

(For students admitted in 2012-13 under the 3-year degree)

## Curriculum for BEng in Civil and Environmental Engineering

### General Requirements

Students are required to complete the following general requirements for graduation in addition to program specific requirements:

*Required Courses in English Communication*

*Common Core Requirements*

*Required Course in Physical Education*

For details please refer to the section "General Requirements" on this website.

### Program Specific Requirements

Credit(s)

#### Required courses

	CIVL 1010	Academic and Professional Development I	0
	CIVL 1020	Surveying and Surveying Camp	2
	CIVL 1030	Civil Engineering Drawing	1
	CIVL 1110	History and Practice of Civil Engineering	1
	CIVL 2010	Academic and Professional Development II	0
(2)	CIVL 2020	Industrial Training	0
	CIVL 2110	Statics	3
	CIVL 2120	Mechanics of Materials	3
	CIVL 2160	Modeling Systems with Uncertainties	3
	CIVL 2410	Environmental Assessment and Management	3
	CIVL 2420	Water and Wastewater Engineering	3
	CIVL 2510	Fluid Mechanics	3
	CIVL 2810	Construction Materials	3
	CIVL 3010	Academic and Professional Development III	0
(1)	CIVL 3020	Internship Training	0
	CIVL 3220	Construction Engineering I	2
	CIVL 3310	Structural Analysis	3
	CIVL 3320	Reinforced Concrete Design	3
	CIVL 3520	Hydraulics	3
	CIVL 3530	Hydrology	3
	CIVL 3610	Traffic and Transportation Engineering	3
	CIVL 3700	Geology for Civil Engineers	3
	CIVL 3720	Soil Mechanics	3
	CIVL 4460	Process Design of Environmental Engineering Facilities	3
	CIVL 4470	Air Quality Control and Management	3
	CIVL 4950	Integrated Civil Engineering Design Project	2
	CIVL 4990	Civil Engineering Project	6
	COMP 1022Q	Introduction to Computing with Excel VBA	3
	IELM 3020	Introduction to Operations Research	2

	IELM 4110	Engineers in Society	1
	MATH 2011	Introduction to Multivariable Calculus	3
(3)	MATH 2350	Applied Linear Algebra and Differential Equations	4
	MATH 3311	Introduction to Numerical Methods	2

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(4)	ENGG	Engineering Elective	3	8
	SB&M	Business and Management Elective	1	2

**Notes:**

- (1) Students are required to complete and pass the internship training in the summer of their second year of study.
- (2) Students are required to complete and pass a prescribed training program within the normal length of study. Details of the program, its requirements and schedule will be announced on the website of the Industrial Training Center (<http://www.ust.hk/itc>) or website of the department in the first year Fall term. Training normally takes place in the Winter and Summer terms starting from the first year of study.
- (3) Students admitted through the School-based Admission Scheme are not required to take MATH 2350. They should take MATH 2111 and MATH 2351 in their first term.
- (4) At least two engineering elective courses (6 credits) should be selected from CIVL 4430, CIVL 4480 (prior to 2009-10), CIVL 4520, CIVL 5410, CIVL 5420, CIVL 5430, CIVL 5450, CIVL 5460, CIVL 5470, CIVL 5480, CENG 4710, CENG 4720. For the remaining credits, students may take any 4000-level or above courses offered by the Civil and Environmental Engineering Department or any 3000-level or above courses offered by other engineering departments. ENGG 4950 can be used to count toward the ENGG elective requirement.

A minimum of 104 credits is required for the BEng program in Civil and Environmental Engineering.