-2021-2022FA-2020-2021 | 3938 |
| CIE 498 | Internship for Graduation | R |   | 2 |   |   | FA-2021-2022FA-2020-2021 | 4136 |
| POS 361 | Ho Chi Minh's Ideology | R |   |   | 2 |   | FA-2021-2022FA-2020-2021 | 3834 |
| OVERALL TOTAL CREDIT HOURS FOR THE DEGREE  |   | **9** | **95** | **49** | **0** |  |  |
| PERCENT OF TOTAL | 6 | 62 | 32 | 0.0 |  |  |

1. For courses that include multiple elements (lecture, laboratory, recitation, etc.), indicate the average enrollment in each element.
2. Required courses are required of all students in the program, elective courses are optional for students, and selected electives are courses where students must take one or more courses from a specified group.
3. General Education or General Studies, are required core courses outside of the major (e.g., art, history, social sciences, etc.)