

# **Real Estate Education in Malaysia: A New Paradigm**

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## **Abstract**

Since early 70s, real estate education in Malaysia emphasises on real estate valuation to cater for the needs for Valuation Officer in Ministry of Finance. Shifts in real estate activities from individual to corporate participation however have evolved real estate education towards more dynamic and proactive learning process. The paper presents the current issues of real estate education in Malaysia including the consequences of REITs listing, managing corporate real estate for non-real estate companies and the perception of real estate investment with other investment means. In order to cater for the changing needs, real estate education should transform for a new paradigm focusing more on real estate investment and decisions. The direction of real estate education must also emphasise on real estate asset management, marketing, market research and decision-making. Currently, the main shortcoming of real estate discipline is the unstable of real estate data and information which affect real estate decision-making. However, shifting towards a new direction in real estate education requires collaboration from institution of higher learning. This means that institution offering courses in real estate should complement one another. In Malaysia, this was done with the formation of REER (Real Estate Educators and Researchers) forum where educators and researchers in real estate discuss together concerning important issues of real estate education.

**Keywords:** Real Estate Education, Decision Making, Real Estate Profession

## **1.0 Introduction**

Real estate is considered as the most expensive commodity on earth. From basic need for human, real estate is now become more institutional in business environment. Over the past few decades, senior managers have focussed extensively on utilising their resources particularly having a use for financial and fiscal measures, human resource management and information technology management to establish a competent operation of the business. However, it has been observed that business managers have forgotten the corporate real estate function that could create more value for the company as assistance to achieve the overall corporate mission. Business managers are now beginning to recognise that real estate is a critical strategic asset for supporting the financial, work environment and operational needs of an organisation. A research team at Harvard and Massachusetts Institute of Technology (MIT) in the USA, lead by Michael Joroff, has undertaken an initial phase of the research on changes in corporate real estate function (Joroff et al., 1993). Real estate, which is known as corporate real estate (CRE), is emerging as the fifth vital corporate resource, after capital, people, technology and information, as a consequence of its acceptance among international businesses. Furthermore, they found that real estate appears to be the second most expensive cost after labour and is becoming an essential part of every corporation's strategic planning.

Real estate industry in Malaysia has changed dramatically since the recovery of the 1987 recession. The real estate market has reached the peak in 1996 just before the economic crisis hit the region. The important impact on the real estate industry before the economic crisis was the real estate boom from 1989 to 1996 which trigger the investors to involve in the industry. Surprisingly, the formation of few real estate unit trusts in 1989 could not attract the investors to actively involve in this newly introduced alternative real estate investment. The uniqueness of real estate industry across the region compared to another has affected practitioner expectation on new graduates in real estate. Formal education is no more a prerequisite to be a good real estate consultant. Dasso and Woodward (1981) stressed that little emphasis was placed upon real estate education. Instead, the emphasis was on license preparation, salesmanship, and professionalism.

This paper presents the current issues in Malaysian real estate education. The main discussion is on the evolution of real estate education with new and innovative approaches to cater the needs of the industry. Suggestions are based on academic and practical aspects. Although this paper has discussed on certain real estate topics, the purpose is to highlight the new paradigm of real estate education.

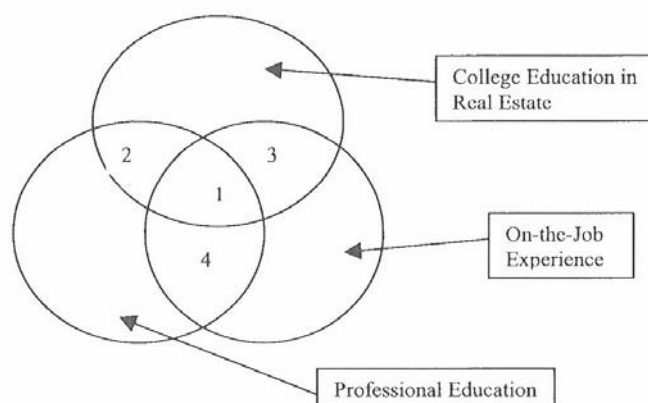
## **2.0 The Evolution of Real Estate Education**

Real estate education in Malaysia was influenced by the British system as most of the real estate system such as real estate laws, planning and taxation. British real estate education is based on the general practice surveying, and planning and development surveying disciplines as defined by the Royal Institution of Chartered Surveyors. While in the US, the real estate education system was heavily emphasised on business and financial management.

According to Rabianski (2003), at least three aspects of real estate education which are academic or formal education provided by colleges and universities; professional education provided by variety of entities in the real estate industry; and on-the-job training. Institute of Surveyors Malaysia (ISM) has conducted a survey on graduates in estate management in 2001 and found that the performance of real estate graduates was below expectation from the perspective public and private organisations. The expectations from the academics and practitioners should be adjusted in order to

close the gap between 'the text book world' and 'the real world'. Therefore, 'a new looked' real estate education is coming of age. All real estate community have to work together in developing the profession from the real estate graduates to the scope of real estate profession.

Nappi-Choulet (2003) highlighted the emergence of real estate education in French business schools. Real estate education in France emphasised on urban and architectural, building services and legal studies. He observed that real estate crisis and high number of bankruptcies among French real estate developers contributing to the emergence of real estate education focusing on business, finance and economics. Schulte (2003) also found that real estate investment and finance play an important role in the real estate discipline. This implies that real estate profession should play a major role in real estate investment decision making.



**Figure 1: The Integration Model (Source: Rabianski, 2003)**

Rabianski (2003) proposed the integration model of real estate education including elements from both academic and professional education process and on-the-job training (Figure 1). The ideal educational arrangement is the intersection of three sets representing academic education, professional education and experience. This is the area signified as "1". The explanations of Area 1 to 4 are as Table 1.

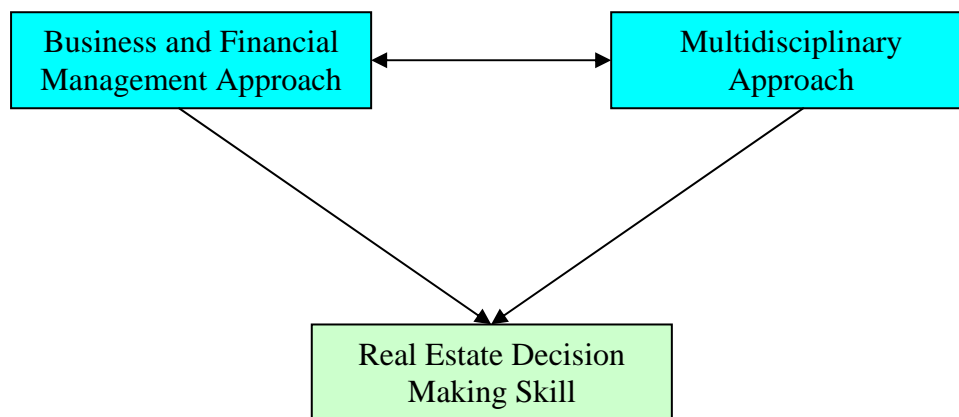
**Table 1: Explanation for the Intersection Model**

Area	Explanation
1	The individual experiences the interaction of three elements that lead to the broadest spectrum of real estate knowledge
2	High on both academic and professional but is somewhat unrealistic as a path to success without experience in the industry
3	Education in real estate with experience
4	Professional education with experience

(Source: Rabianski, 2003)

Area 2 however, is the best form of education experience that prepares the student for future success after obtaining experience in the industry. Meanwhile, the question whether academic education or professional education is better depends on the content of the education experience. This intersection model does not explain the body of knowledge of real estate.

Real estate education generally adheres to either of two philosophies which are the multidisciplinary approach or the business and financial management approach. Dasso and Woodward (1981) suggested that in real estate education emphasis should be put upon licensing, professional development, problem-solving or decision analysis, and theory such as land economies. Therefore, most real estate professionals would acknowledge that they solve problems using four intellectual steps: 1. referring to experience, 2. developing understanding, 3. arriving at a judgment, and 4. making a decision (Kelly, 1990). An integrating theme is needed for real estate education, with integration between business and financial management approach and multidisciplinary approach which strengthen the decision making skill as shown in Figure 2.



**Figure 2: Integration of Two Approaches in Real Estate Education**

Corporate real estate management (CREM) is another area that may need the integration in real estate education as shown in Figure 2. According to Bon et al. (1995) corporate real estate management (CREM) concerns the management of buildings and parcels of land at the disposal of private and public organizations that are not primarily in the real estate business. The chief real estate officer (CREO) is the top executive concerned with an organization's real estate and needs to integrate all these activities into a coherent strategy as shown in Figure 3. Manning and Roulac (1999) stated that CREM must include a company's management of the (multi-facility) network of its working spaces, including leased as well as owned properties, in order to maximize the wealth of its shareholders. Therefore, CREM is the management of corporate real estate in order to maximize the organization's wealth and corporate business objectives through an effective multi-level of management activities. The integration of real estate education is important to provide the industry needs towards effective and efficient corporate real estate management. As a developing country, decisions on real estate development and management become crucial and skills for real estate professional should be enhanced. The undergraduate level of education may inadequate to provide the whole spectrum of the integration. However, post graduate education and managerial training may provide a better avenue for the graduates to enhance their skill.



**Figure 3: CREO's domain: predominant management activities and concerns at different management levels (Source: Bon et al., 1998)**

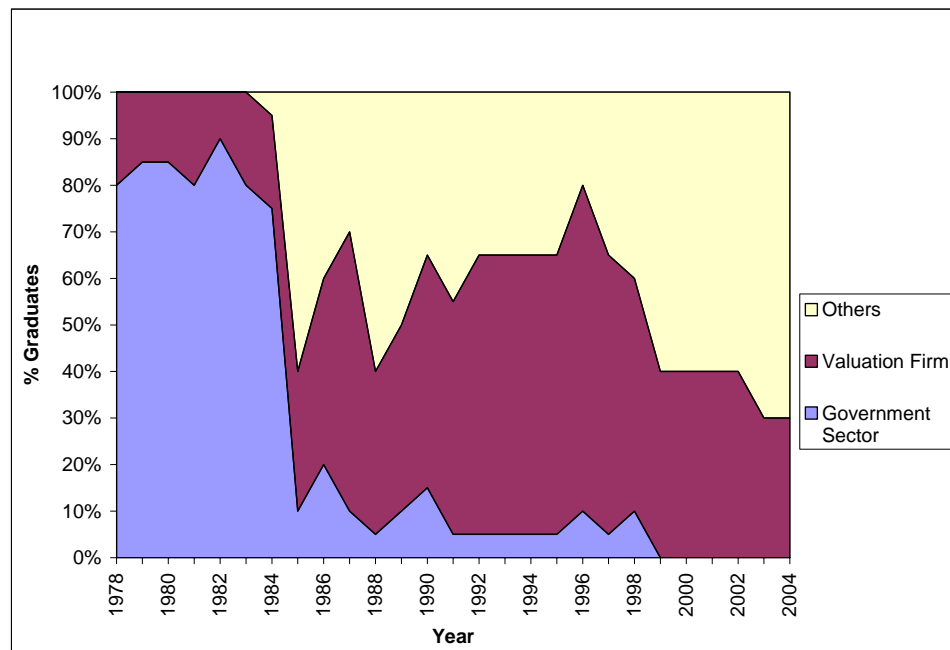
### **3.0 Features of the Malaysian Real Estate Education System**

This section discusses the features of real estate education particularly in the Department of Property Management (DPM), Faculty of Geoinformation Science and Engineering, Universiti Teknologi Malaysia (UTM). The course content is mainly designed to meet the need of the industry and therefore the department would seek views from professional bodies related to the real estate industry in planning for the syllabus and curriculum. The descriptions are both for under and post graduate programmes. In addition, two main approaches, multidisciplinary and business approach which discussed in the previous section, are considered to strengthen the courses.

The early days of real estate profession in Malaysia, just after the Independence Day, a small group of professional served in valuation division in Ministry of Finance (now known as Valuation and Property Services Department or VPSD) undertaking real estate valuation for statutory purposes. Universiti Teknologi Mara (UiTM) has started the diploma programme in real estate in 1967 while Universiti Teknologi Malaysia (UTM) commenced the degree programme in 1973. Meanwhile, University of Malaya began the first real estate programme at degree level in 1996. These institutions have produced graduates who are now serving the real estate sector in the country. UTM is the pioneer university offering property management course at degree level in Malaysia. The university has played an important role in training real estate professionals for the industry and they have been well accepted by the public and private sectors. Most of the students graduating from the university hold important positions in the government VPSD and related government agencies as well as owners and major shareholders of many private valuation and property consultant firms in the country. The degree programme is designed to towards meeting the needs of the industry. Therefore changes in the curriculum and syllabus are occasionally reviewed to ensure its relevance to the need of the industry and to cater for the need of the developing nation.

The first intake to the degree programme in UTM was in 1973 with the enrolment of eleven students pursuing for the Bachelor Degree in Surveying (Property Management). The course is planned for five years and the entry requirement was a good grade in Malaysia Certificate of Education (MCE) that is equivalent to the GCE 'O' level. The main subjects were mainly valuations, law, economics, planning, and property management. Students are also exposed to the industry where they are required to fulfil

practical training each year during vacation. The first intake graduated in 1978 where most of them are well placed in VPSP. Figure 4 shows estimation of UTM's graduates working in government agencies such as VPSP, local authorities and other government agencies, valuation firm and other organisations. After 1985, the number of graduates joining the government sector has decreased drastically due to unavailability of vacancies. Since then, UTM's graduates have to explore for the job other than VPSP and valuation firms. Nevertheless, most of the graduates were well accepted by other firm and corporate companies.



**Figure 4: Proposition of Sector for UTM's Alumni (Estimation)**

Rapid real estate development in the country has also affected the demand for real estate professionals in the country causing the increase in the enrolment for the course. The university was considered as one of the leading centre in training real estate professionals to meet the needs of the nation. The demand for the course was not only from the local students but there were also interest from international students particularly from the neighbouring developing countries such as Brunei and Indonesia.

### ***Degree programme philosophy***

The philosophy of the degree programme is in line with the philosophy of the university and it is aimed at meeting the needs of the nation. It is basically to enhance knowledge in science and technology for the well being of human being as a whole based on the divine law. In the real estate terms this would simply means to enhance knowledge in the estate field so as to facilitate teaching and learning in real estate. A large part of the degree programme is to train students to be real estate professionals with high moral and ethical values. So, academic programmes and syllabus content is designed according to this philosophy.

### ***Key objectives and learning outcomes***

The need to groom responsible real estate professionals to the society suggests that the teaching and learning programmes should to be multi disciplinary and business

orientation focusing on all aspect of professional knowledge, current agenda in the society as well as ethical and moral subjects. So, the running of the degree programmes is targeted to meet specific objectives. These objectives are in line with the university's philosophy. Some of the objectives of the degree programmes are:

- i) To provide curriculum and knowledge to students in basic understanding in various aspects in real estate discipline.
- ii) To provide teaching and learning process that enable development of skills and technical competence in real estate problem solving critically, logically, creatively and analytically based on sound facts and ideas.
- iii) To provide the students with professional and leadership qualities through formal programme and extra academic activities.
- iv) To enhance students qualities in communication skills in real estate practices.
- v) To develop students to be responsible and accountable real estate professional

These objectives are attainable through the following approaches:

- i) Selecting students that will meet the criteria for the real estate course.
- ii) Designing the syllabus and curriculum that will enable students to take up jobs related to the real estate field.
- iii) Exposing students to the practical aspects of the real estate field.
- iv) Establishing a centre to encourage research and learning relating to real estate matters.
- v) Collecting and disseminating information on matters affecting real estate issues.

The learning outcomes that will be achieved out of the degree programme are (the details are as Appendix 1):

- i) Knowledge of real estate valuation, investment and management principles.
- ii) Ability to use techniques, skills and real estate analysis.
- iii) Ability to identify, formulate, plan, analyse and solve real estate related problems.
- iv) Ability to communicate effectively.
- v) Ability to show ethics related skill cautiousness.
- vi) Ability to function effectively in a team.
- vii) Ability to perpetually seek and acquire contemporary knowledge.

### ***Degree programme structure and management***

The degree programme would be completed within 4 years programme on a full time basis. The running of the degree programme follows the semester system where each academic year consists of two semesters. Students must complete at least eight (8) semesters before graduation. The number of credits required for graduation is 124 credit hours where one credit hour is equivalent to one-hour lecture or two hours practical/lab or tutorial sessions per week. Therefore a 3-credit subject may consist of 2 hours lecture and two hours of tutorials per week.

The academic course content is structured accordingly to enable students to acquire knowledge and competencies as well as to develop generic and professional skills to meet the current requirements of the industry. According to the programme, students must complete different subject areas in order to meet the course objective. These subjects are divided into five main areas. Table 2 describe the division of the main subjects for the course.

**Table 2: Classification of Subjects**

No.	Classification	Credit Hours	Percentage
i.	University		
	a. General	10	
	b. Language	6	14.5
	c. Co-curriculum	2	
ii.	Faculty Core	0	0
iii.	Programme Core	86	69.3
iv.	Programme Electives	12	9.7
v.	Programme Basic	8	6.5
	<b>Total</b>	<b>124</b>	<b>100</b>

The first classification is the university subjects, second is the faculty core subjects, third is the main subjects required to be real estate professionals and called as programme core subjects, the fourth category is subjects that are extension to the field called as elective subjects and finally are subjects which are basic to the programme. The university subjects are general area subjects, which must be completed by every students of the university. It comprises of about 15 percent of the whole curriculum and the subjects that fall under this category are Islamic and Asian civilisation, English and other co curricular activities.

The core subjects for the course are subjects, which are directly relevant to the real estate professionals. These include subjects such as mathematics, law, valuation, planning, construction, economics, information technology and surveying. The basic subjects are also general subjects but which are directly related to the real estate profession. Examples of these subjects are introductory law, surveying and land information and basic computer knowledge. Apart from the basic and core subjects, students are also required to take elective subjects. These subjects are extension to the core subjects and it is exposure to students on other common areas which students to know in line with the development of the profession, which tend to be cross discipline. Students will need to select two electives for semester 7 and 8. Please refer to Appendix 2 for more details.

Apart from the main contact hours realised through lectures, tutorials and practical work, students are also exposed to related field work such as visits to the VPSP, the national valuation institute (INSPEN), local authorities, other public and private agencies and organisations with property and facilities management functions. The degree programme exposes the student to a range of multidisciplinary subjects, which are relevant to real estate discipline. The main areas focused in this programme are:

- i) Property valuation and investment;
- ii) Property economics and development;
- iii) Building construction and services



- iv) Planning and law;
- v) Property information technology and management; and
- vi) Property and facilities management

The running of the programme by the department is supported by qualified academic staffs, which are trained in various disciplines relevant to the field. Majority of the teaching staffs are basically trained in the property valuation and management discipline who eventually major on other areas such as investment, finance, computer technology, property economics, planning and construction. In order to ensure that students are exposed to the current trend in the field, academic staffs are encouraged to specialise in selected subjects areas through researches and undertaking consultancies for various organisations. The product of these activities is then channelled to writing and publication work.

The range of subjects thought at the department is arranged in such a way so that students are able to grasp the continuity and integrity of the different subjects offered. The basic core areas of the programme dwell on valuation and property management. The other supporting subjects such as planning, law investment and economics are given accordingly so as to complete the knowledge of the real estate professionals. In order to ensure that students could appreciate the application of subjects in class, students to the practical aspects through assignments and field. In order to complete assignments, students are required to gather relevant information so as to resolve the problems given. This will expose students to the inter relations of the different disciplines that they are required to know.

### ***Industrial training***

Apart from academic training students are required to fulfil practical training and this have been planned in semester 6 of the degree programme. This 6-month industrial training period will enable students to experience the nature of the real estate field. Students must to apply for training in related private or public sector organisations. Most of the students are trained in valuation and property consultancy firms, property developers, government valuation departments, local authorities and other organisation dealing with properties. During the training period, students are required to record their experiences on a daily basis in a standard logbook. Students are also required to prepare a report on related areas of their experiences and present to the committee in order to pass the industrial training requirement.

### ***Postgraduate programme***

The postgraduate programmes are offered at the masters and doctoral level. At the masters level courses are offered by thought courses and research and this can be done through full or part time basis. The full time thought courses offered are:

- M.Sc Facilities Management
- M.Sc Real Estate

In both programme students are required to take common university subjects, core subjects for each course and elective subjects. Details of the subject required are listed in Appendix 3. The main aim of these post graduate programmes is to provide a managerial skill of real estate professional facing more challenges in order to accomplish the organisational objectives.

The programmes have been designed with this end in view, to match a continuing worldwide demand for postgraduate education in real estate area. The programme focuses on real estate and facilities strategic issue which leading to produce a high quality post graduates who will ultimately be the high skill real estate and facilities management specialists. The objectives of the programme are to allow for more advanced studies in strategic real estate asset management and facilities management.

#### **4.0 A New Paradigm of Real Estate Education**

The programme conducted by the department is in line with the development of the profession and the industry. Therefore the department have established links with other organisations relevant to the industries. These links come in the form of joint research activities, consultancies, academic visits, joint seminar organisations and industrial placement for students and staff during sabbatical leave. Some of the links established are with ISM, BOVAEA, other local universities, VPSD, INSPEN, local authorities and some valuation and property consultancy firms. Students are also encouraged to enrol with ISM as student members to encourage early exposure to the profession.

There is a close link between department members and the professional bodies such as the Board of Valuers, Appraiser and Estate Agents (BOVAEA) and ISM. These links are realised through occasional visits, seminars and conferences. There is also a representative from the faculty in the meetings with both ISM and BOVAEA. This is to ensure that education needs from the industry are being transmitted.

Some key factors should exist to accomplish this desirable interrelationship by the department members are (Rabianski, 2003):

- a) Department members should have professional involvement in some form either past or present.
- b) Academic courses should utilise real world examples brought to the lecture room.
- c) Department members should fully recognise the nature and content of the courses taught by the professional.
- d) Department members should do some applied research to improve their academic or scholarly research.

On the other hand, professional should also recognise the following key factors of the integration:

- a) Professional should recognise the importance of concept and theory which always answer the question, "why did you choose to do it this way?"
- b) Professional should minimize the personal experience aspect of instruction.
- c) Professional need to remember that teaching is a learned and practiced craft which require the teacher to adopt the viewpoint of the audience in order to determine if the material is being learned and not just presented.

Following the integration approach of real estate education as depicted in Figure 2, real estate academics have come out with an idea of establishing real estate educators and research forum in order to enhance the real estate education and profession. The initial discussion has started in 2004 among a small group of academics from UTM, UiTM and UM. Eventually, the discussion group known as Real Estate Educators and Researcher Malaysia (REER) was formed and become a regular forum and meeting among institutions including UTM, UiTM, UM, INSPEN, Kolej Universiti and Institut

Teknologi Tun Hussien Onn (KUiTTHO), Universiti Sains Malaysia (USM), National Land Institute (INSTUN). An inaugural general meeting was held in September 2005 and the invitation is for educators, researchers and practitioners. Besides the professional bodies and associations, this is the model of collaboration integrating the academics, professionals and industry for the benefit of the profession.

## 5.0 Conclusion

REER is just a collaboration model to enhance real estate education. All real estate programmes need commitment and full support from the industry to improve to higher and more recognisable level of prestige (Rabianski, 2003). Real estate has a wide spectrum of discipline. Real estate industry is on an upward path and so do real estate education. It is up to us whether to put real estate profession as one of the most prestige career on earth. To achieve that, academic and profession have to work together helping and supporting real estate education in order to produce a knowledgeable graduates and respectable professionals.

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**Appendix 1 :  
Programme Learning Outcomes**

Intended Learning Outcomes	Teaching and Learning Methods	Assessment
<b>(a) Technical Knowledge and Competencies</b>		
<b>LO1. Knowledge of real estate valuation, investment and management principles</b>		
Understand the principles of real estate management, valuation and investment.	Lectures, tutorials, seminars, directed reading, independent research, problem-based learning	Examinations, seminar presentations, discussions, problem-based exercises, group projects, independent projects.
<b>LO2. Ability to use techniques, skills and real estate analysis</b>		
Be able to understand and apply knowledge to appropriate valuation, investment, and management analysis.	Lectures, tutorials, computer practical classes.	Examinations, seminar presentations, discussions, problem-based exercises, group projects and independent projects.
<b>LO3. Ability to identify, formulate, plan, analyse and solve real estate related problems</b>		
Be able to carry out activities related to real estate practices and solve real estate problem through the integration of qualitative and quantitative knowledge and approaches.	Project supervision, lectures, tutorials, seminars, directed reading, computer-based exercises, independent research, problem-based learning	Problem-based examinations, seminar presentations, design project, individual research project.
<b>(b) Generic Skills</b>		
Intended Learning Outcomes	Teaching and Learning Methods	Assessment
<b>LO4. Ability to Communicate effectively</b>		
Excellent communication skills	Group projects, independent research, tutorials, discussions	Oral presentations
Ability to utilise communication tools effectively	Lectures, group projects, independent research	Written assignments, laboratory reports, essays, thesis
<b>LO5. Ability to show ethics related skill cautiousness</b>		
Ability to practice good ethics and positive values in day to day work of real estate profession	Lectures, group projects, independent research	Merit and De-merit System in Oral presentations, Written assignments, laboratory reports, essays, thesis
<b>LO6. Ability to function effectively in a team</b>		
Ability to work collaboratively as part of a team undertaking a range of different team roles	Tutorials, group assignments	Group reports, learning logs/diaries
<b>LO7. Ability to perpetually seek and acquire contemporary knowledge</b>		
Ability to learn independently and understand new concepts in real estate valuation, management and investment.	Independent research projects, group research projects, industrial training	Industrial training report, independent project report, learning portfolios
Ability to develop and implement personal plan of work to meet a deadline as well as able to work in a multidiscipline environment.	Independent research projects, group research projects, industrial training	Industrial training report, independent project report, learning portfolios

**Appendix 2:**  
**Curriculum for Bachelor of Science (Property Management)**

Semester/ year	Subjects		
	Code	Name	Credits
<b>1/1</b>	SGH 1022	Malaysian legal system	2
	SGH 1053	Building technology	3
	ULT 1112	Islamic and Asian cultures (TITAS1)	2
	UHS 1**2	Islamic and Asian cultures (TITAS II)	2
	SGH 1013	Property valuation principles	3
	SGH 1033	Computer application in property	3
		<b>TOTAL</b>	<b>15</b>
<b>2/1</b>	SGH 1563	Surveying and property information	3
	UHB 1**2	English for academic communication	2
	SGH 1542	Land Economics	2
	UQ ***1	Co-curriculum 1	1
	SGH 1593	Planning and development	3
	SGH 1513	Applied valuation	3
	SGH 1523	Law on contract agency and tort	3
		<b>TOTAL</b>	<b>17</b>
<b>1/2</b>	SGH 2023	Property management	3
	SGH 2033	Property law	3
	ULT 2**2	Islamic institution/ current Islamic issues	2
	UHS 2**2	Elective university subject	2
	SGH 2043	Urban economics	3
	SGH 2013	Statutory valuation	3
		<b>TOTAL</b>	<b>16</b>
<b>2/2</b>	SGH 2553	Building maintenance and services	3
	UHB 2**2	Advanced English for academic communication	2
	SGH 2573	Rural land resources management	3
	UQ ***1	Co-curriculum	1
	SGH 2533	Local government law	3
	SGH 2513	Valuation of special properties	3
		<b>TOTAL</b>	<b>15</b>
<b>1/3</b>	SGH 3113	Property market research	3
	U**3**2	Entrepreneur development	2
	SGH 3093	Property marketing and agency	3
	SGH 3043	Macro economic analysis on property	3
	UHB 3**2	English Language (elective)	2
	SGH 3103	Property investment analysis	3
		<b>TOTAL</b>	<b>16</b>
<b>2/3</b>	SGH 3539	Industrial training	9
	SGH 3533	Seminar on industrial training	3
		<b>TOTAL</b>	<b>12</b>

<b>1/4</b>	SGH 4093	Professional practice	3
	SGH 4013	Business valuation	3
	SGH 4113	Quantitative techniques for real estate	3
	SGH 4172	Special project 1	2
	SGH 4**3	Elective 1*	3
	SGH 4**3	Elective II*	3
		<b>TOTAL</b>	<b>17</b>
<b>2/4</b>	SGH 4553	Land acquisition practice	3
	SGH 4584	Special project 11	4
	SGH 4503	Corporate real estate management	3
	SGH 4**3	Elective 1*	3
	SGH 4**3	Elective 11*	3
		<b>TOTAL</b>	<b>16</b>
		<b>Total for the whole course</b>	<b>124</b>

\*List of elective subjects

SGH 4863	Property portfolio management
SGH 4853	Project management
SGH 4833	GIS on property
SGH 4953	Computer assisted mass appraisal
SGH 4963	Facilities management
SGH 4883	Negotiation
SGH 4933	Quality Management

The subjects listed above can be categorised into different groups such as :

#### **Compulsory university subjects.**

These are common subjects that must be taken by all students enrolled with the university. They are meant to provide general knowledge and develop student's students knowledge on the society and the environment which built up the culture of the society. They are design to built up generic skills to enable students to face with the reality of the working environment.

#### **Foundation subjects**

These are subjects designed to provide basic knowledge relating to the real estate field. They form the basis for building the pillars in which all aspects of real estate analysis rest on. The subjects that are considered basic for the real eatate studies are the Malaysian legal system, contract agency and tort law and surveying and property information..

#### **Elective subjects**

These are subjects which is not directly related but knowing them is an advantage for their continuing professional development. The development that has grown within the profession suggest that graduates should extend their knowledge not only in the traditional field but also to other related field which may affect the real estate profession.

### **Core real estate subjects**

These subjects are directly related to the real estate field. Students must acquire these knowledge to enable them to analyse real estate problems. The main core subjects for the course consists of various areas of different disciplines such as :

#### **Valuation and investment**

- Introduction to basic valuation
- Application of valuation principles in valuing different property interest
- Statutory valuations
- Valuations of special properties
- Business valuations
- Property investment analysis

#### **Building technology and services**

- Construction industry and the building process
- Different stages of construction : site, foundations, walls, roofs, floors, finishes
- Building materials and its uses
- Mechanical and electrical installations
- Building services maintenance
- Project and construction management

#### **Economics and finance**

- Introduction to economic theory
- Application of economic theory to real estate markets
- Urban problems and urban economics
- Real estate market analysis
- Operation of real estate markets and government intervention
- Investment theories and principles
- Investment markets and the real estate markets
- Development appraisal and finance
- Assessing risk and target rates of return
- Investment selection and portfolio theory

### **Property and facilities management**

- Introduction to property management
- Management plans and strategies
- Understanding financial statements in property management
- Business management
- Facilities management theories and principles
- Planning and coordinating facilities
- Project and site management

### **Law and regulations**

- Introduction to law
- The Malaysian legal system
- The federal constitutions
- Basic contract and agency law
- Property law
- Planning law
- Local government law
- Land acquisition law
- Property taxation law

### **Planning and development**

- Planning theories and the planning system
- Development procedures and planning control
- Land use and planning policies
- Development process development appraisals and finance
- Urban design, conservation and heritage
- Environment and sustainability

The subjects offered are intended to enable graduates to be accepted and will enable them to undertake professional exercises to be accepted by the BOVAEA. Appendix 1 details out the methods in which the various learning outcomes and the general skills required of the graduate can be achieved.



**Appendix 3:  
Structure for Masters Programme**

<b>M. Sc. Facilities Management</b>		<b>M. Sc. Real Estate</b>	
<b>Subject title</b>	<b>Credits</b>	<b>Subject title</b>	<b>Credits</b>
<u>Core subjects</u>		<u>Core subjects</u>	
Facilities Management and	4	Advance valuation	4
Project Management	4	Real Estate and Portfolio Investment Analysis	4
Quality Management	4	Real Estate Market Research	4
Value and risk management	4		
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>12</b>
<u>Compulsory subjects</u>		<u>Compulsory subjects</u>	
Master's project	6	Master's project	6
Elective subjects*		Elective subjects*	
Choose 2 only	<b>8</b>	Choose 3 only	12
<u>University Subjects</u>		<u>University Subjects</u>	
Seminar on development and global issues	2	Seminar on development and global issues	2
Social developments and social science	2	Social developments and social science	2
<b>TOTAL CREDITS</b>	<b>34</b>	<b>TOTAL CREDITS</b>	<b>34</b>
<b>Elective Subjects</b>		<b>Elective Subjects</b>	
Organisation and Management		Corporate Real Estate Asset Management	
Building Performance		Project and Real Estate Development	
Support Services		Quality and Facilities Management	
Environmental Management		Decision Analysis	
Facilities Information Management System		Research Methodology	
Professional Practice			
Research Methodology			

**Appendix 4:**  
**Types of student's assessment**

Type of Assessment/ Activities	Generic Skills Addressed/ Assessed
<b>Examination</b> (40% - 50% of subject assessment). Include problem-based, low and high-order cognitive skills according to Bloom's Taxonomy.	<ul style="list-style-type: none"> <li>○ Ability to present ideas clearly and effectively</li> <li>○ Ability to define and analyze problems in complex and ill-defined domain and make well-supported judgment</li> <li>○ Ability to work under pressure</li> </ul>
<b>Group/ Individual Assignments</b>	<ul style="list-style-type: none"> <li>○ Ability to interact and work effectively with others</li> <li>○ Ability to look for alternative ideas and solutions</li> <li>○ Ability to seek relevant information from variety of sources</li> <li>○ Analyze and make decisions to solve problems involving ethical issues</li> <li>○ Understand the economic, environmental and socio-cultural impacts of actions</li> <li>○ Ability to present information effectively</li> </ul>
<b>Group/ Individual Presentations</b>	<ul style="list-style-type: none"> <li>○ Ability to express ideas clearly and confidently</li> <li>○ Ability to use technology in presentation</li> <li>○ Self-confidence and assertive qualities</li> <li>○ Commitment to collective decision</li> </ul>
<b>Peer teaching</b> Students are given tasks to learn specific topics in order to lecture in class.	<ul style="list-style-type: none"> <li>○ Openness to new ideas and capacity for self-directed learning</li> <li>○ Ability to make clear and confident presentation appropriate to audience</li> <li>○ Ability to seek relevant information from varied sources</li> <li>○ Self-confidence</li> </ul>
<b>Classroom Debate</b>	<ul style="list-style-type: none"> <li>○ Ability to express ideas clearly and confidently</li> <li>○ Ability to use technology in presentation</li> <li>○ Self-confidence and assertive qualities</li> <li>○ Ability to be resilient and persistent, and to stay focused on task</li> <li>○ Ability to actively listen and respond to the ideas of other people</li> </ul>

The following tables illustrate the proportion of direct teaching (lecture and tutorial hours) and other activities according to subject and year. Other teaching activities and learning objectives specific for certain subjects will be described as well.