THE CITY COLLEGE – SCHOOL OF ENGINEERING
Civil Engineering Curriculum
Fall 2019 – Spring 2020

| Math 21000 | Calculus I 
Pre: Math 19500 (C min.) | 4 cr. |
| Chem 10301 | General Chemistry I 
Pre: Math 19500 (C min.) | 4 cr. |
| Eng 11000 | Freshman Composition | 3 cr. |
| Engr 10100 | Engineering Design 
Pre/Co: Math 19500 (C min.) | 1 cr. |
| Csc 10200 | Introduction to Computing 
Pre: Math 19500 (C min.) or Pre/Co: Math 21000 (C min.) | 3 cr. |
| Liberal Arts | 4 cr. |

| Math 21200 | Calculus II 
Pre: Math 20100 (C min.) | 4 cr. |
| Math 21300 | Calculus III 
Pre: Math 21200 (C min.) | 4 cr. |
| Math 39100 | Differential Equations 
Pre: Math 21300 | 3 cr. |

| Math 34600 | Linear Algebra 
Pre: Math 21300 | 3 cr. |
| Math 39200 | Linear Algebra/Vector Ana 
Pre: Math 21300 | 3 cr. |

| Math 35000 | Fluid Mechanics 
Co: CE 10100 | 3 cr. |
| Math 36500 | Hydraulic Engr. 
Pre for CE majors: CE 35000 (C min.) 
Pre for ESE majors: CE 35600 or CHD 34100 | 3 cr. |
| Math 31500 | Computational Methods in CE 
Pre: Math 39100 (C min.) 
& CE 26400 & CE 23100, Co: Math 10100 
& Math 34600 (or Math 39200) | 3 cr. |
| Math 32600 | Transportation Planning 
Pre/Co: CE 31500 | 3 cr. |
| Math 37200 | Environmental Impact Assessment 
Pre for CE majors: CE 26400, Chem 10401 (C min.) 
& CE 55000 or CE 35600 or CHD 34100 | 3 cr. |
| Math 43500 | Dynamics of CE Systems 
Pre: CE 33200, Math 34600, Math 39200 | 3 cr. |

| Math 44100 | Reinforced Concrete 
Pre: CE 26400 & CE 34000 | 3 cr. |
| Math 32700 | Transportation Systems Engr. 
Pre: CE 26400, CE 33200, CE 29090, (Spring Only) | 3 cr. |
| Math 47400 | Environmental Engineering 
Pre: CE 36500 & CE 37200 | 3 cr. |
| Math 31600 | CE Decision & Systems Analysis 
Pre: CE 26400, CE 31500 & Math 34600 (or Math 39200) | 3 cr. |
| Math 44000 | Environmental Science Elective 
Pre: CE 33200, Math 34600, Math 39200 | 3 cr. |

| Chemistry 10501 | General Chemistry II 
Pre: Chem 10501 (C min.) | 4 cr. |
| Physics 20700 | General Physics I 
Pre/Co: Math 21200 | 4 cr. |
| Physics 20800 | General Physics II 
Pre/Co: Phys 20700 & Math 21300 | 4 cr. |
| CE 29090 | Structural and Site Plans 
Pre/Co: Csc 10200 | 3 cr. |
| CE 26400 | CE Data Analysis 
Pre: Csc 10200 
& Pre/Co: Math 21300 & Eng 10107 | 3 cr. |
| Eng 21007 | Writing for Engineering 
Pre: Eng 11000 or FIQRS | 3 cr. |
| Science Elective | 3 cr. |
| EAS 32800 | Global Environ. Haz 
Co: Bio 10100 
Bio Foundats. | 3 - 4 cr. |

| Chemical 10401 | General Chemistry II 
Pre: Chem 10301, (C min.) | 4 cr. |
| Physics 20700 | General Physics I 
Pre/Co: Math 21200 | 4 cr. |
| Physics 20800 | General Physics II 
Pre/Co: Phys 20700 & Math 21300 | 4 cr. |
| CE 29090 | Structural and Site Plans 
Pre/Co: Csc 10200 | 3 cr. |
| CE 26400 | CE Data Analysis 
Pre: Csc 10200 
& Pre/Co: Math 21300 & Eng 10107 | 3 cr. |
| Eng 21007 | Writing for Engineering 
Pre: Eng 11000 or FIQRS | 3 cr. |
| Engineering Science Elective | 3 cr. |
| Engr 23000 | Thermodynamics 
Pre: Chem 10301 (C min.) 
& CE 26400, Math 21300 (C min) | 3 cr. |
| Engr 22000 | Electrical Circuits 
Pre/Co: Phys 20800 | 3 cr. |

1. The latest version of the curriculum sheet supersedes any curriculum and pre/co-requisite information in the Undergraduate Bulletin or online.
2. “C” Passing Grade Requirement: Courses in shaded area require a minimum passing grade of “C”.
3. Skills tests: Certain students may be required to pass CUNY Assessment Tests in one or more subjects within 1 or 2 years of admission.
4. Liberal Arts electives: CE students must take six approved courses, of which at least two must have course numbers of 20000 or higher. Four of the courses should satisfy Flexible Core (Pathways) liberal arts requirements in the Creative Expression (CE), World Cultures & Global Issues (WCGI), Individual & Society (IS), and U.S. Experience (US) areas. Prior courses in these four areas from other colleges can satisfy the electives. The remaining two courses must be chosen from the list on the Grove School of Engineering web site at ccny.cuny.edu/engineering/gen-ed .

See ccny.cuny.edu/engineering/pathways for details and the Pathways course lists. A prior degree may remove the requirement of all six courses.
5. Other Graduation Requirements: Apply for graduation during registration for the last semester. Minimum GPA of 2.00. Minimum QPA of zero. Residency Requirement: 33 credits of 30000-level or higher Civil Engineering courses taken at CCNY.
6. Transfer students with credit for Math 20200 are considered too advanced for Engr 10100. They may satisfy this 1-credit requirement by either taking CE 51001 (Independent Study with a design component) or CE 31000 (CE Policy and Design, Co req: CE 32600 and CE 37200) See note above.
7. Program Changes: Substitution of other courses for required courses must be approved by the Chair of the Civil Engineering Department (ST-136), and the Associate Dean of the Office of Undergraduate Affairs (ST-209).
8. All elective courses are on rotation.

Total Credits: 136 – 137.