

Civil Engineering at University of Canterbury

Approved 20 June 2018 by Prof. Stammer

| Semester 1 | Course | Cr Hrs |
|---------------------|---------------------------|--------|
| CHEM 1601, 1601L | General Chemistry | 4 |
| ES 1401, 1402, 1403 | Intro to Engineering | 3 |
| MATH 1300 | Acc Single-Var Calculus I | 4 |
| | LAC | 3 |
| | Vanderbilt Visions | 0 |
| | | |
| | total hours | 14 |

| Semester 3 | Course | Cr Hrs |
|------------------|----------------------------------|--------|
| CE 2101 | Civil & Environmental Eng. Info. | 3 |
| CL 2101 | Systems | 3 |
| CE 2120 | Sustainable Design in Civil Eng. | 3 |
| CE 2200 | Statics | 3 |
| MATH 2300 | Multivariable Calculus | 3 |
| PHYS 1602, 1602L | General Physics II & Lab | 4 |
| | | |
| | | |
| | total hours | 16 |

| Semester 5 | at the University of Canterbury | Cr Hrs |
|----------------------|---------------------------------|--------|
| CE 3200 (VU | Standard Analysis | 2 |
| distance) | Structural Analysis | 3 |
| ENCN 242 (2 hrs CE | Fluid Machanies & Hudralagu | 4 |
| 3700; 2 hrs CE 2052) | Fluid Mechanics & Hydrology | 4 |
| | CE Program Elective | 3 |
| | Open Elective | 3 |
| | LAC | 3 |
| | | |
| | | |
| | total hours | 16 |

| Semester 7 | Course | Cr Hrs |
|------------|-----------------------------------|--------|
| CE 3700* | Fluid Mechanics | 1 |
| CE 3700L** | Fluid Mechanics Lab | 1 |
| CE 4400 | Construction Project Mgmt | 3 |
| CE 4950 | Civil Eng. Design I | 1 |
| CE 4959** | Sr. Engineering Design Seminar | 1 |
| MSE 2205 | Strength & Structure of Materials | 1 |
| | CE Design Elective | 3 |
| | CE Program Elective | 3 |
| | | |
| | total hours | 14 |

| Semester 2 | Course | Cr Hrs |
|----------------------|----------------------------|--------|
| CS 1101 (or CS 1103) | Prog & Prob Solving | 3 |
| MATH 1301 | Acc Single-Var Calculus II | 4 |
| PHYS 1601, 1601L | General Physics I | 4 |
| MSE 1500, 1500L | Materials Science I | 4 |
| | | |
| | | |
| | total hours | 15 |

| Semester 4 | Course | Cr Hrs |
|----------------------|---|--------|
| CE 2205 | Mechanics of Materials | 3 |
| CE 3501 | Transportation Systems Engineering | 3 |
| ME 2190 | Dynamics | 3 |
| ME 2220 or ChBE 2200 | Thermodynamics | 3 |
| MATH 2420 | Methods of Ordinary Differential Equations | 3 |
| | LAC | 3 |
| | | |
| | total hours | 18 |

| Semester 6 | Course | Cr Hrs |
|------------|--------------------------------------|--------|
| CE 3100W | Civil & Environmental Eng. Lab. | 2 |
| CE 3205 | Structural Design | 3 |
| CE 3300 | Risk, Reliability, & Resilience Eng. | 3 |
| CE 3705 | Water Resources Eng. | 3 |
| ENGM 2160 | Engineering Economy | 3 |
| | LAC | 3 |
| | | |
| | total hours | 17 |

| Semester 8 | Course | Cr Hrs |
|------------|-----------------------|--------|
| CE 4951 | Civil Eng. Design II | 2 |
| | CE Design Elective | 3 |
| | Technical Elective*** | 1 |
| | Open Elective*** | 3 |
| | LAC | 3 |
| | LAC Elective | 3 |
| | | |
| | | |
| | | |
| | total hours | 15 |

total hours =

125

This curriculum plan is a guide but NOT authoritative. The Undergraduate Catalog is the authoritative document regarding degree requirements.

Students considering studying abroad should consult the catalog and discuss their plans with their academic advisers.

^{*}Special regisration of one credit hour of CE 3700 Fluid Mechanics to complement content abroad.

^{**}CEE Faculty will work with you to facilitate simultaneous enrollment in these courses.

^{***}A 3 credit hour technical elective is recommended; extra technical elective hours count as open elective hours.