

The Hong Kong University of Science and Technology

CIVL 1160 Course Syllabus

Course Title: Civil Engineering and Modern Society

Course Code: CIVL 1160

No. of Credits: 3

Pre-/co-requisites: None

Instructor: Thomas W. C. Hu

Email: thomashu@ust.hk

Course Description

Lectures will meet twice a week; selected tutorials will be used for discussing project-specific materials and conducting midterms. Lecture topics include:

1. Introduction to main areas of civil engineering
2. Types of forces and pertinent structural principles
3. Main types of construction materials and technology
4. Foundation systems, slopes and retaining walls
5. High-rise buildings and basic structural forms
6. Bridges of various types and simplified analysis methods
7. Deterioration and maintenance of concrete structures
8. Urban planning and land use, development and redevelopment
9. Housing issues in Hong Kong: social-economic impact and possible solutions
10. Transportation and environmental protection issues
11. Water supply systems
12. Simple statistical tools and educational technology pertinent to civil engineering studies

Textbook: None

Assessments:

Assessment Task	Contribution to Overall Course grade (%)
Two Mid-Terms	20%x2 = 40%
Group Project	10%
Final examination	50%

Required Texts and Materials

Lecture notes to be posted on canvas