# REGULATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN SURVEYING (BSc[Surv])

These regulations are applicable to candidates admitted under the 4-year '2012 curriculum' to the first year of the Bachelor of Science in Surveying in 2012-13 and 2013-14.

(See also General Regulations and Regulations for First Degree Curricula)

### Admission to the degree of Bachelor of Science in Surveying

**Ar281** To be eligible for admission to the degree of Bachelor of Science in Surveying, a candidate shall:

- (a) comply with the General Regulations;
- (b) comply with the Regulations for First Degree Curricula; and
- (c) satisfy all the requirements of the curriculum in accordance with these regulations and the syllabuses.

### Period of study

**Ar282** The curriculum for the Bachelor of Science in Surveying shall normally require eight semesters of full-time study, extending over not fewer than four academic years, and shall include any assessment to be held during and/or at the end of each semester. Candidates shall not in any case be permitted to extend their studies beyond the maximum period of registration of six academic years.

### **Selection of courses**

**Ar283** Candidates shall select their courses in accordance with these regulations and the guidelines as specified in the syllabuses before the beginning of each semester. Such selection shall be subject to the approval of the Head of the Department of Real Estate and Construction.

**Ar284** Changes to the selection of courses may be made during the first two weeks of each semester, subject to the approval of the Head of the Department of Real Estate and Construction, and such changes shall not be reflected in the transcript. Requests for changes after the first two weeks of a semester shall not be considered, and a candidate withdrawing from any course without permission shall be given an F grade.

**Ar285** Candidates shall not be permitted to select other courses for which a failed course forms a prerequisite unless permission is given by the department for the candidates to be reassessed in the failed course and for them to satisfy the examiners in this.

### **Curriculum requirements**

**Ar286** To complete the curriculum a candidate shall:

- (a) satisfy the requirements prescribed in UG5 of the Regulations for First Degree Curricula;
- (b) enrol in courses of a total of 240 credits, comprising a professional core of 180 credits (including 150 credits of core courses, 24 credits of Faculty Foundation courses and 6 credits of a disciplinary elective), 12 credits in English language enhancement, 6 credits in Chinese language enhancement, 36 credits of Common Core courses and 6 credits of an elective course:

- (c) follow instruction in the courses as prescribed under these regulations and satisfactorily complete all coursework requirements set as tests or as parts of any assessment and practical work to be undertaken as an integral part of the BSc(Surv) curriculum; and
- (d) satisfy the examiners in the assessment of the courses in the manner specified in the regulations and syllabuses.

### Ar287 Progression in curriculum

- (a) Candidates shall normally be required to take not fewer than 24 credits nor more than 30 credits in any one semester (except the summer semester) unless otherwise permitted or required by the Board of the Faculty, or except in the last semester of study when candidates may be required to take fewer than 24 credits to satisfy the outstanding curriculum requirements.
- (b) Candidates may, of their own volition, take additional credits not exceeding 6 credits in each semester, accumulating up to a maximum of 72 credits in one academic year. With the special permission of the Board of the Faculty, candidates may exceed the annual study load of 72 credits in a given academic year provided that the total number of credits taken does not exceed 288 credits, save as provided for under Ar287(c).
- (c) Where candidates are required to make up for failed credits, the Board of the Faculty may give permission for candidates to exceed the annual study load of 72 credits provided that the total number of credits taken does not exceed 432 credits.
- (d) Candidates may, with the approval of the Board of the Faculty, transfer credits for courses completed at other institutions at any time during their candidature. The number of transferred credits may be recorded in the transcript of the candidate, but the results of courses completed at other institutions shall not be included in the calculation of the GPA. The number of credits to be transferred shall not exceed half of the total credits normally required under the degree curricula of the candidates during their candidature at the University.
- (e) Unless otherwise permitted by the Board of the Faculty, candidates shall be recommended for discontinuation of their studies if they have:
  - (i) failed to complete successfully 36 or more credits in two consecutive semesters (not including the summer semester), except where they are not required to take such a number of credits in the two given semesters, or
  - (ii) failed to achieve an average Semester GPA of 1.0 or higher for two consecutive semesters (not including the summer semester), or
  - (iii) exceeded the maximum period of registration specified in the regulations of the degree.
- (f) Candidates may be required by the Board of Examiners to take a reduced study load of not fewer than 24 credits if their academic progression is unsatisfactory.

### Assessment

**Ar288** Candidates shall be assessed for each of the courses for which they have registered, and assessment may be conducted in any one or any combination of the following manners: written examinations or tests, written assignments or exercises, continuous assessment of coursework, laboratory work, field work, research or project reports, or any other manner as determined by the examiners. Only passed courses will earn credits. Grades shall be awarded in accordance with UG8(a) of the Regulations for First Degree Curricula.

**Ar289** (a) Candidates who are unable, because of illness, to be present at the written examination of any course may apply for permission to present themselves at a supplementary examination of the same course to be held before the beginning of the First Semester of the following academic year. Any such application shall be made on the form prescribed within two weeks of the first day of the candidate's absence from any examination. Any supplementary examination shall be part of that academic year's examinations, and the provisions made in the regulations for failure at the first attempt shall apply accordingly.

(b) Candidates who are unable, because of illness, to be present at any assessment task of any course

may apply for permission to present themselves for supplementary assessment of the same course to be held in a manner prescribed at the Department's discretion.

**Ar290** (a) Candidates shall not be permitted to repeat a course for which they have received a D grade or above for the purpose of upgrading.

- (b) Where candidates are permitted or required to present themselves for re-assessment / re-examination / assessment in an alternative course, the new grade obtained together with the previous F grade shall be recorded on the transcript and will be included in the calculation of the semester GPA, the year GPA and the cumulative GPA.
- (c) The maximum number of attempts for a particular course or requirement is three.

Ar291 There shall be no appeal against the results of examinations and all other forms of assessment.

### Ar292 Failure in assessment

- (a) Candidates are required to make up for failed courses in the following manner as prescribed by the Board of Examiners:
  - (i) undergoing re-assessment / re-examination in the failed course to be held no later than the beginning of the first semester of the following academic year (except for courses offered in the summer semester, re-assessment / re-examination in the failed course to be held within five weeks after the beginning of the following acdemic year); or
  - (ii) re-submitting failed coursework, without having to repeat the same course of instruction; or
  - (iii) repeating the failed course(s) by undergoing instruction and satisfying the assessments; or
  - (iv) taking another course *in lieu* of a failed elective course, and satisfying the assessment requirements.

### **Honours classification**

### Ar293

(a) Honours classifications shall be awarded in five divisions: First Class Honours, Second Class Honours Division One, Second Class Honours Division Two, Third Class Honours, and Pass. The classification of honours shall be determined by the Board of Examiners for the degree in accordance with the following Cumulative GPA scores, with all courses taken (including failed courses) carrying equal weighting:

| Class of honours     | CGPA range    |
|----------------------|---------------|
| First Class Honours  | 3.60 - 4.30   |
| Second Class Honours | (2.40 - 3.59) |
| Division One         | 3.00 - 3.59   |
| Division Two         | 2.40 - 2.99   |
| Third Class Honours  | 1.70 - 2.39   |
| Pass                 | 1.00 - 1.69   |

- (b) Honours classification may not be determined solely on the basis of a candidate's Cumulative GPA and the Board of Examiners for the degree may, at its absolute discretion and with justification, award a higher class of honours to a candidate deemed to have demonstrated meritorious academic achievement but whose Cumulative GPA falls below the range stipulated in Ar293(a) of the higher classification by not more than 0.1 Grade Point.
- (c) A list of candidates who have successfully completed all degree requirements shall be posted on Faculty noticeboards.

# SYLLABUSES FOR THE DEGREE OF BACHELOR OF SCIENCE IN SURVEYING (BSc[Surv])

These syllabuses are applicable to candidates admitted under the 4-year '2012 curriculum' to the first year of the Bachelor of Science in Surveying in 2012-13.

Students entering the 4-year Bachelor of Science in Surveying curriculum in the academic year 2012-13 will take a professional core of 180 credits (including 150 credits of core courses, 24 credits of Faculty Foundation courses and 6 credits of a disciplinary elective course), plus a total of 54 credits in language and Common Core courses, and 6 credits of an elective course, totalling 240 credits for the 4-year curriculum.

The syllabuses of the Bachelor of Science in Surveying shall comprise the following requirements:

### **University Requirements**

54 credits of compulsory University requirements which must be completed successfully:

- (i) One 6-credit course in Core University English 1; one 6-credit course in English language enhancement; and one 6-credit course in Chinese language enhancement<sup>2</sup>
- (ii) 36 credits of courses in the Common Core Curriculum, comprising at least one and not more than two courses from each Area of Inquiry with not more than 24 credits of courses being selected within one academic year except where candidates are required to make up for failed credits.

### **Faculty Requirements**

24 credits of compulsory Faculty requirements which must be completed successfully:

| Four 6-credit Faculty Foundation courses   | 24 credits |
|--|------------|
| - Introduction to Building Technology      |            |
| - Visual Culture                           |            |
| - Housing and Cities                       |            |
| - Sustainability and the Built Environment |            |

### **Professional Core of Surveying**

The Surveying curriculum has four course categories which are taught using distinct learning modes.

<sup>&</sup>lt;sup>1</sup> Candidates who have achieved Level 5\*\* in English Language in the Hong Kong Diploma of Secondary Education Examination, or equivalent, may at the discretion of the Faculty be exempted from this requirement and should take an elective course in lieu, see UG6 of the Regulations for First Degree Curricula.

<sup>&</sup>lt;sup>2</sup> Students are required to successfully complete the 6-credit Faculty-specific Chinese language enhancement course, except for:

<sup>(</sup>a) Putonghua-speaking students who should take CUND9002 (Practical Chinese and Hong Kong Society) or CUND9003 (Cantonese for Non-Cantonese Speaking Students); and

<sup>(</sup>b) students who have not studied Chinese language during their secondary education or who have not attained the requisite level of competence in the Chinese language to take the Chinese language enhancement course should write to the Faculty Office to apply to be exempted from the Chinese language requirements, and

<sup>(</sup>i) to take a 6-credit Cantonese or Putonghua language course offered by the School of Chinese especially for international and exchange students; OR

<sup>(</sup>ii) to take an elective course in lieu.

Most courses are 6-credit courses, with the exception of the Dissertation component which is 18 credits. The majority of courses are classified into the Management, Law, Economics, and Construction aspects. These different aspects are then interwoven in the Studio courses to allow for knowledge and skills learnt in each course to be related directly to concurrent project work in the studio courses, and to allow a more specific and structured approach to student learning.

### Studio courses

(6 credits, approximately 120 - 150 hours of student learning activities is required for each course, including 54 - 72 contact hours for weekly studio meetings)

These courses engage students, under staff guidance and supervision, in addressing the core and related issues essential to the training of a professional surveyor. The studio projects require students to apply and integrate the theories and knowledge learned in concurrent courses of management, law, economics, and construction. Assessment is 100% by continuous coursework assessment, i.e. writing reports (up to 5,000 words), performance in studio meetings, including (but not exclusively) contribution to and participation in studio discussions and presentations.

# Studio courses (6 credits)

| RECO2025 | Surveying Studio 1                                     |
|----------|--|
| RECO2026 | Surveying Studio 2 (pre-requisite: Surveying Studio 1) |
| RECO3025 | Surveying Studio 3                                     |
| RECO3026 | Surveying Studio 4                                     |
| RECO4002 | Surveying Studio 5                                     |

### Management, law and economics courses

(6 credits, approximately 120 – 150 hours of student learning activities is required for each course)

A typical 6-credit course in land and construction management, law and economics includes 36 to 48 hours of lectures and seminars or tutorials. Around 80 hours of independent study is expected. Continuous assessment is by coursework (essays or reports: up to 3,000 words approximately) (20%) and a 3-hour written examination (80%), unless otherwise specified.

### Management courses (6 credits)

| RECO2028 | Planning and Development  |
|----------|---|
| RECO3028 | Real Estate and Construction Management Theory                  |
| RECO4007 | Real Estate and Facility Management Practice                    |
|          | (pre-requisite: Real Estate and Construction Management Theory) |
| RECO4003 | Real Estate and Construction Management Practice                |
|          | (pre-requisite: Real Estate and Construction Management Theory) |

# Law courses (6 credits)

| DEGG666  |   |
|----------|---|
| RECO2027 | Introduction to Law and Contract                        |
| RECO3027 | Land Law and Conveyancing Law                           |
| RECO4005 | Real Estate Investment Law                              |
| RECO4008 | Development Control and Alternative Disputes Resolution |

### Economics courses (6 credits)

| RECO2029 | Land Economics   |
|----------|--|
| RECO4004 | Economics of Property Rights                                       |
| RECO3029 | Real Estate Investment and Finance (pre-requisite: Land Economics) |
| RECO4006 | Advanced Valuation (pre-requisite: Land Economics)                 |

### Construction courses

(6 credits, approximately 120 – 150 hours of student learning activities is required for each course)

A typical 6 credit course in construction includes 36 to 48 hours of lectures, seminars, tutorials, and site visit. Around 80 hours of independent study is expected. Assessment is by coursework (essays or reports: up to 3,000 words approximately) (20%) and a 3-hour written examination (80%), unless otherwise specified.

Construction courses (6 credits)

| RECO2030 | Building Services for Health and Safety            |
|----------|--|
| RECO2022 | Building Technology                                |
| RECO3030 | Environmental Science in Buildings                 |
| RECO2031 | Advanced Structures and Construction for Surveyors |

### Research courses

(6 credits, approximately 120 – 150 hours of student learning activities is required for each course)

6-credit course in *Research Methods* – This course introduces various methodologies and the latest development in studies related to the different aspects of real estate and construction research. It also prepares students for their final year dissertations. It aims to train students to think rationally and logically in conducting academic research and to be equipped with the ability to formulate a dissertation proposal. It includes a number of research seminars, students are then to prepare a dissertation proposal which will be assessed by their assigned supervisor.

One 18-credit course in *Dissertation* – A dissertation (10,000 words+) is a detailed discourse requiring original research. Up to 30 contact hours and 420 hours of independent studies is expected of the student. Assessment is 100% by the final dissertation submitted.

Research Courses (6-18 credits)

| RECO3032 | Research Methods                               |
|----------|--|
| RECO4001 | Dissertation (Pre-requisite: Research Methods) |

### **Disciplinary Elective (6 credits)**

Disciplinary Electives are open exclusively to Year Three students in the BSc Surveying programme only. Students are required to choose from a prescribed set of options by the Department.

| RECO3031 | Cities and Urban Development <sup>#</sup>       |
|----------|---|
| RECO3033 | Professional Practice                           |
| CONS2004 | History of Urban Hong Kong & its Built Heritage |

<sup>\*</sup>The Cities and Urban Development component in the disciplinary elective course comprises overseas (or out-of-Hong Kong) study field trips, the costs of which are to be borne by students; hence, students are reminded that there will be travelling, accommodation and other related costs associated with those field trips. Such costs are not included in the tuition fees and will vary depending on location.

### Elective course (6 credits)

Students can choose to take courses offered within or outside the Faculty.

### First Year of Study

### [First semester courses]

| - Sustainability in the Built Environment | (6 credits)      |
|---|------------------|
| - Visual Culture                          | (6 credits)      |
| - 2 Common Core courses                   | (6 credits each) |
| - Core University English                 | (6 credits)      |

### [Second semester courses]

| - Housing and Cities                  | (6 credits)      |
|---------------------------------------|------------------|
| - Introduction to Building Technology | (6 credits)      |
| - 2 Common Core courses               | (6 credits each) |
| - Chinese Language Enhancement course | (6 credits)      |

### Second Year of Study

### [First semester courses]

| - Surveying Studio 1               | (6 credits) |
|------------------------------------|-------------|
| - Building Technology              | (6 credits) |
| - Introduction to Law and Contract | (6 credits) |
| - Planning and Development         | (6 credits) |
| - Common Core course               | (6 credits) |

### [Second semester courses]

| - Surveying Studio 2                                 | (6 credits) |
|--|-------------|
| - Land Economics                                     | (6 credits) |
| - Building Services for Health and Safety            | (6 credits) |
| - Advanced Structures and Construction for Surveyors | (6 credits) |
| - English Language Enhancement course                | (6 credits) |

# Third Year of Study

# [First semester courses]

| - Surveying Studio 3                             | (6 credits) |
|--|-------------|
| - Land Law and Conveyancing Law                  | (6 credits) |
| - Real Estate and Construction Management Theory | (6 credits) |
| - Real Estate Investment and Finance             | (6 credits) |
| - Environmental Science in Buildings             | (6 credits) |

# [Second semester courses]

| - Surveying Studio 4     | (6 credits) |
|--------------------------|-------------|
| - Research Methods       | (6 credits) |
| - Disciplinary Elective* | (6 credits) |
| - Elective               | (6 credits) |
| - Common Core course     | (6 credits) |

<sup>\*</sup>There are three Disciplinary Electives: Cities and Urban Development and Professional Practice, which are open for selection exclusively for BSc Surveying students in the second semester of their Third Year of Study only. The third Disciplinary Elective, History of Urban Hong Kong and its Built Heritage, is offered in the first semester, and students need to apply for approval from the BSc Programme Director to elect this.

### Final Year of study

[Full year course]

| - Dissertation | (18 credits) |
|----------------|--------------|
|----------------|--------------|

[First semester courses]

| - Surveying Studio 5  | (6 credits) |
|---|-------------|
| - Advanced Valuation  | (6 credits) |
| - Real Estate Investment Law <sup>3</sup>                   | (6 credits) |
| - Real Estate and Facility Management Practice <sup>4</sup> | (6 credits) |
| - Real Estate and Construction Management Practice          | (6 credits) |

[Second semester courses]

| - Economics of Property Rights                            | (6 credits) |
|---|-------------|
| - Development Control and Alternative Disputes Resolution | (6 credits) |

### **Course Description**

### Year 1 Semester 1 Courses

### ARCH1028 Sustainability and The Built Environment (6 credits)

The course examines the broad range of issues confronting mankind's search for a sustainable future, such as: population & urbanization; transportation & logistics; technology & mobility; water; waste; energy; food; (natural) disasters; and community & governance. Through the perspective of contemporary and historical case studies students explore how people, in their visions of the future, have sought to perfect built environments as the setting for model communities.

Assessment: 100% continuous coursework assessment

### **ARCH1027**

### **Visual Culture (6 credits)**

This course introduces students to visual literacy and visual thinking. Critical thinking, visual analysis and reflection on personal experience will be emphasized. Students will develop creative observations through taxonomies of visual grammars; and understand their active participation as both consumer and producer in the world of visual culture. Students will explore a broad introduction to art history and visual culture, introducing key themes, figures, and movements.

Assessment: 100% continuous coursework assessment

# CAES1000 Core University English (6 credits)

The Core University English (CUE) course aims to enhance first-year students' academic English language proficiency in the university context. CUE focuses on developing students' academic English language skills for the Common Core Curriculum. These include the language skills needed to understand and produce spoken and written academic texts, express academic ideas and concepts clearly and in a well-structured manner and search for and use academic sources of information in

<sup>3</sup> RECO4005 Real Estate Investment Law is not offered in the 2016-17 academic year.

<sup>&</sup>lt;sup>4</sup> RECO4007 Real Estate and Facility Management Practice is offered in the second semester in the 2016-17 academic year.

their writing and speaking. Students will also complete four online-learning modules through the Moodle platform on academic grammar, academic vocabulary, citation and referencing skills and understanding and avoiding plagiarism. This course will help students to participate more effectively in their first-year university studies in English, thereby enriching their first-year experience.

Assessment: 60% continuous coursework assessment and 40% examination

#### 2 Common Core courses

(6 credits each)

### Year 1 Semester 2 Courses

### **RECO1200** Housing and Cities (6 credits)

The aim of this course is to develop students' abilities to identify, describe and analyze critically the role and function of cities at different stages. In addition, students will be encouraged to correlate between city formation and various elements in urban development, particularly housing issues, in an increasingly globalized context. The course is explicitly interdisciplinary, and introduces recurrent and emerging debates about housing and the role and function of cities in the 21<sup>st</sup> century together with a parallel analysis of an increasingly complex matrix of social, political and economic issues as the pace of urbanization increases. Upon completion of the course students will have an appreciation of the complexity of urban issues in an increasingly urban world, and an appreciation of one of the major functions of cities - housing people.

Assessment: 100% Continuous coursework assessment

### **RECO1201** Introduction to Building Technology (6 credits)

This course provides the fundamental knowledge and concepts for functional design and construction of buildings. The aim of the course is to help students to explain why the building stands up, identify the function of essential elements and components of buildings, including the materials used and their installation methods.

A morphological approach will be used to explain the building elements and components. Students will learn how to read from drawings and sketches, and appreciate their practical application from site visits.

Topics will cover structural elements, building envelopes and services of buildings, including the materials and methods of their installation.

Assessment: 100% continuous coursework assessment

# CEUC9001 Practical Chinese for Surveying, Urban Studies, and Conservation Students (6 credits)

The main objective of this course is to enhance the students' command of Chinese for the construction and surveying profession through basic training in presentation skills and in specific techniques for the preparation of target-oriented letters, proposals, plans and reports. This course also aims to develop students' ability to engage in negotiations, debates as well as critical and creative thinking. In order to promote artistic and aesthetic appreciation, thematic lectures and topical workshops on Chinese calligraphic and artistic representations will be conducted. Site visits to traditional Chinese temples, gardens and museums will be organized to provide students with opportunities to gain handson experiences of the inner dynamics of Chinese culture. Students will be able to acquire sophisticated Chinese language skills and knowledge of Chinese culture within the context of the discipline of construction and surveying.

- 1. Demonstrate ability in using effective spoken and written language skills required for daily life communication, surveying & architecture related professions and academic studies. Reflect on their language learning experience and devise strategies for further improvement
- 2. Have in-depth oral presentation, discussion and debating skills.
- 3. Have an overall understanding between language and cultural concepts.
- 4. Have a better awareness and sensitivity toward language usage, critical thinking and aesthetic quality.

Assessment: 50% continuous coursework assessment and 50% examination

### 2 Common Core courses

(6 credits each)

# Year 2 Semester 1 Courses

### **RECO2022** Building Technology (6 credits)

Functions of buildings, relationship of elements, properties of basic construction materials, structural concepts, the processes and techniques of constructing simple buildings in Hong Kong.

Assessment: 20% continuous coursework assessment and 80% examination

# **RECO2025** Surveying Studio 1 (6 credits)

This course is structured to apply and integrate the subject matter of lecture courses through case studies and projects. This semester is devoted to developing an appreciation and understanding of the land conversion process, including the roles of stakeholders involved, factors affecting property choices, and institutional constraints governing land uses and development.

Assessment: 100% continuous coursework assessment

### **RECO2027** Introduction to Law and Contract (6 credits)

Legal framework of the HKSAR - the Basic Law and the HKSAR legal system; Elements of the law of contract; Construction contracts – standard forms; Discharging and enforcing contracts.

Assessment: 20% continuous coursework assessment and 80% examination

### **RECO2028** Planning and Development (6 credits)

This course addresses the planning and development issues related to land and construction management in Hong Kong. It covers general aspects of the land and property development process; housing market analysis; the real estate cycle; market analysis; urban land policy analysis; the land tenure system; land supply and urban land policy; development appraisal; development controls; post development analysis; property appraisal; change of use; end of the life cycle; redevelopment; planning, land lease and building control; application and approval procedures; development potential and parameters; the construction process; introduction to procurement, contract option, and facility management.

Assessment: 20% continuous coursework assessment and 80% examination

### **Common Core course (6 credits)**

### Year 2 Semester 2 Courses

### **RECO2026** Surveying Studio 2 (6 credits)

This course is structured to apply and integrate the subject matter of lecture courses through case studies and projects. This semester is devoted to further developing an appreciation and understanding of the issues and constraints faced by real estate developers in the land conversion process, including but not limited to site selection, optimization of land use and building design, and sales and marketing of real estate projects.

Assessment: 100% continuous coursework assessment

Prerequisite: RECO2025 Surveying Studio 1

### **RECO2029** Land Economics (6 credits)

Location, trade and economic growth; the concept of rent and economic rent; producers' location decisions; urban land markets; economic regions; land as a natural resource; money and interest theory; timing problems in the land conversion process; renovation and redevelopment cycles; land stock control; government land and housing policies; social costs and land rent dissipation.

Assessment: 20% continuous coursework assessment and 80% examination

### **RECO2030** Building Services for Health and Safety (6 credits)

This course is designed to appraise how the design and installation of various building services systems and building components combine to help achieve the health and safety of occupants and the public at large. They include: (1) fire safety; (2) sanitation; (3) vertical transportation; and (4) internal components.

Assessment: 20% continuous coursework assessment and 80% examination

### **RECO2031** Advanced Structures and Construction for Surveyors (6 credits)

This course provides the theoretical knowledge and concepts for the functional design and construction of complex buildings in Hong Kong. Topics cover processes and techniques for the construction of buildings, appreciation of structural systems for high-rise buildings, inspection and maintenance of building, performance of materials and components, sustainable construction and common civil engineering construction.

Assessment: 20% continuous coursework assessment and 80% examination

### CAES9121 Communication Course for Real Estate & Built Environment Students (6 credits)

This English-in-the-Discipline course is designed to help students to respond effectively to the communication demands of their studio programme. The focus is on raising students' awareness of the genre of professional discourse by providing them with opportunities to enhance their linguistic range in their approach to cultural, real-estate & built environment literacy.

Activities are organised through engagement in project-based discussion and written tasks designed to simulate the English Language demands on Surveying and Built Environment professionals.

The out-of-class learning component of the course will supplement the main aims by consolidating use of real-estate & built environment business-related vocabulary and further enhancing students' writing. Students will also become familiar with self-evaluation and with resources they can access to take responsibility to improve their own language skills in future.

Assessment: 100% continuous coursework assessment

### Year 3 Semester 1 Courses

### **RECO3025** Surveying Studio 3 (6 credits)

In the first semester students will participate in an inter-disciplinary project, or comparable learning project. The project is designed for surveying students to form multi-disciplinary teams to work on tasks from feasibility to scheme design stage so that they could learn from each other, experience team spirit and be able to see different problems from different perspectives. Appropriate elements of China Practice may be included.

Assessment: 100% continuous coursework assessment

# **RECO3027** Land Law and Conveyancing Law (6 credits)

Land tenure in the HKSAR; co-ownership; mortgages; easements; covenants; leases; landlord and tenant; adverse possession; deed of mutual covenant and the management of multi-storey buildings; the land registration system; Conveyancing law in the HKSAR and Mainland China.

Assessment: 20% continuous coursework assessment and 80% examination

## **RECO3028** Real Estate and Construction Management Theory (6 credits)

This module introduces management theory, project management, construction management with a particular focus on the real estate and construction context.

Assessment: 20% continuous coursework assessment and 80% examination

### **RECO3029** Real Estate Investment and Finance (6 credits)

Interactions between space and asset markets; financial economic concepts and tools for real estate analysis; real estate valuation and investment analysis at property and business levels; leverage and mortgages; statistical modelling and forecasting; price indices and derivatives; real options and land value.

Assessment: 40% continuous coursework assessment and 60% examination

Prerequisite: RECO2029 Land Economics

# **RECO3030** Environmental Science in Buildings (6 credits)

Principles of the built environment, climate, sick buildings and green buildings. Indoor air quality and thermal comfort. Principles of ventilation and air conditioning. Humidity and condensation. Principles of lighting, colour and vision. Lamps, luminaries, daylighting and lighting systems design. Principles of sound and hearing. Sound insulation, noise control and architectural acoustics. Principles of thermal insulation and energy management in buildings.

Assessment: 20% continuous coursework assessment and 80% examination

### Year 3 Semester 2 Courses

### **RECO3026** Surveying Studio 4 (6 credits)

The second semester is designed to consider inter-disciplinary problem scenarios from practical real life situations that may arise from the different aspects of surveying. Appropriate elements of China

Practice may be included. Design of problem scenarios is intended to provide students with an opportunity to apply what they have learnt in real life situations that arise during the planning, development, construction, marketing and maintenance stages of a project. The scenarios will be designed to require students to identify and explore inter-disciplinary problems that they need to resolve in real life situations, instead of dealing with specified problems as with assignments in other modules. For that purpose, on many occasions the problems will be deliberately ill-defined.

Assessment: 100% continuous coursework assessment

### **RECO3032** Research Methods (6 credits)

This course introduces various methodologies and the latest development in studies related to the different aspects of real estate and construction research. It also prepares students for their final year dissertations. It aims to train students to think rationally and logically in conducting academic research and to be equipped with the ability to formulate a dissertation proposal. Techniques in literature search, qualitative and quantitative approaches, tests of hypotheses, data analysis, and dissemination of results are also introduced.

Assessment: 100% continuous coursework assessment

### **Disciplinary Elective (6 credits)**

Disciplinary Electives are open exclusively to Year Three students in the BSc Surveying programme only in the second semester only. Students are required to choose from one of the following courses:

### **RECO3033** Professional Practice (6 credits)

The aim of this module is to build on academic modules in a practical environment so as to increase maturity and motivation by working as a member of a professional team in the real estate and construction field and handling real life real estate and construction projects. This also allows tacit and professional knowledge in the field to be conveyed to the students in a more personal and efficient way. On the other hand, it provides a platform for our students to demonstrate advanced academic knowledge learned in different modules to be applied in practice.

The course is composed of a number of activities.

First of all, seasoned professionals from the industry in the field of real estate, general practice surveying, quantity surveying / commercial management, building surveying, planning and development as well as property and facility management will be invited to deliver in-depth knowledge exchange with the students in the Professional Competency Workshop (PCW) series. Such PCW series will span over a period of 10 weeks.

This will serve as a foundation for students to conduct a comparative study of similarities and differences in professional practice when they undertake professional activities during the internship period. PCW will be assessed and the mark forms 30% of the overall mark for this course. In addition to conventional classroom delivery of such knowledge in the PCW, specific arrangements will be made with the industry to allow students to experience how such knowledge is applied in the daily work during the course of PCW.

The third element is a more structured internship arrangement which will take place either in the Summer or throughout the year. In addition an academic tutor, who will be full-time academic staff of the Department, will provide ongoing support as required.

Students will complete a period of training equivalent to not less than 4 weeks, or 160 hours. The programme of this training should include activities which involve the major themes of the academic syllabuses. Students are to be exposed to situations that will allow them to consolidate the theoretical knowledge gained during academic study, consistent with taking the maximum responsibility possible.

Assessment: 100% continuous coursework assessment

(Assessment of the student's performance during the placement is carried out jointly by the professional firm (the Host Company) which provided the training to the respective student, and the Departmental Internship Coordinator. A Professional Journal (PJ) will be kept by the participating student that will detail the tasks they have been assigned to and knowledge they have been conveyed during the training period. This PJ will be assessed and marked by the Departmental Internship Coordinator. In addition, the Host Company will also provide an assessment on the student based on training performance, personal qualities and social skills.)

The relative weighting of these assessments is: PCW 30% and Internship Training 70%

### **RECO3031** Cities and Urban Development (6 credits)

This course requires students to organize a 1-2 weeks study field trip themselves, to international or PRC destinations. The main objective is to analyse and explain international differences in real estate and construction institutions and practices. Desk research, preparation and organization of site visits, analyses, formal reporting and presentation are all important components. In addition to the preparing of the study trip, students taking this Disciplinary Elective are also required to attend the Professional Competency Workshop (PCW) series that are offered to the other Disciplinary Elective, RECO3033 Professional Practice. This will serve as a foundation for students to conduct a comparative study of similarities and differences in professional practice when they undertake the study trip outside Hong Kong. PCW will be assessed and the mark forms 30% of the overall mark for this course.

Students for personal reasons, upon approval by the BSc Programme Director of the Department before the commencement of the Second Semester in this year, may opt not to take this Disciplinary Elective. To earn the same amount of credits, such students are required to take an elective from a pool of designated electives to be prescribed and announced by the Programme Director at the beginning of Year 3 study.

Assessment: 100% continuous coursework assessment (except for students who are allowed to take a replacement elective, who shall follow the assessment criteria of that elective)

### CONS2004 History of Urban Hong Kong and its Built Heritage (6 credits)

(Where students who, for special circumstances and upon approval granted by the BSc Programme Director, cannot select the above two Disciplinary Electives, this Disciplinary Elective provides a third option for the students. Students are reminded that this course is offered in the first semester and students need to re-adjust their own study plan.)

This course will provide a broad historical survey of Hong Kong's urban history from the 19th century to today, focusing both on the history of the city as well as its architectural development over time. This will provide an overall understanding of the historical context of Hong Kong to ensure a better foundation is laid for understanding the city's conservation.

| Common Core course (6 | credits | ۱ |
|-----------------------|---------|---|
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Elective (6 credits)

### Final Year Full Year Course

### **RECO4001** Dissertation (18 credits)

A dissertation is a detailed discourse on a research topic in the area of real estate and construction chosen by the student, to be executed following scientific methodology principles as taught in Research Methods. It aims to train students to think scientifically, and to carry out and complete an entire research project on their own, under a dissertation supervisor. Students are expected to identify and define a problem for scientific research; substantiate the research problem, and as appropriate, propose testable hypotheses with appropriate methodology and data; collect empirical data to test the proposed hypotheses and explain the regularities in the data collected; and carry out further research to widen and deepen the analysis.

Assessment: 100% continuous coursework assessment

Prerequisite: RECO3032 Research Methods

Final Year Semester 1 Courses

### **RECO4002** Surveying Studio 5 (6 credits)

For this Studio programme students are required to formulate their own study area based on brief hypothetical scenarios given. Emphasis is on issues related to the broad concept of sustainability in a global context and its relation to land, real estate, construction and building development and management.

Assessment: 100% continuous coursework assessment

### **RECO4003** Real Estate and Construction Management Practice (6 credits)

This module develops further skills developed in Year 2, in terms of contract administration and construction management theory, and introduces practical and commercial issues through the medium of real life case studies and simulations. It also covers principles of professional surveying practices.

Assessment: 50% continuous coursework assessment and 50% examination

Prerequisite: RECO3028 Real Estate and Construction Management Theory

### **RECO4005** Real Estate Investment Law<sup>5</sup> (6 credits)

Law, government, and business; Business Associations and Entities - partnership, agency, and corporation; Regulatory framework of banking and finance; Surveyors in financial markets - roles, liabilities, and professional ethics.

Assessment: 20% continuous coursework assessment and 80% examination

### **RECO4006** Advanced Valuation (6 credits)

The concept of value in different contexts and for different valuation purposes. Statutory valuation – purposes and methods. Advanced valuation for real estate development. The relationships between

<sup>&</sup>lt;sup>5</sup> RECO4005 Real Estate Investment Law is not offered in the 2016-17 academic year

the real estate market and other asset markets. Asset pricing models. Real estate investment portfolio management – theory, institutions and constraints.

Assessment: 20% continuous coursework assessment and 80% examination

Prerequisite: RECO2029 Land Economics

### Final Year Semester 2 Courses

### **RECO4004** Economics of Property Rights (6 credits)

Basic concepts of economic growth and development; general concepts of property rights as foundation for understanding the economy and government policies on land use; concepts of market failure in the development market and industry and their Coasian transaction cost reinterpretation in the light of sustainable development driven by innovations in property development; and neo-institutional analysis of issues in development economics applied to spatial analysis.

Assessment: 20% continuous coursework assessment and 80% examination

# **RECO4007** Real Estate and Facility Management Practice<sup>6</sup> (6 credits)

This module outlines and explains the roles of property and facility management on real estate portfolios, and explores the strategic management roles of a property and facility manager.

Assessment: 20% continuous coursework assessment and 80% examination

Prerequisite: RECO3028 Real Estate and Construction Management Theory

### **RECO4008** Development Control and Alternative Disputes Resolution (6 credits)

Building and planning applications and appeals; Government leases; lease terms / conditions, lease modification and relevant legislation; Land resumption and compensation; Alternative dispute resolution: primary and secondary dispute resolution; negotiation; conciliation; mediation; adjudication and arbitration; Law of arbitration.

Assessment: 20% continuous coursework assessment and 80% examination

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<sup>&</sup>lt;sup>6</sup> RECO4007 Real Estate and Facility Management Practice is offered in the second semester in the 2016-17 academic year.