

**POSTGRADUATE STUDIES  
FACULTY OF GEOINFORMATION AND  
REAL ESTATE (FGRE)**

[fght.utm.my](http://fght.utm.my)



## Postgraduate Programmes at FGRE

Faculty of Geoinformation and Real Estate (FGRE) offers postgraduate studies at Masters and Doctor of Philosophy levels. The Master's programme is divided in two modes which are Course Work and Research, while the Doctor of Philosophy programme is carried out in full research mode.

### Masters by Course Work – New Programme

FGRE offers six Master by Course Work programmes. The programmes are carried out in full time and part time basis. The programmes are:

- Master of Science (Geomatics Engineering)
- Master of Science (Geoinformatics)
- Master of Science (Remote Sensing)
- Master of Science (Real Estate)
- Master of Science (Land Administration and Development)
- Master of Assets and Facilities Management

### Master of Science (Geomatics Engineering) – Code MGHUA1AJA

The Master of Science (Geomatics Engineering) by course work consists of 6 Core Courses, 3 Elective Courses and 1 University Course. The Elective Courses are divided in two specializations (Survey & Mapping, and Utility Mapping). Besides these courses, students are required to submit a Master Project of 8 credits. To graduate, students must complete a total of 45 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 1.

Table 1: Curriculum for Master of Science (Geomatics Engineering) Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (22 CREDITS, COMPULSORY)</b>		
MGHU 1014	Geomatics Positioning/GNSS	4
MGHU 1024	Geomatics Data Analysis	4
MGHU 1034	Advances Mapping	4
MGHU 1043	Geomatics Project Management	3
MGHU 1054	Geographical Information System	4
MGHU 1063	Research Methodology	3
<b>MASTER PROJECT (8 CREDITS)</b>		
MGH MGHU 2218	Master's Project	8
<b>ELECTIVE COURSES (CHOOSE ONE (1) SPECIALIZATION GROUP ONLY) (12 CREDITS)</b>		
<b>SPECIALIZATION A: SURVEY &amp; MAPPING</b>		
MGHU 1514	Cadastral Studies	4
MGHU 1524	Advances Engineering Survey	4
MGHU 1534	Hydrographic Survey Application	4
<b>SPECIALIZATION B: UTILITY MAPPING</b>		
MGHU 1544	Underground Utility Surveying	4
MGHU 1554	Geophysics for Utility Surveying	4
MGHU 1564	Utility Mapping Standard & Practice	4
<b>TOTAL NUMBER OF CREDITS</b>		<b>45</b>

## Master of Science (Geoinformatics) – Code MGHGA1AJA

The Master of Science (Geoinformatics) by course work consists of 6 Core Courses, 3 Elective Courses and 1 University Course. Besides these taught subjects, students are required to submit a Master Project of 8 credits. To graduate, students must complete a total 45 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 2.

Table 2: Curriculum for Master of Science (Geoinformatics) Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (22 CREDITS, COMPULSORY)</b>		
MGHG 1114	Principles of GIS	4
MGHG 1124	Geospatial Databases	4
MGHG 1134	Spatial Analysis & Modeling	4
MGHG 1223	Research Methods in GIS	3
MGHG 1234	Geospatial Data Management	4
MGHG 1243	Programming for GIS	3
<b>MASTER PROJECT (8 CREDITS)</b>		
MGHG 2218	Master's Project	8
<b>ELECTIVE COURSES (CHOOSE THREE (3) COURSES) (12 CREDITS)</b>		
MGHG 1514	Geospatial Data Acquisition and Processing	4
MGHG 1524	GIS Project Management	4
MGHG 1534	GIS Applications	4
MGHG 1544	GIS Application Development	4
MGHG 1554	GIS Implementation	4
MGHG 1564	GIS & Public Policy	4
MGHG 1574	Cartography and Visualisation	4
<b>TOTAL NUMBER OF CREDITS</b>		<b>45</b>

## Master of Science (Remote Sensing) – Code MGHSA1AJA

The Master of Science (Remote Sensing) by course work consists of 7 Core Courses, 2 Elective Courses and 1 University Course. Besides these taught subjects, students are required to submit a Master Project of 8 credits. To graduate, students must complete a total 45 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 3.

Table 3: Curriculum for Master of Science (Remote Sensing) Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (26 CREDITS, COMPULSORY)</b>		
MGHS 1014	Remote Sensing Technology	4
MGHS 1024	Digital Image Processing	4
MGHS 1074	Microwave Remote Sensing	4
MGHS 1083	Research Methods in RS	3
MGHS 1054	Geographical Information System and Spatial Analysis	4
MGHS 1063	GPS Surveying	3
MGHS 1104	Applications of Remote Sensing	4
<b>ELECTIVE COURSES (CHOOSE TWO (2) COURSES) (8 CREDITS)</b>		
MGHS 1534	Atmospheric Physics	4

Codes	Courses	Credits
MGHS 1594	Advance Digital Image Processing	4
MGHS 1534	Satellite System and Earth Station	4
MGHS 1544	Remote Sensing Project Management	4
<b>MASTER PROJECT (8 CREDITS)</b>		
MGHS 1998	Master's Project	8
<b>TOTAL NUMBER OF CREDITS</b>		<b>45</b>

### Master of Science (Real Estate) – Code MGHPA1AJA

The Master of Science (Real Estate) by course work consists of 5 Core Courses, 4 Elective Courses and 1 University Course. Besides these taught subjects, students are required to submit a Master Project of 6 credits. To graduate, students must complete a total 45 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 4.

Table 4: Curriculum for Master of Science (Real Estate) Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (20 CREDITS, COMPULSORY)</b>		
MGHP 1114	Strategic Asset Management	4
MGHP 1124	Real Estate Business and Marketing	4
MGHP 1144	Real Estate Market research	4
MGHP 1134	Corporate Real Estate Asset Management	4
MGHP 1154	Research Methodology	4
<b>ELECTIVE COURSES (CHOOSE FOUR (4) COURSES) (16 CREDITS)</b>		
MGHP 1534	Real Estate Valuation	4
MGHP 1524	Real Estate Investment Analysis	4
MGHP 1514	Strategic Facilities Management	4
MGHP 1544	Real Estate Development	4
<b>MASTER PROJECT (6 CREDITS)</b>		
MGHP 1196	Master Project	6
<b>TOTAL NUMBER OF CREDITS</b>		<b>45</b>

### Master of Science (Land Administration and Development) – Code MGHNA1AJA

The Master of Science (Land Administration and Development) by course work consists of 5 Core Courses, 4 Elective Courses and 1 University Course. Besides these taught subjects, students are required to submit a Master Project of 8 credits. To graduate, students must complete a total 45 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 5.

Table 5: Curriculum for Master of Science (Land Administration and Development) Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (20 CREDITS, COMPULSORY)</b>		
MGHN 1514	Land Information and Administration System	4
MGHN 1524	Law of Land Development	4

Codes	Courses	Credits
MGHN 2554	Planning and Development	4
MGHN 1503	Applied Economics of Property Development	3
MGHN 2523	Research Methodology in LAD	3
<b>ELECTIVE COURSES (CHOOSE FOUR (4) COURSES) (16 CREDITS)</b>		
MGHN 2624	Islamic Land Law and Financing	4
MGHN 2634	Environmental and Natural Resource Management	4
MGHN 2514	Law on Apartment Ownership	4
MGHN 2544	Land and Development in Europe (Strategic Land Development and Practices) (rebranding)	4
<b>MASTER PROJECT (8 CREDITS)</b>		
MGHN 2548	Master Project	8
<b>TOTAL NUMBER OF CREDITS</b>		<b>45</b>

### Masters of Assets and Facilities Management – Code MGHTA1AJA

The Masters of Assets and Facilities Management by course work consists of 5 Core Courses, 4 Elective Courses and 1 University Course. Besides these taught subjects, students are required to submit a Master Project of 8 credits. To graduate, students must complete a total 46 credits. Students are assessed through assignments, presentations and final examination. The curriculum of the programme is shown in Table 6.

Table 6: Curriculum for Masters of Assets and Facilities Management Programme

Codes	Courses	Credits
<b>UNIVERSITY COURSE (3 CREDITS)</b>		
UHAW6023	Science and Social Development	3
<b>CORE COURSES (20 CREDITS, COMPULSORY)</b>		
MGHT 1114	Strategic Asset Management	4
MGHT 1124	Strategic Facilities Management	4
MGHT 1134	Project & Contract Management	4
MGHT 1144	Strategic Maintenance Management	4
MGHT 1154	Research Methodology in FM	4
<b>ELECTIVE COURSES (CHOOSE FOUR (4) COURSES) (16 CREDITS)</b>		
MGHT 1513	Financial Management/ Risk Management	3
MGHT 1523	Quality Management /Value Management	3
MGHT 1534	Facilities Information Technology Solutions/ Sustainable Environmental Management (FITS/SEM)	3
MGHT 1543	Performance Management	3
MGHT 1553	Professional Practice	3
<b>MASTER PROJECT (8 CREDITS)</b>		
MGHT 1168	Master Project	8
<b>TOTAL NUMBER OF CREDITS</b>		<b>46</b>

## **Master by Research Programme**

FGRE offers Master of Philosophy programmes with seven fields of specializations. The programmes are carried out in full time and part time basis. The full time basis will take 4 semesters and the part time basis will take about 8 semesters to graduate. Students enrol in this programme is compulsory to appoint at least one supervisor (academic staff from FGRE). Students are allowed to appoint co-supervisors. Students are also required to take course on Research Methodology and 3 credits University Course. The fields of specializations offered are:

- Geomatics Engineering (Code MGHUA3AJA)
- Geoinformatics (Code MGHGA3AJA)
- Remote Sensing (Code MGHSA3AJA)
- Hydrography (Code MGHHA3AJA)
- Real Estate (Code MGHPA3AJA)
- Land Administration and Development (Code MGHNA3AJA)
- Facilities Management (Code MGHTA3AJA)

Students enrol in the programme are compulsory to present their research proposal in semester 2. The proposal will be evaluated by two internal panels that will be appointed by the FGRE postgraduate academic task force. In order to graduate, students are required to submit a complete thesis by following the UTM Thesis Writing Guidelines. The viva voce session will be held at FGRE Postgraduate Office. Students enrol in the programme are encourage to publish their research in the international refereed journals as an evidences to the originality of their Master research work.

## **Doctor of Philosophy Programme**

FGRE offers Doctor of Philosophy (PhD) programme with seven fields of specializations. The programmes can be carried out in full time and part time basis. The full time basis will take 6 semesters and the part time basis will take about 12 semesters to graduate. Students enrol in this programme is compulsory to appoint at least one supervisor (academic staff from FGRE). Students are allowed to appoint co-supervisors. Students are also required to take course on Research Methodology and 3 credits University Course. The fields of specializations offered are:

- Geomatics Engineering (Code PGHUA3AJA)
- Geoinformatics (Code PGHGA3AJA)
- Remote Sensing (Code PGHSA3AJA)
- Hydrography (Code PGHHA3AJA)
- Real Estate (Code PGHPA3AJA)
- Land Administration and Development (Code PGHNA3AJA)
- Facilities Management (Code PGHTA3AJA)

Students enrol in the programme are compulsory to present their research proposal in semester 3. The proposal will be evaluated by two internal panels that will be appointed by the FGRE postgraduate academic task force. In order to graduate, students are required to prepare complete thesis by following the UTM Thesis Writing Guidelines. The viva voce session will be held at School of Postgraduate Studies UTM. Students enrol in the programme are encourage to publish in international refereed journals as evidences to the originality of their PhD research work.

## Entry Requirements and Tuition Fee

The entry requirement is based on **ASSESSMENT GUIDELINES ADMISSION 1998 AMENDMENT 1 2008** as below:

ITEM	ELIGIBILITY	OTHERS IHL	INTERNATIONAL UNIVERSITY GRADUATE
1.	First Class Second Class Upper (II : I) CPA 4.00 : $\geq 3.00$ Score 20 : $\geq 15$ CPA 5.00 : $\geq 3.75$ Marks 100 ( %) $\geq 75\%$  Marks 1000 : $\geq 750$ Excellent Pass	No experience required  JPA Recognition	No experience required  *
2.	Second Class Lower (II : II) CPA 4.00 : $2.70 \leq CPA < 3.00$ Score 20 : $13.5 \leq CPA < 15$ CPA 5.00 : $3.38 \leq CPA < 3.75$ Marks 100 ( %) : $67.5 \% \leq CPA < 75\%$  Marks 1000 : $675 \leq CPA < 750$ Very Good Pass	2 years working experience in related field  JPA Recognition	1 years working experience in related field  *

ITEM	ELIGIBILITY	OTHERS IHL	INTERNATIONAL UNIVERSITY GRADUATE
3.	Second Class Lower (II : II) CPA 4.00 : $2.50 \leq CPA < 2.70$ Score 20 : $12.5 \leq CPA < 13.5$ CPA 5.00 : $3.13 \leq CPA < 3.38$ Marks 100 ( %) : $62.5\% \leq CPA < 67.5\%$  Marks 1000 : $625 \leq CPA < 675$ Good Pass	4 years working experience in related field  JPA Recognition	3 years working experience in related field  *
4.	Second Class Lower (II : II) CPA 4.00 : $2.30 \leq CPA < 2.50$ Score 20 : $11.5 \leq CPA < 12.5$ CPA 5.00 : $2.88 \leq CPA < 3.13$ Marks 100 ( %) : $57.5 \% \leq CPA < 62.5\%$  Marks 1000 : $575 \leq CPA < 625$ Pass	6 years working experience in related field  JPA Recognition	5 years working experience in related field

## **English Requirement**

All international students applying to UTM must have a valid two-year old TOEFL or IELTS certificate. Students with a TOEFL score of 550 (or 79 IBT) or an IELTS Band 6 will be enrolled in a faculty programme without undergoing UTM English Courses.

Starting from Semester II/2010/2011, students who applied for Master or PhD programme - Teaching English as a Second Language, must have a valid two-year certificate of TOEFL with a score of 600 and above or IELTS Band 7 and above (or IBT/CBT equivalent).

## **Tuition Fee**

The tuition fee for Master programmes for both local and international students is shown in Table 7 and Table 8, respectively. The tuition fee for PhD programmes is shown in Table 9 and Table 10.



Table 7: Tuition Fee for Master Programmes (for Local Student)

Student Category	FEES FOR PER SEMESTER BY PROGRAMME			
	Master Taught Course / Taught Course & Research (Mixed Mode)		Master (Research)	
	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
New Student (First Semester)	3,270.00	2,270.00	3,170.00	2,370.00
Continuing Student (Semester II)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester III)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester IV & beyond)	** (Any extra sem)	1,920.00	** (Any extra sem)	1,620.00
Continuing Student (Semester V & beyond)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)
<b>Total Tuition Fees (Normal duration)</b>	<b>9,110.00</b>	<b>8,030.00</b>	<b>8,010.00</b>	<b>7,230.00</b>

Table 8: Tuition Fee for Master Programmes (for International Student)

Student Category	FEES FOR PER SEMESTER BY PROGRAMME			
	Master Taught Course / Taught Course & Research (Mixed Mode)		Master (Research)	
	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
New Student (First Semester)	7,595.00	5,095.00	6,745.00	4,745.00
Continuing Student (Semester II)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester III)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester IV & beyond)	** (Any extra sem)	4,745.00	** (Any extra sem)	3,995.00
Continuing Student (Semester V & beyond)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)
<b>Total Tuition Fees (Normal duration)</b>	<b>22,085.00</b>	<b>19,330.00</b>	<b>18,735.00</b>	<b>16,730.00</b>

Table 9: Tuition Fee for PhD Programmes (for Local Student)

Student Category	FEES FOR PER SEMESTER BY PROGRAMME			
	Doctor of Philosophy (Mixed Mode)		Doctor of Philosophy (Research)	
	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
New Student (First Semester)	3,970.00	2,970.00	3,470.00	2,670.00
Continuing Student (Semester II)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester III)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester IV)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester V)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester VI)	2,920.00	1,920.00	2,420.00	1,620.00
Continuing Student (Semester VII)	** (Any extra sem)	1,920.00	** (Any extra sem)	1,620.00
Continuing Student (Semester VIII)	** (Any extra sem)	1,920.00	** (Any extra sem)	1,620.00
Continuing Student (Semester X & beyond)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)
<b>Total Tuition Fees (Normal duration)</b>	<b>18,570.00</b>	<b>16,410.00</b>	<b>15,570.00</b>	<b>16,410.00</b>

Table 10: Tuition Fee for PhD Programmes (for International Student)

Student Category	FEES FOR PER SEMESTER BY PROGRAMME			
	Doctor of Philosophy (Mixed Mode)		Doctor of Philosophy (Research)	
	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
New Student (First Semester)	8,295.00	5,795.00	7,045.00	5,045.00
Continuing Student (Semester II)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester III)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester IV)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester V)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester VI)	7,245.00	4,745.00	5,995.00	3,995.00
Continuing Student (Semester VII)	** (Any extra sem)	4,745.00	** (Any extra sem)	3,995.00
Continuing Student (Semester VIII)	** (Any extra sem)	4,745.00	** (Any extra sem)	3,995.00
Continuing Student (Semester X & beyond)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)	** (Any extra sem)
<b>Total Tuition Fees (Normal duration)</b>	<b>44,520.00</b>	<b>39,010.00</b>	<b>37,020.00</b>	<b>33,010.00</b>

**For further information, please contact:**

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