SPD5152 Industry-Based Student Project

http://ibse.hk/SPD5152/

Proposed Topics (2016-2017)

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Title:	Feasibility study of combined heat and power (CHP) plant in hotel / sport complex / data centre
Description:	To reduce the carbon emission, the CHP plant is recommended in many green organizations and government. Currently, in Hong Kong, the CHP plants are only installed in sewage treatment plant and hospital. This study is aimed to study the feasibility of installing such plant in different types of building. The areas of focus should cover the legal, CO_2 emission and cost effeteness. Student with background on energy simulation would be in advantage.

Title:	Development of database for building energy simulation prototypes used in urban planning
Description:	Traditionally, urban planning is under a top-down approach. However, this type of strategy cannot be adequately reflecting the impacts of building design on the advancement of building services equipment. Recently a bottom-up approach is proposed. This study will focus on studying the development of prototype buildings in the simulation study. In this study, basic understanding in building energy simulation would be preferred.

Title:	Post occupant evaluation (POE) on the daylighting environment
Description:	Office natural light are limited in most of the buildings. However, it is closely related to the acceptance, willingness and health for building occupants. In this study, the students are required to design a questionnaire to record the occupant's satisfaction and their health record to analysis the relationship among them.