SUBJECT DESCRIPTION FORM

Subject title: Research and Consultancy Techniques for Construction and Real Estate

Subject code: BRE585

Credit value: 3

Responsible staff and department: Prof. Geoffrey Shen and Prof. Heng Li (BRE)

Pre-requisite (Subject title and code no, if any): Nil

Recommended background knowledge:

Students are expected to possess knowledge of the construction and real estate industries such as would be acquired through study on a degree in a built-environment discipline.

Mutual exclusions:

Research and Consultancy Techniques for Construction and Real Estate (BRE501)

Learning approach:

• Lectures and seminars
• Independent study
  • Assignments
  • Self-study

Assessment:

Continuous assessment 100%

Objectives:

This subject aims to meet the needs of construction professionals who wish to contribute to the identification of business and project problems, to select appropriate techniques for their solutions and to present or communicate their findings effectively. It is designed to be of specific interest to those working on research or consultancy projects.

Keyword syllabus:

Problem Definition Techniques: Structured and unstructured problems; soft and hard systems definition; concept formulation and mapping.

Research Methods: Types of research problems and appropriate methodologies; literature search techniques using bibliographic databases; evaluation, analysis and synthesis of literature for review of past research findings; data collection for qualitative and quantitative analysis; statistical analysis and significance/validity tests; validity and reliability issues in research design; peer review and refereeing in the research process.
Communication and Presentation Techniques: Preparation of research proposals; preparation of consultancy proposals; progress reports; planning of thesis and dissertation writing; lecture and seminar presentations; expert witness presentations in the Hong Kong legal system; professional obligations and liabilities in expert witness situations.

Case Studies: Preparation of a research/project proposal; Review of work in the project topic area; Expert evidence and preparation of reports on construction/property problems; Presentations for winning consultancy contracts.

Indicative reading list and references: