

SBS5498 Final Year Project 2 (Applied Research Project)

<http://ibse.hk/SBS5498/>

Suggested Topics from Supervisors (2018-2019)

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Title:	Study on the indoor environment in multi-storey car parks
Description:	To use land effectively, multi-storey car parks are popular in Hong Kong. This study will investigate the indoor environment of multi-storey car parks by on-site measurement and survey so as to promote some guidelines to improve the environment of the car parks.

Title:	Study on the residential environment of the public housing in Hong Kong
Description:	At present, around 1/3 of people are living in the public housing in Hong Kong. Due to the high population density, the residential environment is sometimes not satisfying. This study will investigate the indoor and outdoor environment of the public housing by on-site measurement and survey so as to promote some guidelines to improve the residential environment of the public housing.

Title:	Study on the environment in public transport interchange in Hong Kong
Description:	Hong Kong is a busy city, and it is usually crowd in public transport interchange, especially during the rush hour. This study will investigate the environment of the public transport interchange by on-site measurement and survey so as to promote some guidelines to improve the environment of the public transport interchange.

Title:	Study on potential power generation with PV panels on THEi building
Description:	Although Hong Kong is short of fossil fuels, it possesses pretty good renewable energy resources, such as solar energy. The annual solar irradiation in Hong Kong is about 1400 kWh/m ² , which is higher than the average solar energy resource in Japan and is much better than that in Germany. Take THEi building as an example, the study aims to

	investigate the potential power generation with PV panels and analyze the payback time with the installation of PV panels.
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Title:	Study on potential power generation from fresh water supply system in high-rise residential buildings
Description:	Hydropower is an extremely flexible technology for power generation. The water supply system in high-rise residential buildings has a great potential to generate power with the use of surplus pressure. Therefore, the study aims to obtain the power generation potential in a typical residential building and analyze the cost benefit as well. Besides, a suitable turbine needs to be selected through investigation.