

## **OTHM QUALIFICATIONS**

### **Level 4 Diploma in Information Technology**

#### **Description**

These courses are well suited for the students who are aspiring to go to Australia to further their studies. OTHM courses which are more academic in nature will cater to the students in Singapore and overseas students who would like to pursue their higher studies up to degree programme in Singapore itself. Hence, it caters a different market segment other than the segments we are focusing right now. OTHM qualifications with multiple majors will provide more choices for potential students.

#### **Job roles**

Information technology and software programmed gadgets replacing a vast number of jobs previously operated by human, there is a forecasted demand for graduates of Information technology. The need to employ Information Technology ('IT') graduates in the business world have been expanding ever since businesses made their presence online.

With the advancement of web-based commerce and business, web developer responsible for creating dynamic pages to provide interaction between users and online businesses is in demand. A Diploma in Information Technology graduate will be able to aspire for this position as they will be equipped with the technical and analytical skills required for developing the user-website interface.

Many organisations are heavily dependent on IT products such as operating systems, servers and networking tools for day-to-day operations. These organisations are in continuous demand for system administrators and IT support personnel. Graduates from this course will be able to take up these jobs with the skills and knowledge they acquired to install, upgrade and configure operating systems and handle complex support operations.

With the replacement of many tedious tasks and jobs by Artificial Intelligent (AI) computer systems and machines, there have been openings and expansions in IT graduates' job market. Singapore has been growing as a hub not only for businesses online but also for research in the field of AI. The AI hub will incubate 100 start-ups every year, once it starts in 2018, resulting in more jobs in many businesses. Additionally, Singapore has been recognised as an Artificial Intelligence (AI) hub, so it is expected that this will create more jobs in the IT sector.

China, Japan, and countries in Europe are investing more in IT research, and this is expected to garner more jobs in IT sectors and in other industries at large. These jobs would require graduates to apply to a wide range of higher-level technical skills in ICT areas such as networking, IT support, database development, programming and web development.

A graduate of Advanced Diploma of Information Technology whose knowledge and skills would match the need of the market that is involved in digitising products and services may be able to seek jobs in areas of specialised ICT support functions. Jobs that require to create and install web services and cloud computing applications are in demand among fintech companies. Computer programmer roles for graduates of Advanced Diploma in Information technology may be able to cater to these job demands, as the graduates will be equipped with knowledge and skills to create and run web services and cloud-based applications for organisations.

## Training Strategies

AAC adopts the following learning and teaching strategy to nurture the students to achieve the courses' learning outcomes and stretch them to reach their maximum capacity in their skills and knowledge.

### High Expectations

High expectations for learning and behaviour are identified and shared with all students. Clear expectations for acceptable student behaviour and classroom procedures are established, communicated, modelled, and maintained. Classrooms are task-oriented while the social and emotional needs of students are met through mutual respect and rapport. Classroom schedules are followed, activities are organised. Students are encouraged to ask probing questions about content and their work.

### Achievement

Academic expectations, goals for achievements are identified and shared with all students for each module and the whole course. These learning targets are connected to the learning activities and stated in terms of students learning outcomes. The learning targets and activities are set to reflect different types of the learning environment. Lecturer plans ways for students to assume responsibilities for their learning.

### Collaboration

Teaching strategies or purposely designed to engage all students in learning with other learners. To achieve this, lecturers incorporate collaborative structures by making them work in groups on tasks aligned with standards during guided learning sessions. Lecturers make adjustments to instructions, e.g., pace, modality, questioning, and collaborative structures for all students in the classroom based on student engagement throughout the lesson.

### Relationships

Meaning interaction and interpersonal connections occur between the lecturers and students. Learning activities and instructional strategies are informed by students' skills, interests, cultural backgrounds, language proficiency, and exceptionalities. Students are encouraged to take risks in their learning without fear of negative responses from the teacher or peers.

### Respect and Tolerance

Ideas, thoughts, and learning are accepted by and from all students. Instructional strategies reflect and respond to students' cultural values, experience, and learning styles in the class. Lecturers recognise the students' cultural biases and know how those biases may impact classroom management and prepare appropriate strategies to tackle the situations. AAC Lecturers are trained to understand and respond appropriately to the students' cultural differences in verbal and non-verbal cues, especially in a multinational classroom environment. Students are also oriented to show respect to cultural diversity and trained to show tolerance and adapt to the differences.

## Duration:

9 MONTHS

## Qualification Entry Requirements

Academic	-At least D for any 1 A Level subject or -12 years of formal education or equivalent
English Proficiency	- IELTS 5.0 or equivalent or - AAC EFL Level-4 or - Pass AAC English proficiency test
Age	At least 18 or above

## Qualification Modules

### LEVEL 4 Diploma in Information Technology (Full Time)

Modules	Core/ Option	Credits	Teaching hours	Guided Learning Hours	Independent Learning Hours	Total Qualification Time
Programming Foundations	Core	20	36	24	140	200
Systems Analysis and Design	Core	20	36	24	140	200
Web and Multimedia Applications	Core	20	36	24	140	200
Computer and Network Technology	Core	20	36	24	140	200
Software Development	Core	20	36	24	140	200
Managing Business Information	Core	20	36	24	140	200
		120	Total Learning Hours			1200

### LEVEL 4 Diploma in Information Technology (Part-time)

Modules	Core/ Option	Credits	Teaching hours	Independent Learning Hours	Total Qualification Time
Programming Foundations	Core	20	36	164	200
Systems Analysis and Design	Core	20	36	164	200
Web and Multimedia Applications	Core	20	36	164	200
Computer and Network Technology	Core	20	36	164	200

Software Development	Core	20	36	164	200
Managing Business Information	Core	20	36	164	200
Total Credits		60	Total Learning Hours		1200

## Synopsis

The objective of the Diploma in Information Technology (Level 4 & 5) is to provide learners with an excellent foundation for a career in a range of organisations. It is designed to ensure that each learner is 'business ready': a confident, independent thinker with a detailed knowledge of Information Technology, and equipped with the skills to adapt rapidly to change. The qualification is ideal for those who have started, or are planning to move into, a career in private or public sector business. Successful completion of Level 4 and/or Level 5 Diploma in Information Technology will provide learners with the opportunity to progress to further study or employment.

## Assessment Arrangements

Modules	Assessment*	Assesses Learning Outcomes	Wordcount (words)
Software Engineering	Coursework	All ACs under LO1 and LO3	2000
	Practical/Lab Demonstration	All ACs in LO2 and LO4	NA
Database Systems	Coursework	All ACs under LO1	2000
	Practical/Lab Demonstration	All ACs under LO2 and LO3	NA
Advanced systems Analysis and Design	Coursework	All ACs under LO1, LO2, LO3, LO4	2000
	Lab Demonstration	LO3, LO4	NA
Management Information Systems	Coursework	All ACs under LO1 and LO2	1500
	Computer Lab documentation	All ACs under LO3	NA
Network Information Systems	Coursework	All ACs under LO1, LO2	2000
	Practical	All ACs under	NA

		L03	
IT Project Management	Project	All ACs under LO1, LO2, LO3, LO4	4500

\*All the assessments are supplied by OTHM.

All units within this qualification are internally assessed by AAC and externally verified by OTHM. The qualifications are criterion referenced, based on the achievement of all the specified learning outcomes.

To achieve a 'pass' for a unit, learners must provide evidence to demonstrate that they have fulfilled all the learning outcomes and meet the standards specified by all assessment criteria. Judgement that the learners have successfully fulfilled the assessment criteria is made by the Assessor. The Assessor is required to provide an audit trail showing how the judgement of the learners' overall achievement has been arrived at.

Specific assessment guidance and relevant marking criteria for each unit are made available in the Assignment Brief document. These are made available to centres immediately after registration of one or more learners.

#### Grades

Mark	Grade
50% - 100%	Pass
0% - 49%	Fail

#### Graduation Requirement:

To award certificate students are required to pass all the modules in Level 4 Information Technology.