

Spring 2024

CIVL4430 Environmental Impact Assessment

Instructor: Prof. Xiangru ZHANG

Room: 4601 Phone: 2358-8479 Email: xiangru@ust.hk

Course Description:

Relationship of environmental impact assessment (EIA) and environmental policy act; Planning and management of EIA; Methods for impact identification; Description of environmental setting; Prediction and assessment of air impact, water impact, noise impact, biological impact, and visual impact; Environmental monitoring; Preparation of EIA Reports according to the EIA Ordinance by the Hong Kong Environmental Protection Department; Case studies of EIA for several types of civil engineering projects.

Course Objectives:

Environmental impact assessment (EIA) has been mandated by legislation in over 100 countries or regions. The objectives of this course are to encourage consideration of the environment in the planning and decision-making process so that adverse impacts on the environment can be avoided, minimized or mitigated; to introduce the conceptual framework of EIA planning and management, the methods for impact identification, and the contents of environmental setting description; to illustrate in detail the quantitative/qualitative methods for prediction, assessment and mitigation of air impact, water impact, noise impact, biological impact, and visual impact; and to provide guidance for preparing EIA reports according to the EIA Ordinance by the Hong Kong Environmental Protection Department.

Reference book:

Environmental Impact Assessment, 2nd Edition
by Larry W. Canter
ISBN: 0-07-114103-0
McGraw-Hill, Inc.

Mark Allocation:

Attendance	5%
Homework	15%
Exam	80%

Course Outline:

Week1: EIA and environmental policy act;
Week2: Planning and management of EIA;
Week3: Methods for impact identification; Description of environmental setting;
Week4-6: Prediction and assessment of air impact;

Week7-8: Prediction and assessment of water impact;
Week9: Prediction and assessment of noise impact;
Week10: Prediction and assessment of biological impact;
Week11: Prediction and assessment of visual impact;
Week12-13: Environmental monitoring; Preparation of EIA reports according to the EIA Ordinance by the Hong Kong EPD; Case studies of EIA for several types of civil engineering projects;
Week14-15: Help session.

Prerequisite(s): CIVL 1100 or CIVL 2410

Exclusion(s): CENG 4720