

## School of Information and Communication Technology

### Faculty of Computing and Digital Technology

## Student Handbook

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The provisions of this publication are not to be regarded as an irrevocable contract between the students and HELP. The university reserves the right to change any provision or requirement at any time. The university reserves the right to make changes of an editorial nature to correct or amend the text of this program handbook.

The conditions outlined in this Program Handbook refers to the HELP University's own programs unless otherwise mentioned. All programs conducted by HELP University with its partners shall be subjected to the terms and conditions stated by the partners. In the absence of certain terms and conditions by the partners, HELP University's terms and conditions shall prevail.

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*Updated: December 2021*

**HELP Vision**

- ❖ To be University with strong culture and strong leadership that focuses on sound academic standards, continuous improvement, and the talent development of students and staff.
- ❖ To be University that offers learning experience that enhances career development, lifetime values and personal fulfilment.
- ❖ To be University with strong research focus in our key areas of excellence.
- ❖ To be a University that shares our success with the stakeholders and communities we serve.

**HELP Mission**

- ❖ To help people succeed in life and to live a life of significance through education

## **1. Introduction**

Welcome to the Faculty of Computing and Digital Technology of HELP University (HELP).

This Student Handbook (Handbook) outlines the academic and administrative structure for all candidates of the faculty programme, stipulating HELP policy and procedure, subject to regulatory guidelines for your programme progression and completion.

**Students are advised to:**

- **Read and understand the Handbook carefully before commencing their studies as well as whenever necessary during the course progression; and**
- **Obtain needful clarification and/or more information from the faculty on any information in the Handbook as well as other matters concerning their course.**

HELP University reserves the right to revise academic and administrative policy and procedure as well as the rates of course fees and charges after Management has given approval for the revision.

Undertaking an undergraduate or postgraduate programme successfully as an adult with a career, family and personal commitments is a challenging task. It requires physical and intellectual stamina, commitment, discipline and good time management; resulting in competence, confidence and networking advantage, among other attributes that you will gain, for an enriching and rewarding career and for success in life.

As a member of the HELP student community, you will be part of a larger cohort of students from diverse backgrounds and work experiences. The interaction with your fellow students and academic facilitators is part of your learning process. We trust that the faculty experience will provide you with the opportunity to develop beneficial social and business relationships.

We hope you will find your association with HELP and the faculty an enjoyable and rewarding one.

**Faculty of Computing and Digital Technology,  
HELP University**

## **2. Welcome Note from the Dean**

The Faculty of Computing and Digital Technology (formerly the Faculty of Applied Sciences and Multimedia) was established in 1998 to prepare individuals for a rewarding career in computing. Information and digital technologies are now part of daily life in a way that could not be envisioned in 1998. In particular, digital technologies and business performance are inextricably interwoven. Digital technologies continue to develop with breath taking and disruptive rapidity, with a continuing significant and urgent demand for qualified, competent and creative professionals.

High organisational performance can be built on alliances and partnerships. HELP has forged robust links with institutions of higher learning in more than 30 countries, with many partners across Asia and Europe. The strength of HELP's own and collaborative programmes has also enabled HELP scholars to obtain PhD scholarships from the world's top universities in the UK and Australia.

The School of Information and Communication Technology works closely with its global partners and IT professional bodies to ensure that our curricula stay relevant to current needs and future challenges. Graduates require marketable skills to compete in the jobs market, and these skills sets change and evolve. We constantly review our pedagogy and delivery models to maintain the most relevant approach. At HELP we do not compromise on quality, and our consistent efforts to enhance quality recently won us a Brand Laureate Award. Our graduates are ideally positioned to drive the IT industry towards higher levels of innovation and success.

The School's robust links with industry have enabled us to introduce an innovative series of internship programmes that not only offer students valuable work experience, but also provide specific knowledge and development of specialised skills. Our mission is to produce self-directing graduates who can master new skills quickly and efficiently. Our primary aim is to produce graduates able to embrace rapid technological change and economic evolution, and at the same time prepare them to meet the demands and challenges of the Fourth Industrial revolution. We endeavour to instil attitudes and values that will prepare them for a lifetime of continued learning and leadership. The School distinguishes itself by adopting and facilitating unique approaches to teaching and learning models.

We welcome you to HELP University.

**Associate Professor Dr Sien Ven Yu**

**Dean  
Faculty of Computing and Digital Technology**

### 3. School of Information and Communication Technology

The School of Information and Communication Technology (School of ICT), led by the Head of School, is staffed by a group of highly qualified and committed academicians that are equipped with a diverse exposure to a wide range of disciplines. Their combined experiences in both the public and private sectors ensure that the quality of teaching is maintained at a high standard.

With HELP University's mission statement, to be the leading and most successful education institution in fulfilling the education needs and aspirations of Malaysians, the School of ICT plays an integral role in this respect.

The IT programmes are offered at diploma and undergraduate level with options to transfer to top partner universities, such as the University of Queensland, the Australian National University, the University of Technology Sydney, Beijing Jiaotong University and the University of Essex.

In recognition of its efforts to produce industry-ready technology graduates, HELP University was conferred the Premier Digital Tech University (PDTU) award by the Malaysian Digital Economy Corporation (MDEC). The PDTU is endorsed by the Ministry of Education to selected Institutions of Higher Learning that are able to deliver first class courses in digital technology to produce highly-employable graduates.

#### Staff List for the School of Information and Communication Technology

The school is supported academically by lecturers with industry as well as teaching experience, with expertise and strengths in the various areas of information and communication technology.

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#### **4. Mission, Vision & Values**

##### **Mission**

To help people succeed in life and to live a life of significance through education.

##### **Vision**

- a) To be a university with a strong culture of quality and leadership that focuses on sound academic standards, continuous improvement, and the talent development of students and staff
- b) To be a university that offers a learning experience that enhances career development, lifetime values and personal fulfilment
- c) To be a university with a strong research focus in key areas of excellence
- d) To be a university that shares our success with the stakeholders and the communities we serve

##### **Corporate Values**

The educational and corporate philosophy of HELP University is:

- a) Pride of Achievement
- b) Sharing Success
- c) The Courage to Be
- d) To be Compassionate
- e) To be Significant

##### **Teaching Philosophy & Pedagogy**

##### **Teaching Philosophy**

At HELP University, we focus on:

- a) The Skill of Conceptualisation
- b) The Science of Organisation
- c) The Art of Articulation
- d) The Practice of Application

##### **Pedagogy**

HELP's success lies in its unique educational philosophy and pedagogy. Firmly believing that education is an opportunity for an individual to realise his/her fullest potential in order to reach the pinnacle of his/her vocation and to lead a meaningful and fulfilling life, we utilise our faculty's impeccable academic credentials and vast experience in all levels and modes of education to design and deliver programmes that live up to the highest standards.

Moreover, the quality of instruction and delivery is benchmarked against the highest standards and criteria, and is guaranteed by an elaborate system of quality assurance imposed by examining boards, external examiners, peer evaluators and statutory regulations.

Our educational philosophy is holistic. On campus, there are sophisticated and unique programmes and services offered by qualified and experienced counsellors and psychologists for pastoral care and personal development of students to enable them to undertake their rigorous studies in the best psychological and emotional frames of mind for maximum achievement.

## **Quality Assurance**

### **Preserving the Best There Is**

HELP's unique reputation as a university of achievers has ensured it a worldwide reputation. The high standards that it has painstakingly achieved are guaranteed, and where necessary, enhanced through a system of Quality Assurance by HELP's partner universities and statutory requirements. In addition, HELP was the first private institution of higher learning to obtain the ISO 9001:2000 under AJA. Currently, the certification body for HELP's ISO 9001:2015 is NQA. In addition, since June 2020, HELP has been certified to ISO 45001:2018.

Quality assurance in HELP is based on a system of internal and external peer scrutiny. The principles of quality assurance in HELP is based on a developmental approach and viewed as a shared responsibility executed in a centralised and decentralised manner. Whilst the Vice Chancellor and senior management staff play a major role in steering the University's quality assurance system, all members of the University community are entrusted to recognise and promulgate best quality practices.

### **Accreditation**

HELP University's programmes are recognised/accredited by the Malaysia Ministry of Higher Education, the Malaysian Qualifications Agency (MQA), the Multimedia Development Corporation and universities in Australia, New Zealand, United Kingdom, and United States of America. Our Diploma and Foundation programs are accepted for entry into top ranked universities, while our bachelor's degrees are accepted for postgraduate studies in leading universities in the UK, Australia and the USA. In addition, they are given maximum exemption by professional bodies for admission into professional qualifications.

## **5. Programmes**

Technology is evolving at a great speed. The School of ICT offers current and relevant programmes that prepare our students for the future workforce.

Students are expected to progress in accordance with the course timetable unless there is good reason for not doing so. Students are advised that unless personal or business commitments necessitate deferment of one or more subjects, it is in their interest to complete the course as scheduled. If one or more subject deferments need to be made, students are still expected to complete the course within the required duration of commencement.

Students who exceed the maximum duration and wish to continue have to obtain approval for continuation. Such extension shall not exceed the maximum duration from commencement of the programmes. A continuation fee of RM2,000.00 is chargeable for each year beyond 3 years up to a maximum of an additional 2 years. The rate is subject to change without notice.

### **Course Progression**

HELP keeps track of a student's progression and may ask for a written explanation if a student is found to be progressing unsatisfactorily in terms of results or non-enrolment of subject for an unreasonable length of time (about 6 months or more). This is especially important for international students because the Malaysian Immigration may not renew their student pass if they had been inactive or if they did not progress satisfactorily without reason.

### **Attendance**

All students are expected to keep satisfactory attendance rate for all modules enrolled. For International students, a minimum regulatory requirement of 80% attendance must be met for each enrolled subject. Failing which, the student may risk cancellation of their visa.

### **5.1. Diploma in Information Technology**

At HELP University, the IT programmes are designed to equip students with up-to-date expertise in corporate information systems, internet and interactive media, mobile communications technologies, computer systems and networking, and software engineering. Students are trained to gain technical knowledge and skills. The programmes also prepare the students to assume their place in the demanding Information Technology industry.

The Diploma in Information Technology encompasses a thorough grounding in the fundamental skills as well as providing a theoretical understanding which is vital for an IT graduate. Students will be exposed to programming, as well as networking and business communication. Lifelong learning skills are integrated into the Level One units with emphasis on critical thinking skills and personal excellence. Students are also taught communication and personal skills to enable them to interact effectively in the demanding workforce.

#### **Programme Educational Objectives**

The Diploma in Information Technology will produce information technology professionals who are:

- PEO1. Equipped with the coherent foundational knowledge of IT principles and the necessary technical skills to pursue a career in the IT industry.
- PEO2. Able to exhibit sound presentation and communication skills; and capable of working in a team environment and demonstrate effective leadership skills.
- PEO3. Problem-solvers and innovative thinkers, able to learn and apply computational skills independently and efficiently; and consequently succeed in a competitive professional or academic environment.

- PEO4. Able to demonstrate an awareness of social and national responsibilities; and behave ethically and responsibly in the professional environment.
- PEO5. Able to demonstrate an entrepreneurial mindset that incorporates creativity, innovation and analytical abilities; and apply skills and principles of lifelong learning in an academic and professional development.

### **Programme Learning Outcomes**

At the end of the programme, graduates will be able to:

- PLO1. Acquire and apply knowledge and skills in programming and problem-solving to assist within an organisation's infrastructure and its stakeholders.
- PLO2. Apply analytical skills and principles of lifelong learning to organize, manage and evaluate information.
- PLO3. Use computational tools to configure, integrate and deploy systems and software according to the organisation's needs; as well as providing maintenance and technical support within the organization.
- PLO4. Interact and collaborate effectively with peers, stakeholders and the community.
- PLO5. Able to demonstrate an entrepreneurial mindset that incorporates creativity, innovation and analytical abilities; and apply skills and principles of lifelong learning in an academic and professional development.
- PLO6. Apply a broad range of information, media and technology apps in solving IT problems in academic, global, economic and societal contexts.
- PLO7. PLO7 Apply computational thinking and graphical/visual data in solving IT problems in academic, global, economic and societal contexts.
- PLO8. Function individually or in teams effectively, with a capability to be a leader.
- PLO9. Apply skills and principles of lifelong learning for social, economic and PLO9 Apply skills and principles of lifelong learning for social, economic and PLO9 Apply skills and principles of lifelong learning for social, economic and
- PLO10. Demonstrate an entrepreneurial mindset in the development of IT solutions.
- PLO11. Understand and commit professionally, ethically and with humane responsibility in the field of information and computing ethics.

### **Programme Structure**

- 2 years programme
- 19 academic subjects to be completed in a minimum period of 2 years
- 14 weeks per full semester; 7 weeks per short semester
- 4.5 - 5 hours of teaching per subject per week

### Maximum Duration for Programme Completion

The maximum time allowed for a student to complete a programme is four (4) years for the Diploma programme.(w.e.f. August 2021)

### Progression

Students who have completed the Diploma in Information Technology with the necessary electives, will be able to pursue their studies towards one of the following programmes listed in Table 1. For partner universities, students will have to fulfill the minimum entry requirements set by the respective universities.

**Table 1. Progression to Undergraduate Degree**

No.	Programme Name	Abbreviation	Degree Awarded By
1	Bachelor of Information Technology (Hons)	BIT	HELP University
2	Bachelor of Information Technology (Hons) Data Analytics	BDA	HELP University
3	Bachelor of Software Engineering	BJTU 2+2	Beijing Jiaotong University
4	Bachelor of Information Technology	UQ 2+1.5	University of Queensland
5	Bachelor of Computer Science	UQ 2+2	University of Queensland
6	Bachelor of Information Technology	ANU 2+2	Australian National University
7	Bachelor of Computing Systems	EIT 2+1.5	Eastern Institute of Technology
8	Bachelor of Science in Information Technology	UTS 2+1.5	University of Technology Sydney
9	BSc Information & Communication Technology /BSc Computer Games /BSc Computer Science	Essex 2+2	University of Essex
10	Bachelor of Information Technology	Cardiff 2+2	Cardiff University
11	Bachelor of Business Analytics	MQ (2+2)	Macquarie University



## 5.2. Bachelor of Information Technology (Honours)

The Bachelor of Information Technology (Hons) offered by HELP University is a three-year course and is designed to equip students with skills and attributes required to be effective and efficient computing professionals.

The Bachelor of Information Technology (Hons) course has a core of IT subjects complemented with a selection from a wide range of subjects that includes the latest advances in IT skills, concepts and applications.

We put premium on instilling students with the expertise and skills to take on a new challenge of a career in IT. Graduates may find employment as computing professionals in both the commercial and technical sectors of the computing industry. Employers might be in manufacturing, commerce, small businesses, financial enterprises, public utilities, education or welfare.

### Programme Educational Objectives

The Bachelor of Information Technology (Hons) will produce information technology professionals who are:

- PEO1. Equipped with the necessary knowledge and technical skills to keep abreast of the rapidly evolving technological landscape.
- PEO2. Able to exhibit sound presentation and communication skills; and capable of working in a team environment and demonstrate effective leadership skills.
- PEO3. Problem-solvers and innovative thinkers, able to learn and apply computational skills independently and efficiently; and consequently able to succeed in a competitive.
- PEO4. Able to demonstrate an awareness of social and national responsibilities.
- PEO5. Able to demonstrate an entrepreneurial mindset that incorporates creativity, innovation and analytical abilities; and apply skills and principles of lifelong learning in an academic and professional development.

### Programme Learning Outcomes

At the end of the programme, graduates will be able to:

- PLO1. Acquire and apply knowledge of principles, concepts and techniques associated with computing and IT.
- PLO2. Apply analytical skills and principles of lifelong learning to organize, manage and evaluate information.
- PLO3. Use computational tools and packages in the design, development, management and implementation of information systems.
- PLO3. Use computational tools and packages in the design, development, management and implementation of information systems.
- PLO4. Interact and collaborate effectively with peers, stakeholders and the community.
- PLO5. Interact and collaborate effectively with peers, stakeholders and the community.
- PLO6. Apply a broad range of information, media and technology apps in solving IT problems in academic, global, economic and societal contexts.
- PLO7. Apply computational thinking and graphical/visual data in solving IT problems in academic, global, economic and societal contexts.
- PLO8. Function individually or in teams effectively, with a capability to be a leader.
- PLO9. Apply skills and principles of lifelong learning for social, economic and individual development.
- PLO10. Demonstrate an entrepreneurial mindset in the development of IT solutions.
- PLO11. Understand and commit professionally, ethically and with humane responsibility in the field of information and computing ethics.

### Programme Structure

- 3 years programme
- 25 academic subjects to be completed in a minimum period of 3 years
- 14 weeks per full semester; 7 weeks per short semester
- 4.5-5 hours of teaching per subject per week

### Maximum Duration for Programme Completion

The maximum time allowed for a student to complete a programme is six (6) years for Bachelor's degree programmes. (w.e.f. August 2021)

### Progression

Students who have completed Year 1, Year 2 or Year 3 of the Bachelor of Information Technology with the necessary electives, will be able to pursue their studies towards one of the following programmes listed in Table 2. For partner universities, students will have to fulfill the minimum entry requirements set by the respective universities.

**Table 2. Credit Transfer Pathways**

No.	Programme Name	Abbreviation	Degree Awarded By
1	Bachelor of Software Engineering	BJTU 2+2	Beijing Jiaotong University
2	Bachelor of Information Technology	UQ 2+1	University of Queensland
3	Bachelor of Computer Science	UQ 2+1.5	University of Queensland
4	BEng (Software) (Honours)	UQ 2+2	University of Queensland
5	Master of Computer Science	UQ 2+1+1.5	University of Queensland
6	Master of Computer Science	UQ 3+1.5	University of Queensland
7	Bachelor of Information Technology	ANU 2+1.5	Australian National University
8	Bachelor of Software Engineering (Honours)	ANU 2+2	Australian National University
9	Bachelor of Advanced Computing (Honours)	ANU 2+2	Australian National University
10	BSc Information & Communication Technology	Essex 2+1	University of Essex
11	BSc Computer Games	Essex 2+1	University of Essex
12	BSc Computer Science	Essex 2+1	University of Essex
13	BSc Computer Science	Cardiff 1+2 or 1+3 with 1year internship	Cardiff University
14	BSc Computer Science with Specialism	Cardiff 1+2 or 1+3 with 1year internship	Cardiff University

15	BSc Software Engineering	Cardiff 1+2 or 1+3 with 1year internship	Cardiff University
17	BSc Business Information Systems	Cardiff 1+2 or 1+3 with 1year internship	Cardiff University
18	MSc Advanced Computer Science		Cardiff University
19	MSc Information Security and Privacy		Cardiff University
20	MSc Computing		Cardiff University
21	MSc Computing and IT Management		Cardiff University
22	Swansea University	Swansea 1+2	Swansea University
23	MSc Computer Science		Northumbria University
24	MSc Business Information Systems Management		Northumbria University
25	MSc Computer Network Technology		Northumbria University

### **Work-Based Learning (WBL) Mode**

Students who have completed Year 1 and Year 2 of the Bachelor of Information Technology (Hons) programme have the option to pursue a WBL mode, subject to the following conditions:

- Minimum CGPA of 3.25 at the time of application for WBL;
- Acceptance from the WBL organisation;
- Enrolment into the following subjects during the WBL period:
  - Final Year Project I
  - Final Year Project II
  - Industrial Internship
  - Business Development Plan
  - IT Project Management
  - IT Management, Ethics and Security
  - Web Technologies
  - Mobile Applications Development

Students who would like to apply for the WBL option are encouraged to consult the School of ICT in Year 2.

### **5.3. Bachelor of Information Technology (Honours) Data Analytics**

The primary aim of the Bachelor of Information Technology (Hons) Data Analytics is to produce graduates with an understanding of the business challenges of an enterprise, and the ability to conceive and manage solutions that are increasingly data-driven. The programme also aims to address the high industry demand for business and data analysts. Graduates will be trained in the latest data analytics methods and tools; including fundamental and advanced statistical and mathematical principles upon which advanced data analysis techniques are built (machine learning, pattern recognition, data mining, etc.). They will be able to consult on, support or develop the technological platforms of an enterprise to achieve competitive advantage, building a career in roles ranging from data and systems analysts to data engineers and data scientists. Graduates will be able to independently understand, work through and solve problems that arise in the area of management and IT as well as in interdisciplinary matters in practice.

#### **Programme Educational Objectives**

The Bachelor of Information Technology (Hons) Data Analytics will produce information technology professionals who are:

- PEO1. Equipped with the necessary knowledge and technical skills in computational methods/tools for achieving strategic business analysis and decision-making goals.
- PEO2. Able to exhibit sound presentation and communication skills; and capable of working in a team environment and demonstrate effective leadership skills.
- PEO3. Problem-solvers and innovative thinkers, able to learn and apply computational skills independently and efficiently; and consequently able to succeed in a competitive professional or academic environment.
- PEO4. Able to demonstrate an awareness of social and national responsibilities; and behave ethically and responsibly in the professional environment.
- PEO5. Able to demonstrate an entrepreneurial mindset that incorporates creativity, innovation and analytical abilities; and apply skills and principles of lifelong learning in an academic and professional development.

#### **Programme Learning Outcomes**

At the end of the programme, graduates will be able to:

- PLO1. Acquire and apply knowledge of principles, concepts and techniques associated with the management and analysis of data to meet business needs.
- PLO2. Apply analytical skills and principles of lifelong learning to organize, manage and evaluate information.
- PLO3. Use computational tools and packages in the design, development, management and implementation of data and analytics models.
- PLO4. Interact and collaborate effectively with peers, stakeholders and the community.
- PLO5. Interact and collaborate effectively with peers, stakeholders and the community.
- PLO6. Apply a broad range of information, media and technology apps in solving IT problems in academic, global, economic and societal contexts.
- PLO7. Apply computational thinking and graphical/visual data in solving IT problems in academic, global, economic and societal contexts.
- PLO8. Function individually or in teams effectively, with a capability to be a leader.
- PLO9. Apply skills and principles of lifelong learning for social, economic and individual development.
- PLO10. Demonstrate an entrepreneurial mindset in the development of IT and analytics solutions.
- PLO11. Act professionally, ethically and with humane responsibility, with awareness of the impact of technology on individuals, organisations and society.

### Programme Structure

- 3 years programme
- 25 academic subjects to be completed in a minimum period of 3 years
- 14 weeks per full semester; 7 weeks per short semester
- 4.5-5 hours of teaching per subject per week

### Maximum Duration for Programme Completion

The maximum time allowed for a student to complete a programme is six (6) years for Bachelor's degree programmes.

### Progression

Students who have completed Year 1, Year 2 or Year 3 of the Bachelor of Information Technology with the necessary electives, will be able to pursue their studies towards one of the following programmes listed in Table 3. For partner universities, students will need to fulfill the minimum entry requirements set by the respective universities.

**Table 3. Credit Transfer Pathways**

No.	Programme Name	Abbreviation	Degree Awarded By
1	Master of Computer Science	UQ 2+1+1.5	University of Queensland
2	Master of Computer Science	UQ 3+1.5	University of Queensland
3	Bachelor of Information Technology	ANU 2+1.5	Australian National University
4	BSc Information & Communication Technology	Essex 2+1	University of Essex
5	BSc Computer Science with Specialism	Cardiff 1+2 or 1+3 with 1 year internship	Cardiff University
6	BSc Business Information Systems	Cardiff 1+2 or 1+3 with 1 year internship	Cardiff University
7	Msc Information Security and Privacy		Cardiff University
8	MSc Computing and IT Management		Cardiff University
9	MSc Business Information Systems Management		Northumbria University
10	Bachelor of Business Analytics	MQ (1.5+1.5)	Macquarie University

#### 5.4. Master of Data Science

The programme aims to produce graduates to meet the growing demand for data science professionals who are capable of making decisions based on the availability of comprehensive data. It prepares graduates to apply analytics techniques for knowledge discovery and dissemination to assist researchers or decision-makers in achieving organisational objectives.

##### Objectives

The objectives of the Master of Data Science are to produce graduates who are able to:

- Apply quantitative modelling and data analysis techniques to the solution of real world business problems, communicate findings, and effectively present results using data visualisation techniques.
- Recognise and analyse ethical issues in business related to intellectual property, data security, integrity, and privacy.
- Demonstrate knowledge of statistical data analysis techniques utilised in decision-making.
- Use data mining software to solve real-world problems.
- Employ cutting edge tools and technologies to analyse Big Data.
- Apply algorithms to build machine intelligence.
- Demonstrate use of team work, leadership skills and decision making.

The Programme Educational Objectives (PEO) of the Master of Data Science are to produce graduates who are:

<b>PEO1</b>	knowledgeable and technically competent in the discipline of data science in line with industry requirements.
<b>PEO2</b>	effective communicators who collaborate well with stakeholders and demonstrate good leadership quality in an organization.
<b>PEO3</b>	problem solvers and critical thinkers, able to approach data science problems using numerical and computing skills with an understanding of professional and ethical responsibilities.
<b>PEO4</b>	life long learners, who are able to demonstrate entrepreneurial skills for successful personal and career advancement in the field of data science.

##### Programme Learning Outcomes (PLO)

A graduate of the Master of Data Science will be able to:

<b>PLO1</b>	Integrate knowledge concerning current research issues and produce work that is at the forefront of developments in the field of data science.
<b>PLO2</b>	Apply problem-solving skills, computational thinking and statistical analysis to develop and evaluate data science models.
<b>PLO3</b>	Use contemporary software tools for data management, model development and evaluation.
<b>PLO4</b>	Work collaboratively with stakeholders from diverse backgrounds.
<b>PLO5</b>	Communicate effectively with stakeholders to prepare and present technical material to a diverse audience.
<b>PLO6</b>	Apply computing skills to develop and manage data science models.
<b>PLO7</b>	Apply mathematical and other quantitative skills to analyze and evaluate numerical data.
<b>PLO8</b>	Function individually or in teams effectively, with a capability to be a leader.
<b>PLO9</b>	Pursue independent study and demonstrate the awareness for lifelong learning and professional development in data science.

<b>PLO10</b>	Demonstrate an entrepreneurial mindset in the development of analytics solutions.
<b>PLO11</b>	Act professionally, ethically and with humane responsibility, with awareness of the impact of data science projects on individuals, organisations and society.

#### Programme Details

1. 6 academic subjects to be completed in a minimum period of 1 year for full time and 2 years for part time.
2. Short semesters = 11 weeks; Long semester=21 weeks.
3. 5 hours of teaching per subject per week.

#### Programme Structure and Maximum Duration for Programme Completion

**Program Name : Master of Data Science (FULL TIME)**

**Program Code : HUMDS**

**Min Duration : 1 Year**

**Max Duration : 3 Years**

Semester	Subject Code	Subject Name	Classification	Credit Hours
Semester 1 (11 weeks)	MDS501	Programming for Data Science	Core	4
	MDS502	Data Management	Core	4
	MDS503	Statistics for Data Science	Core	4
Total credit hours for semester 1				<b>12</b>
Semester 2 (11 weeks)	MDS504	Applied Machine Learning	Core	4
	MDS505	Research Methods	Core	4
Total credit hours for semester 2				<b>8</b>
Semester 3 (21 weeks)	MDS506	Dissertation	Core	20
Total credit hours for semester 3				<b>20</b>
		Total Credit Hours (1 Year)		40

**Program Name : Master of Data Science (PART TIME)**

**Program Code : HUMDS**

**Min Duration : 2 Year**

**Max Duration : 5 Years**

Semester	Subject Code	Subject Name	Classification	Credit Hours
Semester 1 (11 weeks)	MDS501	Programming for Data Science	Core	4
Total credit hours for sem 1				4
Semester 2 (11 weeks)	MDS502	Data Management	Core	4

Total credit hours for sem 2				4
Semester 3 (11 weeks)	MDS503	Statistics for Data Science	Core	4
Total credit hours for sem 3				4
Semester 4 (11 weeks)	MDS504	Applied Machine Learning	Core	4
Total credit hours for sem 4				4
Semester 5 (11 weeks)	MDS505	Research Methods	Core	4
Total credit hours for sem 5				4
Semester 6 (21 weeks)	MDS506	Dissertation	Core	20
Total credit hours for sem 6				20
Total Credit Hours (1 Year)				40



## 6. Mata Pelajaran Pengajian Umum (MPU)

Summary Tables of **Mata Pelajaran Pengajian Umum (MPU)** to be taken by students enrolled in

- **Diploma in Information Technology**
- **Bachelor of Information Technology (Hons)**
- **Bachelor of Information Technology (Hons) Data Analytics**

### 6.1. Diploma in Information Technology

Category	Subject Name	Subject Code	Credit Hours	Local	International
MPU1	Penghayatan Etika dan Peradaban	MPU2183	3	•	• ^
	Falsafah dan Isu Semasa (Bilingual)	MPU2193	3	•	• ^
	Bahasa Melayu Komunikasi 2	MPU2133	3	n/a	•
MPU2	Bahasa Kebangsaan A	MPU2213	3	#	n/a
MPU3	Introduction to Malaysian Tourism	MPU2313	3	•	•
MPU4	Co-curriculum – Sport 1	MPU2412	2	Select ONE (1)	
	Co-curriculum – Community Service 1	MPU2422	2		
General Elective	Communication 1	GEN2513	3	•	•
<b>Total credit hours for Mata Pelajaran Pengajian Umum (MPU)</b>				<b>11</b>	<b>11</b>

^ International students can select EITHER **Penghayatan Etika dan Peradaban (MPU2183)** OR **Falsafah dan Isu Semasa (MPU2193)**.

# Bagi pelajar tempatan yang tidak mendapat kredit di dalam mata pelajaran Bahasa Melayu peringkat Sijil Pelajaran Malaysia (SPM) maka DIWAJIBKAN mengambil kursus MPU2213 Bahasa Kebangsaan A sebagai komponen U2. **DO NOT TAKE MPU2313.**

Note:

- Students who fail to satisfy the requirements of the course will not be eligible to graduate and will not be awarded the diploma/degree certificate.
- # It is **COMPULSORY** for local students without a credit in SPM Bahasa Melayu to do MPU2213 (Diploma) or MPU3213 (Degree).
- \*\*Students who wishes to seek exemption for the MPU subject(s) are required to submit the exemption request(s) enclosing the academic transcript(s) and course syllabus to the Registry.
- Students are allowed to choose one of the MPU4 elective subjects if available on the offering list.
- **THE PRE-REQUISITES FOR MPU 4: MPU 2 & MPU3. STUDENTS NEED TO COMPLETE THE MPU 2 & MPU3 BEFORE ENROLLING IN MPU4.**

## 6.2. IT Undergraduate Degree

- Bachelor of Information Technology (Hons)
- Bachelor of Information Technology (Hons) Data Analytics

Category	Subject Name	Subject Code	Credit Hours	Local	International
MPU1	Penghayatan Etika dan Peradaban	MPU3183	3	•	• ^
	Falsafah dan Isu Semasa (Bilingual)	MPU3193	3	•	• ^
	Bahasa Melayu Komunikasi 2	MPU3143	3	n/a	•
MPU2	Bahasa Kebangsaan A	MPU3213	3	#	n/a
MPU3	A* Gen Careers in Malaysia and Beyond	MPU3373	3	•	•
MPU4	Co-curriculum – Sport 2	MPU3412	2	Select ONE (1)	
	Co-curriculum – Event Management 2	MPU3432	2		
General Elective	Communication and Leadership Skills	GEN3513	3	Select ONE (1)	
	Kursus Integriti dan Anti Rasuah (KIAR) (Bilingual)	GEN3523	3		
Total credit hours for Mata Pelajaran Pengajian Umum (MPU)				14	14

^ International students can select EITHER **Penghayatan Etika dan Peradaban (MPU3183)** OR **Falsafah dan Isu Semasa (MPU3193)**.

# Bagi pelajar tempatan yang tidak mendapat kredit di dalam mata pelajaran Bahasa Melayu peringkat Sijil Pelajaran Malaysia (SPM) maka DIWAJIBKAN mengambil kursus MPU3213 Bahasa Kebangsaan A sebagai komponen U2. **DO NOT TAKE MPU3373.**

## 7. Grading Scheme

The grades awarded to students are based on total marks obtained out of a maximum of 100 and in accordance with the following grading scale:

### 7.1. Master of Data Science

MARK RANGE	GRADE	GRADE POINT	DESCRIPTION	REMARK
90 - 100	A+	4.00	High Distinction	
80 – 89	A	3.75	Distinction	
70 – 79	B+	3.50	High Credit	
60 – 69	B	3.00	Credit	
55 – 59	C+	2.50	Low Credit	50 – 59: Referred (given maximum 2 times REDO chance)
50 – 54	C	2.00	Pass	
0 - 49	F	0.00 (NOT included in GPA calculation)	Fail	0 – 49: Poor Failure (given maximum 2 times RETAKE)

Note:

Candidates must pass with a minimum of Grade B for all modules to graduate. Candidates are allowed to repeat/retake each module up to 2 times prior to the maximum duration of study.

To pass a module, students must achieve an overall module mark of not less than 60% and will be given maximum up to 2 attempts at a module to revise and resubmit that component(s) for re-assessment to achieve at least 60% marks and above.

If the academic results are unsatisfactorily (failed in the first or second time for each module), the candidate is encouraged to attend a counselling session to improve their performance or withdraw from the programme.

#### Assessment Plan

- The final grade for a module comprises of one or a combination of a few assessment tasks.
- Graded academic tasks involve continuous assessments such as assignments, quizzes, tests, final project assessment, etc.
- The assessment plan with the distribution of weighting will be stated in the module outline.

These regulations allow for two attempts at a module as follows: -

- First attempt
- Second attempt (Additional Assignment = AA)

Students who do not pass a module at the first attempt may be given an opportunity to revise and resubmit that component(s) for re-assessment.

#### Calculation of Grade Point Average (GPA)

Each semester of study will result in a Grade Point Average (GPA) for each student – this sums up how well a student has performed during the entire semester. The Cumulative GPA for all attempted modules is calculated according to the formula below.

$$\text{CGPA} = \text{Summation of grade points average} / \text{number of modules}$$

### 7.2. IT Undergraduate Degree

- Bachelor of Information Technology (Hons)
- Bachelor of Information Technology (Hons) Data Analytics

Mark Range	GRADE	GRADE POINT	DEGREE CLASSIFICATION
85 – 100	HD1	4.00	FIRST CLASS
80 – 84	HD2	3.75	
75 – 79	DI1	3.50	SECOND UPPER CLASS
70 – 74	DI2	3.25	
65 – 69	CR1	3.00	SECOND LOWER CLASS
60 – 64	CR2	2.75	
55 – 59	PS1	2.50	THIRD CLASS
50 – 54	PS2	2.00	PASS
0 – 49	FL	0.00	FAIL

### 7.3. Diploma in Information Technology

Mark Range	GRADE	GRADE POINT
85 – 100	HD1	4.00
80 – 84	HD2	4.00
75 – 79	DI1	3.75
70 – 74	DI2	3.50
65 – 69	CR1	3.25
60 – 64	CR2	3.00
55 – 59	PS1	2.75
50 – 54	PS2	2.50
0 – 49	FL	0.00

Note:

HD : High Distinction  
DI : Distinction  
CR : Credit  
PS : Pass  
FL : Fail

## **8. Admission Information**

### **Entry Requirements**

The following minimum entry requirements are a general guideline. International students should contact the School of ICT or the university to determine their eligibility.

#### **8.1. Diploma in Information Technology**

Any one of the following:

- 3 SPM credits (including a pass in Bahasa Melayu and Sejarah and a credit in Mathematics)
- 3 O level credits (including Mathematics)
- 3 Bs in Senior Middle 3 (UEC) (including Mathematics)
- Recognized Computing Certificate or equivalent
- Recognized related Technical / Vocational Certificate or equivalent with ONE (1) year relevant work experience or ONE (1) semester Bridging Programme
- Equivalent qualification

#### **8.2. IT Degree Programmes**

- **Bachelor of Information Technology (Hons)**
- **Bachelor of Information Technology (Hons) (Data Analytics)**

Any one of the following:

1. 2 STPM Grade C (CGPA 2.0) OR equivalent AND a credit in Mathematics at SPM level / Grade C (CGPA 2.0) at STPM level.
2. STAM (pangkat jayyid) AND a credit in Mathematics at SPM level
3. Recognised Matriculation OR Foundation with CGPA 2.0 AND a credit in Mathematics at SPM level
4. 5 Bs in United Examination Certificate (UEC) (including Mathematics)
5. 5 CPU passes with a minimum average of 50%
6. 5 SAM / TEE examination passes with a university aggregate of 50%
7. A Diploma in Computer Science OR Information Systems OR Information Technology OR Software Engineering OR equivalent with a minimum CGPA 2.50 AND a credit in Mathematics at SPM level or its equivalent.
8. Any other Diploma in Science and Technology OR Business Studies with a minimum CGPA 2.50 may be admitted, subject to a rigorous internal assessment process AND a credit in Mathematics at SPM level OR its equivalent.
9. Any other equivalent qualification AND 3 SPM / O-Level credits (including a pass in Bahasa Malaysia AND a credit in Mathematics) (for Malaysian students only) OR equivalent recognised entry qualification with 3 credits (including a credit in Mathematics at SPM level).
10. Equivalent recognised entry qualification

Note:

Candidates with CGPA below 2.50 but above 2.00 with a credit in Mathematics at SPM level OR its equivalent may be admitted subject to a rigorous internal assessment process. A credit in Mathematics at SPM level for candidates (1), (3), (7), & (8) can be exempted if the entry qualification contains subjects in Mathematics AND achieves equivalent OR higher than a credit in Mathematics at SPM level.

International applicants will also be required to fulfil one of the following English language competencies:-

- IELTS: 5.0 OR
- TOEFL: 500 OR
- Equivalent qualification

### **8.3. Master of Data Science**

Any one of the following:-

- A Bachelor's Degree or its equivalent, with a minimum CGPA of 2.75; OR
- A Bachelor's Degree or its equivalent, with a minimum CGPA of 2.50 and not meeting CGPA of 2.75, can be accepted subject to a rigorous internal assessment process; OR
- A Bachelor's Degree or its equivalent, with CGPA between 2.00 and 2.50, with a minimum of 5 years' working experience in a relevant field may be accepted.

For candidates without a Computing Degree, prerequisite module(s) should be taken to adequately prepare them for their advanced study.

International applicants will also be required to fulfil one of the following English language competencies:-

- IELTS: 5.0 OR
- TOEFL: 500 OR
- Equivalent qualification

## **9. Credit Exemptions/Transfer of Credits**

Transfer of credits may be granted based on subjects completed in equivalent courses conducted at educational institutions recognised by HELP University (HELP). The request may be made at the time of the course application or within a reasonable time of course commencement. Credit transfers are normally considered and approved by the faculty Academic Board, the Dean and/or the Head of School, based on the applicant's prior learning at undergraduate / postgraduate level that matches generally 80% or more of the curriculum of the related faculty course subject. Credit transfer applicants shall be notified in writing of the approval of their request via a Credit Transfer Confirmation, a copy of which shall be placed in the students' files. The credit transfer shall be entered in HELP's Students' Records System upon payment of the applicable fee. Credit transfers into faculty courses may be approved up to a maximum of 50% of course requirement.

### **Applications for Credit Exemptions**

Applications for credit exemptions should be made at the same time as applications for admission to a course.

Supporting documents include:

- A certified copy of transcripts of academic qualifications and any appropriate supporting document e.g. grading system used to explain transcript, course structure etc.
- Copy of subject outlines taken from the institution's handbook for the year when the subjects were successfully completed.
- A certified translation if the transcript or other documents are not in English.
- Proof of English Language Competency.
- Other documents at the request of HELP.

## **10. Policies and Regulations**

(for more details, please refer to the University Handbook)

### **10.1. Registration**

Every student is required to do an official registration every semester. Students who fail to complete the registration process are not considered officially enrolled and will be denied for any completion of courses at the end of the semester. Students shall confirm their subject enrolment by week 0 of each semester and shall be enrolled for the subject if payment has already been made. If the fee is not paid, no enrolment shall be made.

Below are some simple rules to guide students:

- Registration will commence in the beginning of a new semester. Students can obtain the required Subject Registration Form from the Main Registry. Students are required to fill in the form, obtain the signature of the designated School of ICT's staff (where necessary) and submit the completed form to the Main Registry.
  - Once registration is completed, students will retain once copy of the form and the Assistant Registrar (AR) will issue an invoice which will be used when making payment.
  - Registration is incomplete until all fees payable have been at the Bursary's Office in accordance with HELP University payment policies and regulations. All students are required to comply with the payment deadline as specified in the semester schedule.
- OR
- Students can enrol the subjects online via [newmypride.help.edu.my](http://newmypride.help.edu.my)

### **10.2. Cancellation of Subjects Offered**

The School of ICT makes every reasonable effort to offer courses as indicated in the Subjects Availability List which is posted in the Learning Management System (LMS). However, the school reserves the right to make changes or cancel subjects in the proposed schedule because of insufficient enrolment or for any other reasons deemed valid. Students are responsible to keep themselves posted by viewing the web site periodically.

### **10.3. The responsibilities of the students**

#### **1. Student Responsibilities**

As a student at faculty, you are responsible to:

- Dedicate yourself to your studies to the best of your ability
- familiarise with the rules and regulations governing the postgraduate programme in which you are enrolled and ensure that the respective modules selected meet the programme requirements.
- be mindful of the practices and policies of the faculty for the programme enrolled are stipulated in the materials and information made available to you.
- attend lectures, tutorials, and seminars for each module in which you are enrolled
- adhere to the deadlines for work to be submitted.
- undertake joint responsibility for your own learning and enrichment in education.
- take the initiative to consult the lecturer (s) and / or the administrators when faced with problems.
- contribute to the development of faculty programs and policies by participating in consultative and deliberative processes in a responsible and ethical manner.
- be mindful of the faculty's commitment to equal opportunity, to demonstrate tolerance and respect for all members of the University community.
- respect the right of peers and staff members to express views and opinions.



Please refer to the **General Policies and Procedures of HELP University**.

**2. International Student Responsibilities**

In addition to the responsibilities stated above, you shall adhere to the rules and regulations imposed by the Malaysian Immigration. These rules and regulations are monitored for compliance by the International Student Services Department (ISSD). In the event of any breaches, the University is obliged to notify the relevant authorities and your student visa maybe cancelled or not renewed.

## 11. Programme Structure

Programs are assigned a specified Subject Code and a certain number of Credit Hours.

### 11.1. Subject Numbering System

Subjects are numbered so as to indicate the level of advancement. In general, Subjects with lower numbers are those which should be completed first. Subjects with numbers beginning with 100, 200 and 300 courses are Year 1, 2 and 3 courses respectively.

<b>100-Level</b>	<b>Year 1</b>
<b>200-Level</b>	<b>Year 2</b>
<b>300-Level</b>	<b>Year 3</b>
<b>500-Level</b>	<b>Master Level</b>

### 11.2. Prerequisites

Subjects prerequisites are listed in this handbook in the Subject Descriptions. These requirements are intended to ensure students have a reasonable chance of completing a subject without a low or fail grade. A prerequisite is a subject that must be taken and passed prior to registering for any of the subjects that require it.

Any student who has failed in the first of a sequence of subjects is not allowed to enrol for the subsequent subject until the fail grade has been changed to a pass grade.

Students can refer to the respective programme proforma for the subject prerequisites.

Non-Computing degree students are advised to seek advise and/or counselling from the School of ICT for the pre-requisite module(s) before enrolling in the Master of Data Science programme.

### 11.3. Adding or Dropping Subjects

- a) Students are required to enrol during the official registration periods determined by HELP University, failing which they may not be allowed to attend any classes or be allowed to be assessed in any of the assessed items. Each student shall be given an invoice at the point of enrolment and students are to pay their fees promptly.
- b) For full semester registration, subject enrolment must be made at the Registry or through myPride within the 1st and 2nd week from the semester commencement date. For half semester, enrolment must be made within the 1st week of the semester.
- c) Students are given two (2) weeks from programs commencement date to enrol for subjects, not applicable for short semesters. However, the deadlines may differ from semester to semester and by program. Students are advised to confirm the deadlines at the beginning of each semester with the Registry or School of ICT.
- d) Students are to ensure that they fulfill the subject pre-requisites. For subjects that do not conform to the normal procedures the students must get approval from the School of ICT.
- e) Students who submit the enrolment form within the 3rd & 4th week, or after the stipulated enrollment date, must obtain approval from the School of ICT and the policy under FINANCIAL REQUIREMENTS – Item 7.3, late enrolment penalty fee, will apply (not applicable to short semester).
- f) Subject enrolment will not be allowed after the 4th week from the semester commencement date except under special circumstances and approval is on a case to case basis.
- g) The Registry will not enrol the student's desired subjects if
  - The pre-requisites are not met
  - The student has reached the maximum number of subjects enrolled for the semester
  - The student has not entered for the minimum number of subjects for the semester without approval from the School of ICT

- The student has fee outstanding at the time of subject enrolment

#### **11.4. Change of Majors**

- Students are advised to seek advice and/or counselling from the School of ICT before deciding to change their major/specializations.
- Students who have completed (including subjects enrolled for the latest semester) 15 subjects or above are not allowed to change their major.
- Students shall NOT be charged any fee for their first change of major/ specialization.
- A 'Change of Major Fee' (RM 100) shall be charged for the second and subsequent changes of majors/specializations.
- If an exemption has been give for a third year subject, the student will be required to enrol for another subject to replace it, which may be a second or third year subject. This will be determined by the Head of the Department and is subject to the condition that the total number of final year subjects the student takes in HELP University is no less than 8.

#### **11.5. Change of Programme Status (Full time or Part time)**

(applicable to Master of Data Science only)

- Students are advised to seek advice and/or counselling from the School of ICT before deciding to change their status from part time to full time or vice versa.
- Students shall NOT be charged any fee for their first change of programme status.
- A 'Change of Status Fee' (RM 100) shall be charged for the second and subsequent changes of programme status.

#### **11.6. Withdrawal Procedure from Subjects**

- Students are required to write in officially to the Registry for any request to withdraw from an enrolled subject.
- All requests for subject withdrawals are subject to approval of the management or the respective partner university.
- No refund shall be given for withdrawal of subject (s).

#### **11.7. Withdrawal Procedure from HELP University**

A student shall be deemed to be no longer enrolled in a program at HELP University if:

- The student has completed the requirements for that program;
- Registration in the course has been terminated; or
- The student has been excluded on academic or disciplinary grounds.
- Any student who wishes to discontinue/withdraw from HELP University should inform HELP University immediately in writing. A withdrawal form, available at the Registry/School of ICT must be completed and submitted to the School of ICT Technology to be processed.
- Any student who withdraws from a program before the commencement date shall be refunded only the tuition fee, the resource fee and security deposit.
- 50% of the term/semester fees and the full security deposit and resource fee paid shall be refunded to a student who withdraws from a program within 2 weeks of the date of commencement.
- A student who withdraws from a program 2 weeks after the commencement or date of enrolment will NOT be given any refund of all fees paid except the security deposit which will be refunded in full, provided there is no other outstanding fees.
- A student who has registered and does not attend class for one month from the date of commencement or enrolment shall be classified as having withdrawn unofficially and all fees, except the resource fee and the security deposit, shall be forfeited.
- If a student withdraws after full completion of a program at HELP University and wishes to apply for a new program at a later date, the application fee and registration fees (for undergraduate programs only) shall be waived. Students will be required to complete a new application form and submit all relevant documents and pay the security deposit, course/tuition fee and any other fee payable for the new program.

- If a student withdraws before completion of a program at HELP University, but later wishes to re-apply for a new program at HELP University, he/she shall be considered a new applicant. Therefore he/she shall be required to complete a new application and submit all relevant documents and pay the full administrative fee.
- All money due will be refunded to the financial sponsor as indicated on the application form. Should the financial sponsor change in the course of the study period, an official letter from the original financial sponsor must be submitted to the Registrar to indicate the change.
- If the cheque is to be written in a name other than that of the financial sponsor, an authorisation letter from the financial sponsor must be submitted together with the withdrawal form.
- A sum of RM 20.00 (Ringgit Malaysia Twenty Only) shall be deducted from the security deposit in the event of failure to return the HELP Student Identification Card.

## 12. Assessment and Evaluations

The School follows the university-wide assessment method, where all students are subjected to the same regulations.

### 12.1. Diploma in Information Technology

#### Level 1 and Level 2

Generally, weightage of each assessment item will be based on the following percentage:

Examination	50 - 70%
Assessments	30 - 50%
Total	100%

It is the duty of the examiner of each unit, at its commencement, to make available to students the format, timing, and weightage of assessment for that unit. It is the responsibility of each student to ensure that he is fully informed of the assessment applied to each unit for which he is enrolled.

An examiner may, in consultation with the Head of School, approve a variation in the assessment instrument to be used for a student in the following circumstances:

- Illness of a student which must be supported by documentary evidence; or
- any other cause, which must be supported by documentary evidence.

A student can be granted a supplementary assessment (SX) on the basis of illness or other extenuating cause(s), on a case by case basis.

### 12.2. IT Degree Programmes

- **Bachelor of Information Technology (Hons)**
- **Bachelor of Information Technology (Hons) Data Analytics**

Generally, weightage of each assessment item will be based on the following percentage:

Examination	50 - 70%
Assessments	30 - 50%
Total	100%

Assessment for some modules, such as in Project Papers BIT304, BIT305 and BIT310 will be by 100% coursework.

### 12.3. Master of Data Science

The assessment of a unit may be made up by exam or assignment components. Assignment components may be seminar presentations, time-constrained tests, projects, assignments or other forms of assessment. The number, and weightage, of assessment items may vary from subject to subject.

Generally, weightage of each assessment item will be based on the following percentage:

Continuous Assessment(s)	50 - 100%
Final Assessment	30 - 50%
Total	<hr/> 100% <hr/>

### **13. Academic Consultations**

Academic consultation is an integral part of a student's academic experience. Academic advisors are able to give support and guidance to students who seek their service, but it is the responsibility of each student too to be familiar with academic policies and regulations and to take responsibility for his or her study at HELP University.

Graduation/program requirements vary greatly from one university to another. It is especially important for students to learn about the universities' academic policies and procedures thoroughly. New students will be informed on the education system and its requirements through a series of seminars conducted every semester.

An academic advisor offers students information, guidance and advice throughout their undergraduate program. Specifically, academic advisors assist students in identifying degree requirements and help students balance their course load each semester, so they do not take too many demanding classes in one semester. Students will also be informed on classes that require prerequisites or other restrictions before registration.

Students are encouraged to make an appointment to seek advice from an academic advisor to discuss important educational issues and matters pertaining to transfer to foreign institutions. Students can also do their own research under the guidance of an academic advisor on universities and their requirements, ranks, profile etc.

## **14. Subject Descriptions**

The descriptions for each of the subjects in the respective programmes are given below.

### **14.1. Diploma in Information Technology**

#### **Level 1 / Year 1**

##### **DIP102 English for IT**

*(formerly known as DIP1EIT01 English for IT)*

This subject is designed for students who require the necessary skills for tertiary studies. Some basic grammatical concepts are taught and students are to apply them in their writing. Writing will focus on the development of coherent paragraphs. Reading skills will cover such strategies as scanning, skimming, main ideas, contextual clues and inferences.

##### **DIP1ITC01 Introduction to Information Technology**

This subject is designed to introduce fundamental computer concepts, terminology and the use of basic productivity applications. The emphasis is on how computers are used in everyday activities. The student will acquire an understanding not merely of what a computer system can do for the user and how the user operates the system, but also how the system is designed and developed and why it interacts with the user as it does. Students will gain additional exposure and with office productivity software.

##### **DIP101 Introduction to Visual Programming**

*(formerly known as DIP1PRG11 Introduction to Visual Programming)*

This subject is also designed to expose students to windows programming using Visual Basic as the programming language. This subject aims to provide an insight into structured programming techniques for developing simple application; draw the students' attention to current trends in developing an application; and expose students to some of the current issues in developing a graphical user interface (GUI).

##### **DIP1PRG12 Introduction to Structured Programming**

This subject is designed to address the principal programming issues using C language as a foundation to programming concepts. This subject aims to provide an insight into structured programming techniques for developing simple application, and to provide an environment in which students may gain skills and experiences in adapting other programming language in later stage of their studies.

##### **DIP103 Introduction to Analysis and Design**

*(formerly known as DIP1SAD01 Introduction to Analysis and Design)*

This subject is designed to teach students the ability to analyze an organization's existing procedures by using such tools as data analysis sheets, system flowcharts, process charts, GANTT charts, decision tables and documents which define system requirements and specifications. The overall aim of the subject is for the student to be prepared to go through the necessary process to improve the functioning of an existing system, or to design a new one. It also emphasizes the role of the system analyst and the importance of teamwork in the analysis and design of a computer information system.

##### **DIPITC04 Introduction Networking**

This subject aims to equip student with networking technologies who have little or no background in this subject matter. It develop an understanding of the key principles of computer networks, the underlying technologies and practical application.



**DIP104 Computer Technology Essentials**

*(formerly known as DIP1CTS03 Computer Technology Essentials)*

This subject aims to equip students with an understanding of how a computer works, how to assemble a computer, and how to troubleshoot hardware and software issues.

**DIP105 Introduction to Computer Architecture**

*(formerly known as DIP200 Introduction to Computer Architecture)*

This subject introduces to the students the principles of computing and information technology with focus on the information layer, hardware layer, programming layer and applications layer. It will cover the principles of computer organization and architecture. In addition, it aims to develop an understanding of the logic behind software program design. The applications layer will be covered in laboratory sessions where students will be exposed to various software applications commonly used by organizations today.

**DIP106 Programming Principles**

*(formerly known as DIP222 Programming Principles)*

This subject introduces students to the programming process. It begins with the development of problem solving skills relevant to the solution of programming problems. This subject is one of the foundation subjects for other studies in Information Technology because it develops skills, techniques and approaches that underpin many other areas of the application of computing.

**DIP107 Fundamentals of Web Development**

*(formerly known as DIP204 Internet Technology)*

The World Wide Web has increased the prominence of the Internet for organizations to integrate their information systems and applications into the Web frontier. This subject provides an overall exposure to students with little or no programming experience with Web programming using web development tools. At the start, students will be taught the introductory control structures and functions with the use of scripting languages before they engage in the development of interactive Web-based applications.

**DIP108 Computing Mathematics**

*(formerly known as DIP201 Computing Mathematics)*

Computing mathematics is necessary to communicate with a computer when one is a designer, programmer or user. In this subject, students will learn topics such as sets, functions and relations, logic, mathematical induction, graph theory, recurrence relations, Boolean algebra, and algorithmic thinking. These topics can be viewed as the mathematics necessary for decision-making in non-continuous situations, as is often encountered in computing. This subject provides an opportunity to experience success and enjoyment in mathematics classes.

**Level 2 / Year 2****DIP202 Business Communications**

This subject aims to equip students with the basic and practical communication skills. Students will be taught to identify and apply communication skills in the areas of collaboration, listening, non-verbal communication and meetings. Students will also be exposed to planning and constructing effective verbal and written messages, after which students will learn how to apply the above skills in planning and constructing reports, proposals and presentations. Students will also learn how to prepare for job applications and interviews. This subject incorporates extensive technical and practical exercises and/or activities. Hence, it is important that students participate actively and fully in the entire subject sessions.

### **DIP203 Database Concepts & Practices**

This subject will cover the foundation concepts and techniques in designing a relational database. It is aimed at students from a variety of subjects. It provides an opportunity for students to develop a good basic understanding of both theoretical and practical aspects in designing relational databases, such as data modeling techniques and SQL.

### **DIP215 Object-Oriented Programming**

This subject introduces computer-programming techniques in the modern programming language, Java. Students will learn the fundamental object-oriented structure as well as procedural elements of Java. By mastering the topics presented in this subject, students would gain valuable problem-solving skills and Java knowledge that will enable them to become proficient in object-oriented programming.

### **DIP206 Networking and Data Communications**

*(formerly known as DIP206 Data Communications)*

This subject will cover the fundamental studies in the area of data communications and network connectivity. It explores the information infrastructure and protocols that enable data transmission across global networks.

### **DIP208 Fundamentals of Operating Systems**

This subject explains the fundamental concepts and structures of operating systems such as processor management, memory management, etc. Additionally, students will be able to relate what they have learned to real world design choices in various types of operating systems.

### **DIP209 IT Mini Project**

*(formerly known as DIP1MPR01 IT Mini Project)*

This subject is offered at the end of the Diploma Level 1 to provide students an opportunity to apply what they have learned in terms of technical, organizational and communication skills. The students will explore various options for the types of system they would like to develop, and perform requirements analysis with the target users. They will then design the system interface and technical implementation before proceeding with the implementation of the system. As these are Level 1 students, some tutorials and guidance will be given throughout the semester but the students are expected to spend many non face-to-face hours working on their own.

### **DIP220 Industrial Internship**

This subject enables the student to gain industry experience for the duration of one semester. The student will be attached to an industrial partner of HELP University or he/she apply for an internship on their own.

### **DIP211 Interactive Media Application**

This subject is aimed at developing a theoretical background and practical experience in the various multimedia aspects, such as analysis, design, management, development, and evaluation, concepts which are applicable to multimedia authoring systems.

### **D2MGT100 Organisations and Management**

This subject enables students to understand the main ideas, theories, models and concepts of management, know the structure, behaviour and environment of organisations and appreciate the importance of management towards achieving organisational goals and objectives in a competitive world.

### **D2MKT110 Principles of Marketing**

Marketing Principles has been designed to provide students with an introduction to the field of marketing. The course focuses on the relationship between organizations and the consumers, expressed through the marketing mix. Essentially, the course concentrates on how organizations may create customer value and engagement as well as building customer relationships by applying the various marketing mix elements (product, price, place, promotion) which are used by organizations to satisfy needs and wants of consumers. While the subject has a theoretical base, practical application of the marketing concepts to "real world" situations via a specific project is an essential part of the course.

### **DIP207 Calculus And Linear Algebra**

Students will focus on three main areas: Probability, Linear Algebra and Calculus. Topics in Probability include discrete probability theory and counting. Students will study basic probability theory learn how to calculate probabilities of events. Students will also learn counting techniques and examine how they are used to count possible solutions to problems. They will then examine examples of how probability and counting are used in game theory, data mining, networking and other areas of IT. Linear algebra is another area of mathematics with many computing and IT applications. Vector operations are studied with examples of their use in computer graphics. Students will also study matrix algebra in terms of matrix operations, finding inverses and solving simultaneous equations. Examples of applications of linear algebra to IT will also be presented including cryptography. Calculus is introduced to cover the idea of limits, differentiation and integration, which have applications in modelling and optimization.

### **DIP221 User Interface Design**

This subject introduces user experience design process and is oriented toward methods for approaching a design problem. The focus of the subject is to develop user experience designs based on the needs of users.

### **DIP224 Advanced Web Development**

This subject will introduce web programming processes and scripting languages involve in both front-end and back-end development. Students will learn how to create forms for user interaction, implement controls for managing the logic of the application and setup the application to read and write data from and to database management system.

### **DIP225 Mobile App Development**

This subject provides students with a fundamental knowledge in mobile applications development. This subject explores different mobile activities, user experiences, background processing, data sharing, data storing, and basic mobile programming techniques in a native mobile application development platform. It prepares students with the skill sets to choose a suitable platform, troubleshoot, design and create a simple mobile application.

### **DIP223 Fundamentals of Data Analytics**

This subject provides students with a fundamental understanding of analytics and the increasingly important role it plays in organisations. The topics covered will expose students to the role of big data in decision making. This subject also provides a basis for going deeper into more advanced analytics tools and techniques.

## 14.2. IT Degree Programmes

- **Bachelor of Information Technology (Hons)**
- **Bachelor of Information Technology (Hons) Data Analytics**

### Year 1

#### **BDA100 Introduction to Programming**

*(formerly known as BIT100 Introduction to Programming)*

This subject introduces students to the programming process using Python. It begins with the development of problem solving skills relevant to the solution of programming problems. This subject is one of the foundation subjects for other studies in Information Technology because it develops skills, techniques and approaches that underpin many other areas of the application of computing.

#### **BIT101 Introduction to Information Technology**

This subject is an introduction to Information Technology, providing the students with the introductory theory required to understand the components of computer systems, the operations of the systems and business application software. It discusses the functions of computer systems and the interaction between hardware, software and the computer user. It develops knowledge of how data is prepared for computer processing and how it is represented and processed at a basic machine level.

#### **BIT102 Front-End Web Development**

*(formerly known as BIT102 Internet Concepts and Infrastructure)*

This subject offers students an overall understanding of the Internet, its development and its network infrastructure, as well as the services available on the Internet. Besides that, students are also exposed to the World Wide Web information network and the associated search technologies. In addition, the students will learn to design and develop their own web pages using HTML. To balance theoretical knowledge with real life experience, hands-on lab sessions are incorporated into the subject.

#### **BIT103 Introduction to Database Systems**

This subject offers students an understanding of database concepts and its components, covering the history of database management, Database Management System functions, various data models, database administration and new database trends. Distributed databases, client/server systems, data warehouses and Object-Oriented Database Management Systems are also examined. This subject also provides students with a good foundation in SQL and modeling techniques, with lab sessions to reinforce the understanding of SQL. Based on a simple case study, the students will gain knowledge in implementing an ER conceptual model, creating a small database to store data as required in the case study.

#### **BIT104 Application of Mathematics in IT**

This subject covers the mathematics that is relevant to the field of Information Technology. Topics covered fall into three main areas: Probability, Linear Algebra and Calculus. Topics covered in probability theory include discrete probability theory and counting, which have applications in simulation and games. Linear Algebra consists of vector geometry and matrix algebra, which have applications in computer graphics and cryptography. Calculus is introduced to cover the idea of limits, differentiation and integration, which have applications in modeling and optimization. Mathematical software will be used to aid in visualizing and applying concepts learned.

#### **BIT106 OO Programming Fundamentals**

*(formerly known as BIT106 Programming in Java I)*

This subject aims to introduce students to programming using the Java programming language. Students will be taught fundamental control structures using Java and basic problem solving algorithms. The subject will also introduce object-oriented programming concepts for developing object-oriented applications.

**BIT107 Data Communications and Networking**

*(formerly known as BIT107 Introduction to Data Communications)*

This subject is a fundamental study of the areas of networks, interconnectivity and industry standards. This subject covers the general introduction to the theory, skills, and techniques that are relevant to data communications and fundamental of computer networks and the effect that they have on business and computing environment.

**BIT108 Discrete Mathematics**

Discrete mathematics is sometimes viewed simply as the mathematics that is necessary for decision making in non-continuous situations. Discrete mathematics includes sets, functions and relations, matrix algebra, combinatorics and finite probability, graph theory, finite differences and recurrence relations, logic, mathematical induction and algorithmic thinking. Other topics relevant to computing are Boolean algebra, the mathematics of social choice, linear programming, and number theory.

**BIT110 Introduction to Operating Systems**

This subject explains the fundamental concepts and structures of operating systems such as processor management, memory management, etc. Additionally, students will be able to relate what they have learned to real world design choices in various types of operating systems.

**MGT101 Principles of Management**

The dynamic nature of today's organizations means that managers require certain knowledge, skills and competencies to manage them effectively. The aim of this subject is to provide students with an introduction and overview of management within organizations. The subject will examine management principles, concepts and theories, and give students an appreciation and understanding of various challenges facing managers of organizations in today's competitive global environment.

**MKT101 Principles of Marketing**

MKT101 has been designed to provide students with an introduction to the field of marketing. It focuses on the relationship between organizations and the consumer, expressed through the marketing mix. Essentially, studies are concentrated on the nature and behavior of supplying organizations, the nature and behavior of the consumer and the various marketing mix elements which are used by organizations to satisfy the needs and wants of consumers. While the subject has a theoretical base, practical application of the marketing concepts to real world situations via a specific project is an essential part of the subject.

**BGM101 Multimedia Systems**

Covers the fundamental principles of multimedia authoring and also the usage of multimedia authoring tools in various aspects. Its aim to develop a theoretical background and provide practical experience in the various areas of multimedia, such as analysis, design, management, development, and evaluation – concepts which are applicable to multimedia authoring systems.

**BDA101 Analytics For Decision Making**

This subject provides students with a fundamental understanding of analytics and the increasingly important role it plays in organisations. The topics covered will expose students to the role of big data in decision making. This subject also provides a basis for going deeper into more advanced analytics tools and techniques.

## **Year 2**

### **BIT200 Technopreneurship and Innovation**

*(formerly known as IT and Entrepreneurship)*

This introductory subject is designed to provide students with a broad understanding of the field of entrepreneurship and the role that entrepreneurship plays in society. Topics will include the nature and theories of entrepreneurship, the characteristics and behavior of entrepreneurs, and the entrepreneurial process in small and large firms. Students will get to think and act in a creative manner, obtain exposure to local entrepreneurs, assess their own potential for entrepreneurial careers and develop attitudes and skills that will be useful in any organization. This subject also introduces the use of IT in the business for various aspects and also covers the role of the digital revolution in the new business ventures.

### **BMC204 Introduction to Computer Systems Engineering**

This subject provides an introduction to how computers work at the lowest levels and will cover topics from binary numbers and logic gates to assembly language and C programming. This subject is aimed at students who do not have any prior knowledge of computer systems, and aims at providing a basic understanding of how computers work and how to develop programs for a microcontroller-based computer system.

### **BIT201 Systems Architecture and Design**

*(formerly known as Object-Oriented Analysis and Design)*

#### **Pre-Requisite (s): BIT106 or BDA100**

This subject covers the theory of systems analysis and design using object-oriented concepts. Students will analyze various information systems case studies and use the Unified Modeling Language to model the system specifications.

### **BIT203 Advanced OO Programming**

*(formerly known as BIT203 Programming in Java II)*

#### **Pre-Requisite (s): BIT106**

In this subject, students will extend their fundamental programming skills to include object-oriented concepts using Java interfaces and classes. The important concepts of reusability, inheritance and aggregation are covered. UML models will be used as the basis for implementation of the programs, focusing on the concepts of collaboration and interaction between the Java objects created. Students will also learn the basics of developing GUI applications using the Java AWT and GUI packages, including layout of the user interface and handling of user-generated events.

### **BIT204 Advanced Networking**

*(formerly known as BIT204 Computer Systems and Networks)*

#### **Pre-Requisite (s): BIT107**

This subject deals with the most current technology in the field of computer communications. It is intended for students who want to understand the fundamental principles as well as the critical role of performance in protocol and network design. This subject covers the details of all critical areas in data communication, WANs, LANs and protocol design, with focus on the most current technology employed in computer communication and networking.

**BIT205 Object-Oriented Programming in C++****Pre-Requisite (s): BIT106**

In this programming subject, students will learn how to design, code, develop and debug object-oriented solutions to simple problems. This would require the creation, modification and extension of C++ classes.

**BIT206 User Experience Design**

This subject provides an introduction to the concepts and techniques in Human-Computer Interaction (HCI); enabling the student to develop an appreciation of the application of HCI to systems design. The student is exposed to the various techniques that can be used to develop user friendly user interfaces and computer systems.

**BIT208 Data Structures and Algorithms****Pre-Requisite (s): BIT106**

This subject introduces data structures and algorithms using the Java programming language. Both standard and custom data structures and types will be explored, including how the abstract structures are implemented. The study of algorithms will cover standard algorithms for searching and sorting. Students will also learn techniques for analyzing the time and space complexity of these algorithms.

**BIT210 Web Programming****Pre-Requisite (s): BIT102**

This subject offers students an understanding on how to build Web applications using basic web development frameworks. This subject will help students in the understanding of the full stack of web application tools from front end to back end.

**BIT212 Cloud Computing****Pre-Requisite (s): BIT107**

The objectives of this subject are to present students with the principles behind cloud computing as organizations shift to this new paradigm of IT infrastructure. Students will explore the evolution of IT infrastructure and how it affects business operations and costs.

**BIT215 Computer Forensics**

This subject offers students with an overall understanding of the fundamental principles of computer forensics methodology and emerging investigation techniques related to the identification, collection and preservation of digital crime scene evidence. The subject emphasizes student awareness in handling suspected digital evidence.

**BIT214 Social Media Marketing**

This subject is designed to introduce the fundamentals of Social Media Marketing, and demonstrates tools and techniques to apply in businesses. Students will learn the basic principles in social media marketing. Blending the theoretical knowledge with real life experience, hands-on lab sessions are incorporated into the subject.

## **BIT216 Software Engineering Principles**

### **Pre-Requisite (s): BIT201**

This subject studies both theoretical and practical application aspects in engineering software solutions. Software engineering is one of the most important areas of study and research in the computer science field. It is crucial for students to fully understand the countless dilemmas faced in software development and be able to apply proper standards, techniques and principles in producing high quality software solutions.

## **BDA202 Applications Of Data Analytics**

### **Pre-Requisite (s): BDA101**

This subject enables students to explore the various applications of data analytics to business and organizational problems. Students will examine the concepts, technologies and tools that enable analytics for the various analytics solutions.

## **BDA203 Advanced Database Systems**

*(formerly known as BIS203 Advanced Database Systems)*

### **Pre-Requisite (s): BIT103**

Students will create the conceptual, logical and physical design of databases and then use SQL for data definition and data manipulation of the database and learn how to write PL/SQL programs to create stored procedures, functions and triggers. They will also discuss issues in transaction processing and distributed databases.

## **BDA205 Statistics And Data Visualization**

*(formerly known as BIS205 Statistics and Data Visualization)*

The subject will cover the basic concepts of descriptive and inferential statistics and how to conduct a hypothesis test. The students will produce visualizations of data using charts, graphs and other approaches to analyse the data sets. The student will also perform other data analysis such as analysis of variance, correlations, linear and multiple regression and associations between categorical data.

## **BDA206 Enterprise Data Infrastructure**

*(formerly known as BIS304 Data Warehouse)*

### **Pre-Requisite (s): BIT103**

This subject will expose students to the expanding role of Data Warehousing, the strategies behind its development and the utilization of its information to answer fundamental business questions.

## **BMC208 Introduction to Mobile Apps**

### **Pre-Requisite (s): BIT106**

This subject provides students with a fundamental knowledge in mobile applications development, exploring different mobile activities, user experiences, background processing, data sharing, data storing and basic mobile programming techniques in a native mobile application development platform. Students are prepared with the skills sets to select an appropriate platform, troubleshoot, design and create a simple mobile application.

## **BIT217 Internet of Things**

### **Pre-Requisite (s): BIT110**

This subject provides students with a basic to intermediate level of knowledge in the Internet of Things. The fundamentals, platforms, board architecture, embedded programming, mobile cloud computing and network connectivity in the Internet of Things are also covered. Students are prepared with the



skills sets to select an appropriate platform, troubleshoot, design and create an interesting Internet of Things product.

### **Year 3**

#### **BIT320 Industrial Internship**

##### **Pre-Requisite (s): All Yr 1 & 2 Subjects**

This internship lasts for one semester and can be taken in either semester 1 or 2 in the final year of the undergraduate degree. In order to qualify for an internship, the student must maintain a distinction average throughout their program and must be able to demonstrate communication and technical expertise at a level expected by the industry. As internship places are limited, it is anticipated that the competition for internship spots will be fierce every year.

#### **BIS301 Issues in Strategic Information Management**

This subject aims to promote the understanding of information systems in a wider perspective. It attempts to cover the alignment of technology with the current business needs of organizations to meet the industry standards at present, and discusses how it is likely to change in the future. It aims to help students develop a good understanding of strategic planning and is designed to meet the needs of students from different disciplines.

#### **BIT301 IT Project Management**

This subject aims to help students to acquire knowledge of key project management concepts, and skills to understand the real world practices that make change happen. On completion of the subject, students should be able to critically analyse a project within a specific context and develop alternative solutions technical, resource, organisational and people related issues.

#### **BIT303 Computer Ethics and Cybersecurity**

*(formerly known as BIT303 IT Management, Ethics and Security)*

This subject discusses ethical decision making in the IT environment and will help students to identify and make defensible choices about ethical, moral and legal issues associated with the use of computer technology in the current digital era. Moreover, it will also help students to understand how to manage the various resources of information and communication technology (ICT) infrastructure, particularly as it applies to security aspects and the management of information security.

#### **BIT304 Final Year Project I**

##### **Pre-Requisite (s): Completion of Year 1 & 2 subjects**

This subject involves teams of students carrying out a product development project either in close co-operation with an industry partner or based upon other, real-world product development requirements. The aim of this subject is to provide students an opportunity to acquire, apply and integrate knowledge that will enable them to participate in and lead product development projects. Students will gain knowledge of project management, creative idea generation and communication, and will be capable of handling all stages of product development from requirements gathering and concept generation through to development. This subject encourages the student to look beyond the course curriculum and explores current and emerging technologies to develop innovative solutions in order to keep up with the ever changing requirements of the industry.

#### **BIT305 Final Year Project II**

##### **Pre-Requisite (s): BIT304**

This is the capstone subject in the IT undergraduate programme. Students will work in groups to apply various skills, concepts and ideas acquired to develop a working solution. They are expected to apply

their knowledge to a 'live' project in the planning, estimating, analysing and designing of the software requirements; the technical aspects of project management, quality management, quality assurance; and the implementation and testing skills of a "real" software system. This subject encourages students to look beyond the course curriculum and explore current and technology to develop innovative solutions in keeping up with the ever changing needs of the industry.

### **BIT306 Web Technologies**

#### **Pre-Requisite (s): BIT102 & BIT103**

The aim of this subject is to expose students to various web technologies and techniques in modern web applications. The subject will explore the various web protocols and services used on the internet. Students will also use various libraries, frameworks and technologies for creating full stack web apps.

### **BIT307 Wireless Networking**

#### **Pre-Requisite (s): BIT107**

This subject deals with the theoretical aspects of wireless networking communications, and covers core technologies such as Bluetooth, infrared and also WiFi. This subject is intended for students who wish to understand the concepts of wireless technology as well as its application in various domains of the industry. Students will also be exposed to the technical aspects of wireless LANs from configuring an ad-hoc wireless network to setting up a wireless network with a wired network.

### **BIT308 Enterprise Architecture**

This subject will introduce the theories and concepts in enterprise architecture. The subject covers the domains of connectivity, portability and interoperability of enterprise applications. Students will also be exposed to various types of enterprise architecture, including open source solutions and proprietary software.

### **BIT310 Business Development Project**

This subject offers students an understanding of a business development plan and its components. Having a business product/service in mind, students learn the goals and objectives of developing such product/service. Students will be exposed to the various sectors of the business environment, management, operations and financial analysis for growth and opportunities.

### **BMC304 Mobile Applications Development**

#### **Pre-Requisite (s): BMC208**

This subject introduces mobile applications development by first comparing the various platforms available. Students will then design and develop mobile applications on a specific architecture. They will also explore the various strategies for testing and deploying their applications on a range of devices, and how to employ optimization techniques for their applications.

### **BDA306 Data Mining and Machine Learning**

#### **Pre-Requisite (s): BDA205**

In this subject, the main focus is the automated extraction of patterns representing implicitly stored in large database by examining some important techniques and algorithms in a rigorous manner. This subject also covers the key tasks of data mining, including data preparation (i.e preprocessing), association rule mining, classification, prediction, clustering and evaluation. Some selected areas of

applications are covered. The subject also examines the general trends in data mining. The subject concludes by examining some social impacts of data mining.

#### **BDA307 Big Data Technologies**

This subject covers the basic technologies associated with the storage, pipilining and processing of massive amounts of data. Students will learn about common techniques for storage of big data and algorithms for processing the data and research on latest technologies to manage the ever growing amount of data used by organizations.

### **14.3. Master of Data Science**

#### **MDS501 Programming for Data Science**

This module equips students with fundamentals of programming using a high-level programming language to solve problems focusing on data. This module covers various data analysis and processing techniques such as retrieval, extraction, conversion, aggregation, filtering, processing and storing using programming libraries and toolkits.

#### **MDS502 Data Management**

This module introduces techniques related to modelling, extraction, cleansing, profiling, integration and access of data. This module then introduces the role of databases and database management systems, covering relational and non-relational databases. Policies for access and sharing including provisions for appropriate protection of privacy, ethics, confidentiality, security, or other requirements are also discussed.

#### **MDS503 Statistics for Data Science**

This module provides an introduction to basic statistical concepts and methods which include: simple and multiple linear regression, classification, decisions trees, support vector machines, and unsupervised learning. In addition, this module will serve as an introduction to implementing these methods through the use of statistical software.

#### **MDS504 Applied Machine Learning**

This module provides a foundation to the principles of machine learning by exploring major approaches and algorithms, feature engineering and model evaluation methods. This module covers different algorithms and techniques in developing machine learning systems for real-world problems focusing on prescriptive analytics.

#### **MDS505 Research Methods**

This module instructs students on the various processes related to conducting research, including: writing research proposals and research reports, sample selection, as well as collecting, processing and analysing data. This module will also introduce students towards various methods of conducting quantitative research.

#### **MDS506 Dissertation**

This module is a research project based on industry requirements. Students will conduct an industry based research project supervised by an academic staff member and a supervisor from industry. They may work on the project on-site, or they may work on the project at the university. Students will learn to apply the knowledge of the foundations, theory and methods of data science they have learned in the programme and build a research project on their own from start to finish. They will gain real-world exposure to modern data science challenges. Students will have the flexibility to choose their own domain and technology stack for their project. Projects will be drawn from real-world problems and may be conducted with government, industry or academic partners. The dissertation is a significant piece of work in which students should demonstrate a mature knowledge of data science and its applications.

## **15. Awards, Scholarships and Winners**

The achievements of our students are too numerous to mention. Other than successfully procuring scholarships and awards from the university and from our industry partners, our students have also been also scholarship recipients from our partner universities.

Information on HELP scholarships and bursaries are found in the HELP Scholarships Booklet.

## 16. Programme Structure

### 16.1. Diploma in Information Technology (w.e.f. August 2021)

Subject	Credit Hours	Pre-Req
<b>Year 1 (8 Compulsory)</b>		
DIP101 Introduction to Visual Programming	4	
DIP102 English for IT	4	
DIP103 Introduction to Analysis and Design	4	
DIP104 Computer Technology Essentials	4	
DIP105 Introduction to Computer Architecture	4	
DIP106 Programming Principles	4	
DIP107 Fundamentals of Web Development	4	
DIP108 Computing Mathematics	4	
<b>Year 2 (9 Compulsory)</b>		
DIP202 Business Communications	4	
DIP203 Database Concepts & Practices	4	
DIP215 Object-Oriented Programming	4	
DIP206 Networking and Data Communications	4	
DIP208 Fundamentals of Operating Systems	4	
DIP209 IT Mini Project	5	<b>All Yr 1 Subjects</b>
DIP221 User Experience Design	4	
DIP224 Advanced Web Development	4	<b>DIP107</b>
DIP220 Industrial Internship	6	<b>All Yr 1 Subjects</b>
<b>Year 2 (2 Elective)</b>		
DIP207 Calculus and Linear Algebra	4	
DIP211 Interactive Media Applications	4	
DIP223 Fundamentals of Data Analytics	4	
DIP225 Mobile App Development	4	<b>DIP106</b>
D2MGT100 Organisations and Management	4	
D2MKT110 Principles of Marketing	4	
<b>Plus</b> <b>Relevant Mata Pelajaran Pengajian Umum (MPU) subjects. Refer to Section 6.1 for more details.</b>		
<b>Note:</b> <b>Students are required to complete 19 academic subjects and 4 MPU subjects = total 23 subjects (90 credit hours)</b>		

**16.2. Diploma in Information Technology**  
**(before August 2021)**

Subject	Credit Hours	Pre-Req
<b>Year 1 (8 Compulsory)</b>		
DIP1PRG11 Introduction to Visual Programming	4	
DIP1EIT01 English for IT	4	
DIP1SAD01 Introduction to Analysis and Design	4	
DIP1CTS03 Computer Technology Essentials	4	
DIP1PRG12 Introduction to Structured Programming	4	
DIP1ITC04 Introduction to Networking	4	
DIP1MPR01IT Mini Project	5	All Yr 1 Subjects
DIP1ITC01 Introduction to Information Technology	4	
<b>Year 2 (9 Compulsory)</b>		
DIP200 Introduction to Computer Architecture	4	
DIP204 Internet Technology	4	
DIP201 Computing Mathematics	4	
DIP202 Business Communications	4	
DIP203 Database Concepts & Practices	4	
DIP215 Object-Oriented Programming	4	
DIP206 Data Communications	4	
DIP208 Fundamentals of Operating Systems	4	
DIP220 Industrial Internship	6	All Yr 1 Subjects
<b>Year 2 (2 Elective)</b>		
DIP222 Programming Principles	4	
DIP207 Calculus and Linear Algebra	4	
DIP211 Interactive Media Applications	4	
D2MGT100 Organisations and Management	4	
D2MKT110 Principles of Marketing	4	
<b>Plus</b> Relevant Mata Pelajaran Pengajian Umum (MPU) subjects. Refer to Section 6.1 for more details.		
<b>Note:</b> Students are required to complete 19 academic subjects and 4 MPU subjects = total 23 subjects (90 credit hours)		

**16.3. Bachelor of Information Technology (Hons)**  
(w.e.f. August 2020)

Subject	Credit Hours	Pre-Req
<b>Year 1 (7 Compulsory)</b>		
BIT101 Introduction to Information Technology	4	
BIT102 Front-End Web Development	4	
BIT103 Introduction to Database Systems	4	
BIT106 OO Programming Fundamentals	4	
BIT107 Data Communications and Networking	4	
BIT108 Discrete Mathematics	4	
BIT110 Introduction to Operating Systems	4	
<b>Year 1 (2 Elective)</b>		
BDA100 Introduction to Programming	4	
BIT04 Application of Mathematics in IT	4	
BGM101 Multimedia Systems	4	
BDA101 Analytics for Decision Making	4	
<b>Year 2 (5 Compulsory)</b>		
BIT201 System Architecture and Design	4	BIT106/BDA100
BIT206 User Experience Design	4	
BIT203 Advanced OO Programming	4	BIT106
BIT200 Technopreneurship and Innovation	4	
BIT216 Software Engineering Principles	4	BIT201
<b>Year 2 (3 Electives)</b>		
BIT204 Advanced Networking	4	BIT107
BIT205 Object-Oriented Programming in C++	4	BIT106
BIT208 Data Structures and Algorithms	4	BIT106
BMC204 Introduction to Computer Systems Engineering	4	
BDA203 Advanced Database Systems	4	BIT103
BIT210 Web Programming	4	BIT106
BIT212 Cloud Computing	4	BIT107
BIT215 Computer Forensics	4	
BIT214 Social Media Marketing	4	
BMC208 Introduction to Mobile Apps	4	BIT106
BDA206 Enterprise Data Infrastructure	4	BIT103
BIT217 Internet of Things	4	BIT110
OR up to 2 electives from any Year 2 HELP undergraduate programmes (2 subjects x 4 credit hours = 8 credit hours)		
<b>Year 3 (6 Compulsory)</b>		
BIT301 IT Project Management	4	
BIT303 Computer Ethics and Cybersecurity	4	
BIT304 Final Year Project I	6	All Yr 1 & 2 Subjects
BIT305 Final Year Project II	5	BIT304
BIT310 Business Development Project	5	
BIT320 Industrial Internship	6	All Yr 1 & 2 Subjects
<b>Year 3 (2 Electives)</b>		
BIT306 Web Technologies	4	BIT102 & BIT103
BIT307 Wireless Networking	4	BIT107
BIT308 Enterprise Architecture	4	
BIS301 Issues in Strategic Information Management	4	
BMC304 Mobile Applications Development	4	BMC208
OR up to 2 electives from any Year 3 HELP undergraduate programmes (2 subjects x 4 credit hours = 8 credit hours)		



<b>Plus</b>
<b>Relevant Mata Pelajaran Pengajian Umum (MPU) subjects. Refer to Section 6.2 for more details.</b>
<b>Note:</b>
<b>Students are required to complete 25 academic subjects and 5 MPU subjects = total 30 subjects (120 credit hours)</b>

#### 16.4. Bachelor of Information Technology (Hons) Data Analytics (w.e.f. May 2019)

Subject	Credit Hours	Pre-Req
<b>Year 1 (7 Compulsory)</b>		
BIT101 Introduction to Information Technology	4	
BIT102 Front-End Web Development	4	
BIT103 Introduction to Database Systems	4	
BIT107 Data Communications and Networking	4	
BIT108 Discrete Mathematics	4	
BDA101 Analytics for Decision Making	4	
BDA100 Introduction to Programming	4	
<b>Year 1 (2 Electives)</b>		
Plus 2 Year 1 Electives from IT, Business or Communications Degree programmes. (2 subjects x 4 credit hours = 8 credit hours)		
<b>Year 2 (6 Compulsory)</b>		
BIT201 Systems Architecture and Design	4	BIT106/BDA100
BIT206 User Experience Design	4	
BDA202 Applications of Data Analytics	4	BDA101
BDA203 Advanced Database Systems	4	BIT103
BDA205 Statistics and Data Visualization	4	
BDA206 Enterprise Data Infrastructure	4	BIT103
<b>Year 2 (2 Electives)</b>		
Plus 2 Year 2 Electives from IT, Business or Communications Degree programmes. (2 subjects x 4 credit hours = 8 credit hours)		
<b>Year 3 (8 Compulsory)</b>		
BIT301 IT Project Management	4	
BIT304 Final Year Project I	6	All Yr 1 & 2 Subjects
BIT305 Final Year Project II	5	BIT304
BIT310 Business Development Project	5	
BT320 Industrial Internship	6	
BIT303 Computer Ethics and Cybersecurity	4	
BDA306 Data Mining and Machine Learning	4	BDA205
BDA307 Big Data Technologies	4	
<b>Plus</b>		
<b>Relevant Mata Pelajaran Pengajian Umum (MPU) subjects. Refer to Section 6.2 for more details.</b>		
<b>Note:</b>		
<b>Students are required to complete 25 academic subjects and 5 MPU subjects = total 30 subjects (120 credit hours)</b>		

#### 16.5. Master of Data Science (w.e.f. January 2021)

Subject Code	Subject Name	Classification	Credit Hours
MDS501	Programming for Data Science	Core	4
MDS502	Data Management	Core	4
MDS503	Statistics for Data Science	Core	4
MDS504	Applied Machine Learning	Core	4
MDS505	Research Methods	Core	4
MDS506	Dissertation	Core	20
	Total Credit Hours (1 Year)		40

## **17. Internship & Job Placement**

Many of our graduates are headhunted by various multinational companies before they even graduate, and many of these companies also provide internship opportunities to our students.

A minimum 3 months internship placement is mandatory for both the Diploma and undergraduate degree programmes. Apart from acquiring practical experience in the industry, our students are able to interact and network with industry leaders and professionals in the working environment.

The Work-Based Learning (WBL) option in the Bachelor of IT (Hons) also provides a year-long option to enable students to complete their third and final year while working full-time.

Some of the organizations that our students have been employed by include:

- Accenture
- Broadcast Network Systems (ASTRO)
- Citibank
- Dassault Systemes
- Dell
- Fusionex
- Geoview Data Services
- Hewlett Packard
- HSBC (China)
- IBM
- Maxis Communications
- Motorola Malaysia
- MIMOS
- Pilot Multimedia
- Sapura Holdings
- Shell

## 18. Credit Transfer Arrangements

Please note that students will need to consult the Faculty of Computing and Digital Technology on the grades and English language requirements that they need to obtain in order to transfer the following universities. Furthermore, the Faculty reserves the right to make appropriate changes to the information presented in the next few pages. Thus, it is important for students to check with the Faculty on any changes at the beginning of each new semester.

### 18.1. The University of Queensland, Australia

1. Students must successfully complete the Diploma in Information Technology or the Bachelor of Information Technology (Honours) (one or two years) at HELP University to be eligible for the pathways listed below. Applications for any other pathways will be considered on a case by case basis.
2. Students must achieve the required GPA for admission to the chosen UQ program.
3. Students are required to meet the UQ English language proficiency entry requirements-  
<https://ppl.app.uq.edu.au/content/3.40.14-english-language-proficiency-admission>
4. The pathways listed in Table 4 are based on the current curriculum of both universities and changes by either party may warrant a review and re-assessment of credit. It is the responsibility of each party to communicate any such changes.
5. To be awarded credit for the UQ Math B Entry requirement
  - a. Diploma applicants must complete DIP207 Calculus and Linear Algebra as a Specified Elective.
  - b. Bachelor applicants must complete BIT104 Application of Mathematics in IT in their first year.
  - c. Bachelor applicants who completed 2 years of the Bachelor must complete BIT208 Data Structures and Algorithms.

**Table 4. Articulation pathways to UQ**

HELP Uni Program	UQ Program	Credit Awarded	Remaining at UQ
2 years of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (Cyber Security)	24 units	24 units (2 years)
2 years of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (Data Science)	24 units	24 units (2 years)
2 years of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (Machine Learning)	24 units	24 units (2 years March commencement; 1.5 years July commencement)

2 years of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (No Major)	24 units	24 units (1.5 years)
2 years of Bachelor of Information Technology (Honours)*	Bachelor of Engineering (Honours) Software*	32 units	32 units (2 years)
2 years of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (No Major)	32 units	16 units (1 year)
1.5 years of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (No Major)	24 units	24 units (1.5 years)
1.5 years of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (No Major)	24 units	24 units (2 years March commencement; 1.5 years July commencement)
1 year of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (No Major)	16 units	32 units (2 years)
1 year of Bachelor of Information Technology (Honours)	Bachelor of Computer Science (No Major)	16 units	32 units (2 years March commencement; 2.5 years July commencement)
2 years of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (Computer Systems & Networks)	32 units	16 units (1 year)
2 years of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (Software Design)	32 units	16 units (1 year)
1.5 years of Bachelor of Information Technology (Honours)	Bachelor of Information Technology (Software Design)	24 units	24 units (1.5 years)

\* Applicants must have previously completed suitable high school or other Physics or Chemistry studies to meet the UQ Physics or Chemistry entry requirement.

HELP Uni Program	UQ Program	Credit Awarded	Remaining at UQ
Diploma in Information Technology	Bachelor of Computer Science (Cyber Security)	16 units	32 units (2.5 years)

Diploma in Information Technology	Bachelor of Computer Science (Data Science)	16 units	32 units (2 years March commencement; 2.5 years July commencement)
Diploma in Information Technology	Bachelor of Computer Science (Machine Learning)	16 units	32 units (2 years March commencement; 2.5 years July commencement)
Diploma in Information Technology	Bachelor of Computer Science (No Major)	16 units	32 units (2 years)
Diploma in Information Technology	Bachelor of Information Technology (Computer Systems & Networks)	24 units	24 units (2 years March commencement only)
Diploma in Information Technology	Bachelor of Information Technology (Enterprise Information Systems)	16 units	32 units (2 years)
Diploma in Information Technology	Bachelor of Information Technology (No Major)	24 units	24 units (1.5 years)
Diploma in Information Technology	Bachelor of Information Technology (Software Design)	24 units	24 units (1.5 years March commencement; 2 years July commencement)
Diploma in Information Technology	Bachelor of Information Technology (Software Information Systems)	24 units	24 units (2 years March commencement; 1.5 years July commencement)
	Master of Computer Science		

### **18.2. Australian National University, Australia**

- Bachelor of Information Technology  
HELP Diploma in Information Technology (2 years at HELP University + 2 years at The Australian National University)
- Bachelor of Information Technology (2 + 1.5)
- Bachelor of Software Engineering (Honours) (2 + 2)
- Bachelor of Advanced Computing (Honours) (2 + 2)

### **18.3. University of Technology Sydney, Australia**

- Bachelor of Science in Information Technology  
HELP Diploma in Information Technology (2 years at HELP University + BSc in IT at the University of Technology Sydney + 1.5 years)
- Bachelor of Science in Information Technology (Enterprise Systems Development) (2+1)
- Bachelor of Science in Information Technology (Data Analytics) (2+1)

### **18.4. Macquarie University, Australia**

- HELP Diploma in Information Technology (2 years at HELP University) +  
Bachelor of Business Analytics at Macquarie University (2 years)
- Bachelor of Business Analytics  
(HELP Bachelor of Information Technology (Hons) Data Analytics (1.5 years at HELP University) +  
Bachelor of Business Analytics at Macquarie University (1.5 years)

### **18.5. The Eastern Institute of Technology, New Zealand**

- BComp Systems, The Eastern Institute of Technology (EIT)  
HELP Diploma in Information Technology (2 years at HELP University) +  
BComp Systems (ONE year on campus study (2 semesters) + six months compulsory internship)

### **18.6. Cardiff University, United Kingdom**

- Bachelor of Information Technology  
HELP Diploma in Information Technology (2 years at HELP University + 2 years at Cardiff University)
- BSc Computer Science (1 + 2 or 1 + 3 with one Year at Industry)
- BSc Computer Science with Specialism (1 + 2 or 1 + 3 with one year Industry)
- BSc Software Engineering (1 + 2 or 1 + 3 with Year Industry)
- BSc Business Information Systems (1 + 2 or 1 + 3 with one year Industry)
- MSc Advanced Computer Science
- MSc Information Security and Privacy
- MSc Computing
- MSc Computing and IT Management

### **18.7. Northumbria University, United Kingdom**

- MSc Computer Science
- MSc Business Information Systems Management
- MSc Computer Network Technology

**18.8. University of Essex, United Kingdom**

- HELP Diploma in Information Technology + 2 years at University of Essex (BSc Information & Communication Technology / BSc Computer Games / BSc Computer Science)
- BSc Information & Communication Technology (2+1)
- BSc Computer Games (2+1)
- BSc Computer Science (2+1)

**18.9. Swansea University, United Kingdom**

- BSc Computer Science (2+1)

**18.10. Beijing JiaoTong University, China**

- HELP Diploma in Information Technology + 2 years at the Beijing JiaoTong University (Bachelor of Software Engineering)
- HELP Bachelor of Information Technology (2 years) + 2 years at the Beijing JiaoTong University (Bachelor of Software Engineering)

## **19. Extra Curricular Activities**

The success of the faculty lies in its ability to vary the learning experience. Apart from class studies, projects and participation in competitions, the department also promotes extra curricular activities for their students. These activities are either held in conjunction with the University or on our own. Students are encouraged to join the following clubs organised by the IT Student Council:

- The IT Student Council
- The Robotics Club
- The IoT Club
- 3D Printing Club
- eSports Club
- Cybersecurity Club

Students can also play eSports at the computer lab every Wednesday lunch time.

As part of our efforts to prepare students for the Fourth Industrial Revolution, we offer free and mandatory workshops on Data Analytics and Business Intelligence, Robotics, Blockchain and Machine Learning.



## 20. Research and Development Activities

We are committed to R&D activities. Our collaborations with many industry partners is evidence of our focus to increase industry relevance of our research and also close engagement with our community. The current focus of the faculty R&D activities lies in the areas of analytics, blockchain and AI.

Research Area	Supervisor/Researcher	Sample Projects
Artificial Intelligence	Naline Shanmugam	Chatbot for automating responses to common student queries.
Machine Learning	Dr. Fong Pui Kwan	Investigation on the OpenCV and OpenFace libraries for facial recognition applications
Machine Learning	Dr. Abdul Qayoom Hamal	Emotion recognition by analysis of viewer's emotions while watching movies.
Blockchain	Dr. Mustafa Alobaedy	Use of blockchain for management of health medical records.
Data Analytics	Dr. Mustafa Alobaedy	Review on Metaheuristic Algorithms
Data Analytics	Dr. Mustafa Alobaedy	Big data analytics using Raspberry Pi cluster.
Data Analytics	Navid Behboodan	Distributed computing for data analytics.
Data Analytics	Ng Shu Min	Investigation on job requirements and skills from job listings using Text Analytics.
		Development of a data ingestion platform using containerization for streaming data.

## **21. Useful Services**

### **21.1. Learning Resource Centre (LRC)**

The LRC, also known as the HELP University Library, provides students with learning resources to support study and research and is managed by a team of professionally qualified personnel and trained assistants. The library has a large collection of books, periodicals, print journals as well as online resources. Online databases are accessible using the HELPLIVE email ID and password. Students are required to register with HELPDsk by emailing [helpdesk@helplive.edu.my](mailto:helpdesk@helplive.edu.my) to obtain the login details.

Students should refer to the library website at < <http://library.help.edu.my> > for updates on a regular basis.

### **21.2. International Student Services Department (ISSD)**

The ISSD is responsible for providing advice and support to the HELP international students with regard to liaison with the Malaysian government authorities including visa processing and immigration matters, student arrival and induction, student discipline, academic progress and general welfare.

Students who are required to renew their student pass shall apply to ISSD two months in advance before the expiry date. It is the students' responsibility to ensure that their Student Pass is valid and submit all necessary documents on time for renewal. ISSD sends a reminder email to the students 60 days before their visa expiry.

Please refer to < <http://help.edu.my/international-student-admission/#> > for further details.

### **21.3. Accommodation**

For information on accommodation, please refer to the website at <http://www.help.edu.my/living-lifestyle/campus-accommodation.html>

### **21.4. Computer Facilities and MyPride Student Portal**

1. Computer laboratories and learning spaces equipped with computer facilities are available on campus. The Corporate Information Centre (CIC) HELP Desk provides technical and troubleshooting assistance to support the computer resources at HELP.
2. The "New MyPride" student portal allows students to view their official results, financial and academic status and verify their personal details. Students are required to register with the CIC HELPDsk by emailing: [helpdesk@helplive.edu.my](mailto:helpdesk@helplive.edu.my) to obtain the login details for the "New MyPride" account. Students with outstanding fees will not be able to view their results from "New MyPride".

### **21.5. HELP Counselling**

Other matters pertaining to student well-being shall be brought to the attention of the Dean of faculty for further discussion and resolution. Alternatively, students may wish to contact HELP Counselling for career advisory services or professional guidance on personal matters.

CAREERsense@HELP, telephone: +603 2711 2000 ext.1130 or  
Centre for Psychological & Counselling Services, telephone: +603 2096 1212.

### **21.6. Grievance Procedure**

The faculty is committed to providing a conducive study and work environment. All complaints are treated seriously, and the faculty will attempt to resolve them soonest possible. The faculty has grievance procedure available to enable students to make complaints, and that complaints are

responded to appropriately without prejudice to the student. If you have concerns about your treatment by the faculty, by a staff member or by another student, first and foremost you should try and resolve the problem directly with the person(s) concerned. Wherever possible, complaints should be resolved through a process of discussion, cooperation and conciliation.

#### **21.7. Disability Services**

If you have a disability, you are encouraged to contact the faculty administrator (s) as early as possible to discuss your individual needs. The faculty administrator (s) will provide the relevant reference or information the available support (if applicable) by the University.

#### **21.8. Faculty Programme Office**

1. Faculty's office is opened from 9:00 a.m. – 5:30 p.m. on weekdays, 9:00 a.m. – 1.00 p.m. on Saturdays, and is closed on Sundays and public holidays. Please contact us early to confirm the time if you wish to come to the office a little later.
2. Important information is normally given to students via helplive email. The administrators may also communicate with students via their land or mobile phones; please return our calls if we are unable to reach you. Students' communication with the faculty may be made through office phones or HELPLIVE e-mail - response may take up to 3 working days. Students are required to update the faculty of any change in their e-mail addresses/mobile phone numbers.