



A . P . U
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

I am innovative

COMPUTING, TECHNOLOGY & GAMES DEVELOPMENT



APIIT EDUCATION GROUP

Asia Pacific University of Technology & Innovation (APU) Company no. 672203-A
Asia Pacific Institute of Information Technology (APIIT) Company no. 260744-W
(A Member of the APIIT Education Group)

Technology Park Malaysia, Bukit Jalil, 57000 Kuala Lumpur.
Tel : +603-8996 1000 Fax : +603-8996 1001
Email : info@apu.edu.my | info@apiit.edu.my

DU030(W) | DK121(W)

www.apu.edu.my | www.apiit.edu.my

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03/2020

INNOVATIVE
THINKING
CAN CHANGE
YOUR WORLD



Inspiring

you towards excellence
and digital future

It starts now..... It starts here

COMPUTING, TECHNOLOGY & GAMES DEVELOPMENT PROGRAMMES

DEGREE PROGRAMMES

- **BSc (Hons) in Information Technology**
- **BSc (Hons) in Information Technology with a specialism in:**
 - Information System Security
 - Cloud Computing
 - Network Computing
 - Mobile Technology
 - Internet of Things (IoT)
 - Financial Technology (FinTech)
 - Business Information Systems
- **BSc (Hons) in Software Engineering**
- **BSc (Hons) in Computer Science**
- **BSc (Hons) in Computer Science with a specialism in:**
 - Data Analytics
 - Digital Forensics
- **BSc (Hons) in Computer Science (Cyber Security)**
- **Bachelor of Computer Science (Hons) (Intelligent Systems)**
- **BSc (Hons) in Multimedia Technology**
- **BSc (Hons) in Multimedia Technology with a specialism in:**
 - VR/AR
- **BSc (Hons) in Computer Games Development**

APIIT RATED 5-STARS (EXCELLENT) RATING



APIIT rated 5-Stars
(EXCELLENT)
in MyQuest 2016/17.

APU AWARDED 5-STAR (EXCELLENT) RATING



APU was announced as among the Highest Rated Emerging Universities in Malaysia, being rated at 5-STAR (EXCELLENT Rating) under the SETARA 2017 Ratings by the Ministry of Education (MOE). APU has maintained this Excellent Rating in the SETARA 2011, 2013 as well as in the latest ratings announced in 2017. The SETARA ratings system measures the performance of teaching and learning in universities in Malaysia.

APU IS A PREMIER DIGITAL TECH UNIVERSITY - MALAYSIA DIGITAL ECONOMY CORPORATION



APU was among the first universities in Malaysia awarded Premier Digital Tech University status by the Malaysia Digital Economy Corporation (MDEC). APU is recognised for its commitment to offer top-notch digital technology courses and ensuring our highly-skilled graduates continue to flourish and fill future digital job demands locally and globally.

Experience

APU's iconic campus

Asia Pacific University of Technology & Innovation (APU) is amongst Malaysia's Premier Private Universities, and is where a unique fusion of technology, innovation and creativity works effectively towards preparing professional graduates for significant roles in business and society globally.



An Ultra-modern Campus Built Today for the Needs of Tomorrow

Asia Pacific University of Technology & Innovation (APU). This new Ultra-Modern University Campus in Technology Park Malaysia (TPM) is designed to be the state-of-the-art teaching, learning and research facility providing a conducive environment for students and staff. TPM is the ideal location for this new and contemporary Campus due to its strong positioning as Malaysia's primary hub for leading-edge and high-tech developments in a wide variety of areas. It is also located in one of the most rapidly developing areas in Kuala Lumpur, and is well served and accessible through major highways, LRT and other forms of public transportation.

APU has earned an enviable reputation as an award-winning University through its achievements in winning a host of prestigious awards at national and international levels.



Malaysia's Award Winning University

- A Stylish Blend of Functionality & Accessibility
- A Unique Fusion of Technology, Innovation and Creativity
- Cutting-edge Technologies
- A Wide Variety of Spaces to Learn, Engage & Transform



APU's iconic campus is setting a new benchmark for design excellence among Malaysian Universities, combining an eco-friendly campus with a dynamic blend of technology and innovation to enable professional learning. It is a magnificent teaching & learning space for our Students & Staff designed by our award-winning architects & consultants.

Rated No:1
in Asia and Malaysia
for multicultural learning experience*

MALAYSIA'S AWARD WINNING UNIVERSITY

Engineering Degrees Accredited under
WASHINGTON ACCORD
(Accepted Worldwide)

100%
Employability**

12,000
STUDENTS on campus from 130 COUNTRIES

MORE THAN 40,000
GRADUATES & ALUMNI

* Student Barometer Wave 2019 (International Students),
Studying with people from other cultures.

** Graduate Tracer Study 2018 by Minister of Education, Malaysia.



100% of our graduates are employed by graduation*; this is not just a number, but a significant symbol of our success and pride in nurturing professionals for global careers.

100%

Employability*



Industry Ready Graduates

The APU Career Centre connects and engages with over 10,000 Employers to ensure that our graduates are highly employed in both local and international corporations, as it closely supports APU students in both internship and career placement activities.

Work-ready, World-ready

Study with us and we'll equip you to become a world-ready professional, with the knowledge, attributes, skills and expertise that employers look for.

Employers are demanding that graduates not just have qualifications, but also have the experience and ability to contribute to the workplace. To meet these demands, APU develops programmes and partnerships with academic and industry partners, with a heavy focus on applied learning. This helps ensure that the skills and knowledge taught at APU are up-to-date and in high demand.

Outstanding Support

Regardless of the programme you choose, you will be supported by highly qualified and enthusiastic professionals. Many enjoy an international reputation for their research and actively engage with leading names in the industry.



*Graduate Tracer Study 2018 by Ministry of Education, Malaysia.

Rated No.1

in Asia and Malaysia for Multicultural Learning Experience*

A Truly International Community

Just like the beautiful country in which we are located, APU is a rich blend of traditional and modern styles. We have developed a singular character to embrace those things that set us apart. We pride ourselves on the quality of both our teaching and research as well as having a unique living and learning environment.



A Hub of Cultural Diversity

With more than 12,000 students from over 130 countries, we ensure that you will gain memorable experiences alongside the diversified and colourful cultural environment. We have students from Asia, Central Asia, Middle East, Africa, Europe, and Oceania. Our International Students Support Centre helps you with the procedure to apply for your Student Pass before coming here. Upon arrival in Kuala Lumpur, you will be greeted with warmth by our friendly staff, who will pick you up and bring you to our campus.

Student Welcome Team

The Student Welcome Team was established by Asia Pacific University of Technology & Innovation (APU) to improve the arrival experience of international students in Malaysia. Warm Welcome, Warm Hello, Warm What's up is the theme of this ASK ME Team.



Student Life @ APU

Being a university student can be one of your most exciting expeditions. Higher education opens up a world of new ideas, intellectual growth, new adventures and the building of lifelong friendships. Here at APU, we support you to take the time to explore not only the educational experiences but also the wide range of social, sporting and cultural activities on campus.

* Student Barometer Wave 2019 (International Students), 'Studying with people from other cultures'.



World-class Facilities @ APU



APU provides access to world-class resources across a wide range of disciplines. This translates into industry-ready skills and a competitive edge for graduates.

Our campus is well-situated in a high-technology environment, and is equipped to enable every student to get the most out of their study experience at APU.



Cutting-Edge Technologies

The Campus blends technology, integration, innovation and creativity under one roof. It provides not just a university learning environment, but also a lively community spot for our students to formulate new ideas, gain intellectual growth and discover new adventures. It is not only a university campus, but also the nurturing ground for world-changing global ideas. All spaces are carefully designed to create an unforgettable learning and lifestyle experience that lasts for a lifetime, while enabling professional learning and cultivating global mindsets. APU, as Malaysia's leading technological university, is the incubator for self-starting and innovative APU graduates. Our educational technology environment supports the development of graduates of this calibre, in which well-equipped computing and engineering laboratories with advanced software, hardware and technologies place students at the forefront of technological excellence.

Social Interaction Platforms

Fitness Sweatzone, student lounges, sports facilities and breakout rooms provide spaces for relaxation and socialization throughout the day. They are carefully designed to create an unforgettable learning and lifestyle experience that lasts for a lifetime, especially for students who are studying away from home.

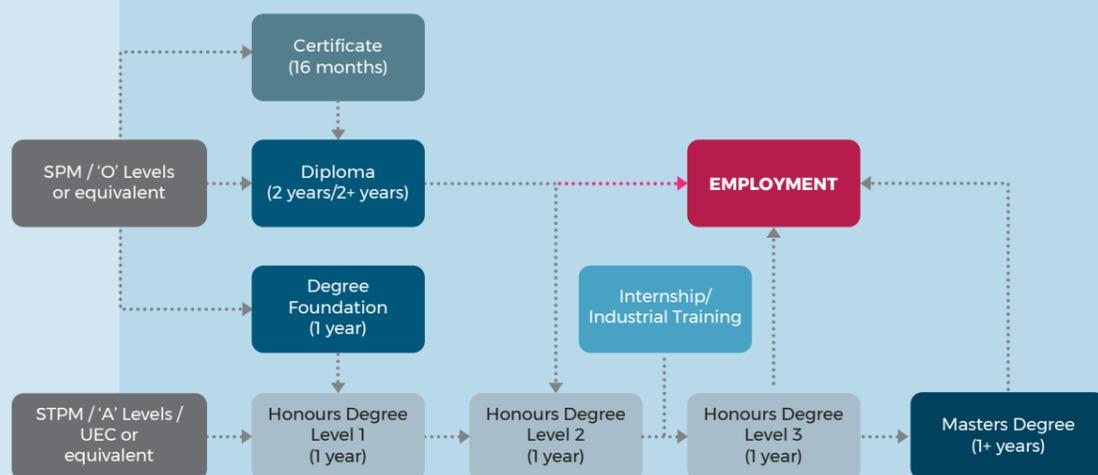
An Integrated Community

The campus aims to establish a community aspect for the university - where integration is the key. Walkways, classrooms, communal spaces and discussion areas promote connectivity and cultivates exchange of ideas among students from different disciplines and academics, to implement cooperative learning concepts in line with the Industrial Revolution 4.0.



Pathways & Admission Requirements

YOUR STUDY PROGRESSION



ADMISSION REQUIREMENTS

BACHELORS (HONS) DEGREE PROGRAMMES

Entry Qualification	Computer Science / Software Engineering / Cyber Security / Intelligent Systems	Information Technology	Multimedia Technology / Computer Games Development
STPM	<ul style="list-style-type: none"> 2 Passes in STPM in Science stream with minimum Grade C (GPA 2.0) in Mathematics and one Science or ICT Subject. OR 2 Passes in STPM with minimum Grade C (GPA 2.0) in any subject with a credit in Additional Mathematics at SPM. OR 2 Passes in STPM with minimum Grade C (GPA 2.0) in any subject with a credit in Mathematics and any one Science or ICT subjects at SPM. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i> 	<ul style="list-style-type: none"> 2 Passes in STPM with minimum Grade C (CGPA 2.0) in any subject with a Credit in Mathematics at SPM. 	<ul style="list-style-type: none"> 2 Passes in STPM with minimum Grade C (CGPA 2.0) in any subject with a Pass in Mathematics at SPM. <p><i>*Strong Mathematics would be an added advantage.</i></p>
A-LEVEL <small>Overseas qualification that are equivalent to 12th Grade/ A-Level/ HSC are accepted.</small>	<ul style="list-style-type: none"> 2 Passes in A-Level in Science stream with a Pass in Mathematics and one Science or ICT subject. OR 2 Passes in A-Level with a Credit in Additional Mathematics at SPM/ IGCSE/ O-Level or its equivalent. OR 2 Passes in A-Level with a Credit in Mathematics and Science or ICT subjects at SPM/ IGCSE/ O-Level or equivalent. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i> 	<ul style="list-style-type: none"> 2 Passes in A-Level and with a Credit in Mathematics at SPM/ O-Level/ IGCSE or equivalent. 	<ul style="list-style-type: none"> 2 Passes in A-Level and with a Pass in Mathematics at SPM/ O-Level/ IGCSE or equivalent. <p><i>*Strong Mathematics would be an added advantage.</i></p>
UEC	<ul style="list-style-type: none"> 5 Grade B Passes in UEC in any subject including Mathematics and one Science or ICT subject. 5 Grade B Passes in UEC in any subject including Additional Mathematics. 5 Grade B Passes in UEC in any subjects including Mathematics. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i> 	<ul style="list-style-type: none"> 5 Grade B Passes in UEC in any subjects including Mathematics. 	<ul style="list-style-type: none"> 5 Grade B Passes in UEC in any subjects including a Pass in Mathematics. <p><i>*Strong Mathematics would be an added advantage.</i></p>
FOUNDATION/ MATRICULATION	<ul style="list-style-type: none"> A pass in Matriculation or Foundation studies with minimum CGPA of 2.0 with a Credit in Additional Mathematics at SPM/ IGCSE/ O-Level or its equivalent. <i>Note: The requirement for the Additional Mathematics can be exempted if the Matriculation or Foundation offers Mathematics module which is equivalent or higher requirement than the Additional Mathematics at SPM level.</i> OR A pass in Matriculation or Foundation studies with minimum CGPA of 2.0 and a Credit in Mathematics and Science or ICT subject at SPM/ IGCSE/ O-Level or its equivalent. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i> 	<ul style="list-style-type: none"> A pass in Matriculation or Foundation studies with minimum CGPA of 2.0 with a Credit in Mathematics at SPM/ IGCSE/ O-Level or its equivalent. 	<ul style="list-style-type: none"> A pass in Matriculation or Foundation studies with minimum CGPA of 2.0 with a Pass in Mathematics at SPM/ IGCSE/ O-Level or its equivalent.
ICT RELATED DIPLOMAS	<ul style="list-style-type: none"> Diploma with a minimum CGPA of 2.50. <i>Note: Student with CGPA above 2.0 and below 2.5 may be accepted using rigorous assessment conducted by APU and subject to the approval of the Academic Board.</i> 	<ul style="list-style-type: none"> Diploma with a minimum CGPA of 2.50. <i>Note: Student with CGPA above 2.0 and below 2.5 may be accepted using rigorous assessment conducted by APU and subject to the approval of the Academic Board.</i> 	<ul style="list-style-type: none"> Diploma with a minimum CGPA of 2.0 and a Pass in Mathematics at SPM/ IGCSE/ O-Level or its equivalent.

Note: Students who do not have a Credit in Additional Mathematics in SPM/ O-Level/IGCSE but have an acceptable achievement in Mathematics related subjects during the Foundation which may be equivalent to SPM/O-Level/IGCSE Additional Mathematics, can be accepted into Degree Programmes. Students can be given preferential entry for ICT related subject in SPM/ O-Level/ IGCSE.

Any qualification that APU accepts as equivalent to the above.

Note: Student with CGPA above 2.0 and below 2.5 may be accepted using rigorous assessment conducted by APU/APIIT and subject to the approval of the Academic Board.

ENGLISH REQUIREMENTS (only applicable to International Students)

Programmes	Requirements
Foundation and Diploma Programmes	<ul style="list-style-type: none"> IELTS : 4.0 TOEFL PBT : 397 TOEFL IBT : 30-31 Pearson (PTE) : 30 MUET : Band 2
Bachelor (Hons) Degree Programmes	<ul style="list-style-type: none"> IELTS : 5.0 TOEFL PBT : 410-417 TOEFL IBT : 35-45 Pearson (PTE) : 36 MUET : Band 3

Please note that under Ministry of Education regulations, only students who have achieved the minimum requirement in the English Language proficiency assessment as indicated above will be allowed to continue their studies in the main study programme. Students who do not have the required English Language achievement may apply for a student visa on conditional basis and are allowed to enrol in an English Language Certification programme at APU upon arrival in Malaysia and, subsequently, appear for the IELTS/TOEFL/PTE/MUET assessment.

Students who are unable to obtain the required level of English Competency during the maximum 12 months' period, will not be allowed to pursue their studies in the main programme and will have to return to their home country.

Students from English speaking countries and those with qualifications taught in English (IGCSE, A-Levels, IB, American High School Diploma etc) are exempted from English requirements. Applications for exemption must be accompanied by supporting documents.

Note: The above entry requirements may differ for specific programmes based on the latest programme standards published by Malaysian Qualifications Agency (MQA).

Foundation Programme – Flexibility of Choice

Duration: 1 Year (3 Semesters)

MODULES YOU STUDY

The modules studied help develop your study skills, introduce you to what you can expect on your degree and also allow you to discover what you can study depending on whether you choose a degree in Accounting, Banking, Finance, Actuarial Studies, Business & Management, Computing & Technology, Engineering, Industrial Design, Animation and Visual Effects.

SEMESTER 1	COMMON SEMESTER 1				
	• English for Academic Purpose	• Communication Skills	• Personal Development & Study Methods	• Essentials of Web Applications	• Mathematics
ROUTES	BUSINESS & FINANCE	COMPUTING & TECHNOLOGY	ENGINEERING	DESIGN	
SEMESTER 2	<ul style="list-style-type: none"> • Introduction to Business • Fundamental of Finance • Global Business Trends • Public Speaking in English 	<ul style="list-style-type: none"> • Introduction to Business • Introduction to Computer Architecture & Networking • Introduction to Visual & Interactive Programming • Public Speaking in English 	<ul style="list-style-type: none"> • Introduction to Business • Introduction to Visual & Interactive Programming • Engineering Mathematics • Public Speaking in English 	<ul style="list-style-type: none"> • Imaging/Production Skills for Design • Major Project 1 • Design Theory and Practice 1 • Public Speaking in English 	
SEMESTER 3	<ul style="list-style-type: none"> • Academic Research Skills • Principles of Accounts • Economics for Business • Perspectives in Technology / Further Mathematics** • Co-Curricular 	<ul style="list-style-type: none"> • Academic Research Skills • Further Mathematics • Introduction to Multimedia Applications • Perspectives in Technology • Co-Curricular 	<ul style="list-style-type: none"> • Academic Research Skills • Mechanical Science • Engineering Science • Electrical and Electronic Principles • Co-Curricular 	<ul style="list-style-type: none"> • Academic Research Skills • History of Design and Media • Major Project 2 • Design Theory and Practice 2 • Co-Curricular 	
You may then proceed to Level 1 of a Degree of your choice in the following pathways					
PRIMARY PATHWAYS	<ul style="list-style-type: none"> - Business & Management - Accounting, Finance, Banking & Actuarial Studies - Media & Communications 	- Computing & Technology	- Engineering	- Industrial Design, Visual Effects, Animation & Digital Advertising	
SECONDARY PATHWAYS	<ul style="list-style-type: none"> - Computing & Technology - Industrial Design, Visual Effects, Animation & Digital Advertising- International Relations <p>Students may also choose the following:</p>	<ul style="list-style-type: none"> - Business & Management - Accounting, Finance, Banking & Actuarial Studies - Industrial Design, Visual Effects, Animation & Digital Advertising - International Relations - Media & Communications 	<ul style="list-style-type: none"> - Computing & Technology - Accounting, Finance, Banking & Actuarial Studies - Business & Management - Industrial Design, Visual Effects, Animation & Digital Advertising - International Relations - Media & Communications 	<ul style="list-style-type: none"> - Computing & Technology - Accounting, Finance, Banking & Actuarial Studies - Business & Management - International Relations - Media & Communications 	

ENRICHING EXPERIENCES - MORE THAN JUST A FOUNDATION

The APU Foundation Programme lays the pathway towards professional tertiary education. It is a vital transformation point for students; soft skills, general knowledge and preparatory subject fundamentals acquired at the Foundation lead to excellence in a student's education performance, as well as career-readiness as they move on as global professionals eventually. This is achieved through 4 key areas:

- Leadership & Teamwork
- Problem-Solving Skills
- Social Skills & Responsibilities
- Practical Skills

The unique support system at APU Foundation Programme consist of helpful academic mentors who are committed in ensuring academic achievements, providing pastoral care, advising, mentoring, motivating students' potential and performance, to ensure that they undergo a smooth transition from secondary education to tertiary learning.

YOUR FOUNDATION PATHWAY TO A DEGREE OF YOUR CHOICE

(Please refer to individual course brochure for details and admission requirements.)

<p>CREDIT / GRADE C in SPM / O-Level is required in:</p> <p> Mathematics</p> <p>Leading from APU Foundation to your Choice of Degree Studies; please note that a Credit Pass in Mathematics at SPM / O-Level is required for the following programmes:</p> <p>Computing, Technology & Games Development</p> <ul style="list-style-type: none"> • BSc (Hons) in Information Technology • BSc (Hons) in Information Technology with a specialism in <ul style="list-style-type: none"> - Information Systems Security - Cloud Computing - Network Computing - Mobile Technology - Internet of Things (IoT) - Financial Technology (FinTech) - Business Information Systems • BSc (Hons) in Computer Science* • BSc (Hons) in Computer Science with a specialism in <ul style="list-style-type: none"> - Data Analytics* - Digital Forensics* • BSc (Hons) in Computer Science (Cyber Security) • BSc (Hons) in Software Engineering* • Bachelor of Computer Science (Hons) (Intelligent Systems)* • BSc (Hons) in Multimedia Technology* • BSc (Hons) in Multimedia Technology with a specialism in VR/AR* • BSc (Hons) in Computer Games Development 	<p>CREDIT / GRADE C in SPM / O-Level is required in:</p> <p> Mathematics</p> <p> Physics OR Chemistry OR Technical Science</p> <p>Leading from APU Foundation to your Choice of Degree Studies; please note that a Credit Pass in Mathematics and Physics OR Chemistry at SPM / O-Level is required for the following programmes:</p> <p>Engineering</p> <ul style="list-style-type: none"> • Bachelor of Engineering in Electrical & Electronic Engineering with Honours • Bachelor of Engineering in Telecommunication Engineering with Honours • Bachelor of Engineering in Mechatronic Engineering with Honours • Bachelor of Computer Engineering with Honours • Bachelor of Petroleum Engineering with Honours 	<p>Leading from APU Foundation to your Choice of Degree Studies:</p> <p>Business, Management, Marketing, Media, Tourism & International Relations</p> <ul style="list-style-type: none"> • BA (Hons) in Business Management • BA (Hons) in Business Management with a specialism in E-Business • BA (Hons) Human Resource Management • BA (Hons) in International Business Management • BA (Hons) in Marketing Management • BA (Hons) in Marketing Management with a specialism in Digital Marketing • Bachelor of Arts (Honours) in Media and Communication Studies • BA (Hons) in International Relations • BA (Hons) in Tourism Management <p>Industrial Design, Animation & Visual Effects</p> <ul style="list-style-type: none"> • BA (Hons) in Industrial Design • BA (Hons) in Visual Effects • BA (Hons) in Animation • BA (Hons) in Digital Advertising <p> PORTFOLIO REQUIRED</p>
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* Student who choose to progress to BSc (Hons) in Software Engineering, BSc (Hons) in Computer Science, Bachelor of Computer Science (Hons) (Intelligent Systems) or BSc (Hons) in Computer Science (Cyber Security) will require Foundation from Computing & Technology route or Engineering route if the student do not have a credit in Additional Mathematics at SPM / IGCSE / O-Level OR do not have a credit in Mathematics and Science subject at SPM / IGCSE / O-Level.

** Compulsory for Student who choose to progress to Bachelor of Science (Honours) in Actuarial Studies.



Diploma Programmes

Our Diploma Programmes are designed to prepare those with SPM, 'O' Levels or similar qualifications with academic aspect as well as the vocational aspects of various areas of studies. The programmes are designed to:

- Prepare students for careers in the respective environment
- Provide students with academic and professional skills to develop solutions requiring a holistic outlook in various areas of studies
- Provide students with critical, independent and cooperative learning skills so as to facilitate their response to continuous future international change
- Develop intellectual skills, communications ability and team working capability
- Provide students with opportunities for progression into the Degree Programmes of their choice*

* Pathways after Diploma Programme vary accordingly.

OUR DIPLOMA PROGRAMMES:

- APU Diploma in Information & Communication Technology
- APU Diploma in Information & Communication Technology with a specialism in Software Engineering
- APU Diploma in Information & Communication Technology with a specialism in Data Informatics
- APU Diploma in Information & Communication Technology with a specialism in Interactive Technology
- APU Diploma in Business with Information Technology

PATHWAYS AFTER DIPLOMA TO COMPUTING & TECHNOLOGY DEGREES

Upon successful completion of the Diploma Programmes with a minimum CGPA of 2.5, you will be eligible to progress into Year 2 of any of the following degree programmes offered at APU and APIIT.

APU Diploma in Information & Communication Technology

Students who undertake this programme will be eligible to progress into Year 2 of:

- BSc (Hons) in Information Technology
- BSc (Hons) in Information Technology with a specialism in:
 - Information Systems Security
 - Cloud Computing
 - Network Computing
 - Mobile Technology
 - Internet of Things (IoT)*
 - Financial Technology (FinTech)
 - Business Information Systems
- BSc (Hons) in Computer Science (Cyber Security)
- BSc (Hons) in Computer Science*
- BSc (Hons) in Computer Science with a specialism in Data Analytics*
- BSc (Hons) in Computer Science with a specialism in Digital Forensics

APU Diploma in Information & Communication Technology with a Specialism in Software Engineering

Students who undertake this programme will be eligible to progress into Year 2 of:

- BSc (Hons) in Information Technology
- BSc (Hons) in Information Technology with a specialism in:
 - Information Systems Security
 - Cloud Computing
 - Network Computing
 - Mobile Technology
 - Internet of Things (IoT)*
 - Financial Technology (FinTech)
 - Business Information Systems
- BSc (Hons) in Software Engineering
- BSc (Hons) in Computer Science (Cyber Security)
- BSc (Hons) in Computer Science
- BSc (Hons) in Computer Science with a specialism in Data Analytics
- BSc (Hons) in Computer Science with a specialism in Digital Forensics
- Bachelor of Computer Science (Hons) (Intelligent Systems)

APU Diploma in Information & Communication Technology with a specialism in Data Informatics

Students who undertake this programme will be eligible to progress into Year 2 of:

- BSc (Hons) in Information Technology
- BSc (Hons) in Information Technology with a specialism in:
 - Information Systems Security
 - Cloud Computing
 - Network Computing
 - Mobile Technology
 - Internet of Things (IoT)*
 - Financial Technology (FinTech)
 - Business Information Systems
- BSc (Hons) in Software Engineering
- BSc (Hons) in Computer Science (Cyber Security)
- BSc (Hons) in Computer Science
- BSc (Hons) in Computer Science with a specialism in Data Analytics
- BSc (Hons) in Computer Science with a specialism in Digital Forensics*
- Bachelor of Computer Science (Hons) (Intelligent Systems)

APU Diploma in Information & Communication Technology with a specialism in Interactive Technology

Students who undertake this programme will be eligible to progress into Year 2 of:

- BSc (Hons) in Information Technology
- BSc (Hons) in Information Technology with a specialism in:
 - Information Systems Security
 - Cloud Computing
 - Network Computing
 - Mobile Technology
 - Internet of Things (IoT)*
 - Financial Technology (FinTech)
 - Business Information Systems
- BSc (Hons) in Multimedia Technology
- BSc (Hons) in Computer Games Development

APU Diploma in Business with Information Technology

Students who undertake this programme will be eligible to progress into Year 2 of:

- BA (Hons) in Business Management
- BA (Hons) in Business Management with a specialism in E-Business
- BA (Hons) in International Business Management
- BA (Hons) in Marketing Management

- BA (Hons) in Marketing Management with a specialism in Digital Marketing
- BSc (Hons) in Information Technology with a specialism in Business Information Systems**

** Please take note that a Credit Pass in Mathematics at SPM/O-Level/IGCSE is required for the above programmes

* Bridging module/s needed before progress into Year 2
- For the full listing of our Diploma Programmes, please refer to the Pre-University programme brochure.

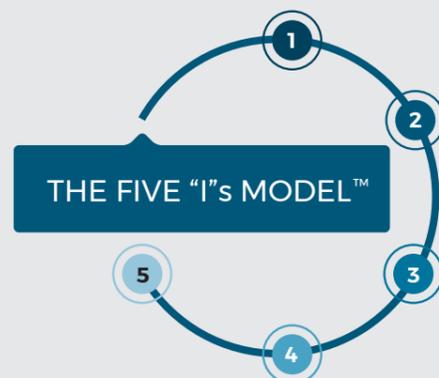
Note: Student with CGPA above 2.0 and below 2.5 may be accepted using rigorous assessment conducted by APU/APIIT and subject to the approval of the Academic Board.

Computing, Technology & Games Development



THE AIMS OF THE APU COMPUTING, TECHNOLOGY & GAMES DEVELOPMENT PROGRAMMES ARE TO:

- Facilitate your progression, both academic and practical, by developing knowledge, key skills and the capacity for independent and lifelong learning
- Develop your skills in imaginative problem-solving and decision-making
- Help you develop a Personal Development Portfolio to support your career aspirations
- Provide you with a stimulating, interactive and accessible course of study that gives you a sound grasp of Information Technology knowledge & analysis and contemporary issues which you can develop and apply in your future employment
- Develop your imagination and innovative abilities and help you show initiative and creativity in your work
- Develop your intelligence, ingenuity, inventiveness and independence as well as your communication skills



- 1: INNOVATION**
through the design of curriculum, the module content and the learning approaches
- 2: INTEGRATION**
through developing your capabilities to interrelate knowledge and to work in multidisciplinary teams
- 3: INFORMATION**
through developing your knowledge and also your abilities to communicate effectively and persuasively
- 4: INTERACTIVITY**
through the use of group work to develop your teamwork skills and through the use of technology to achieve interactivity of devices and people
- 5: IMAGINATION**
in relation to new products, ideas, applications and solutions



Degree Programmes

COMPUTING, TECHNOLOGY & GAMES DEVELOPMENT STUDY PATHWAYS

COMMON SEMESTER 1 / LEVEL 1	PROGRAMMES
All the programmes have similar modules in semester 1. Modules that provide appropriate foundation for any IT professional include Systems Analysis & Design, Introduction to Networking Fundamentals of Software Development, and introductory programming. Modules such as Mathematics for Technology provide the basic academic skills that students require.	<ul style="list-style-type: none"> • BSc (Hons) in Information Technology • BSc (Hons) in Information Technology with a specialism in: <ul style="list-style-type: none"> - Information System Security - Cloud Computing - Network Computing - Mobile Technology - Internet of Things (IoT) - Financial Technology (FinTech) - Business Information Systems • BSc (Hons) in Software Engineering • BSc (Hons) in Computer Science • BSc (Hons) in Computer Science with a specialism in: <ul style="list-style-type: none"> - Data Analytics - Digital Forensics • Bachelor of Computer Science (Hons) (Intelligent Systems)
General understanding of the work environment and aspects of personal and organizational development are provided by Computing and IT in the Workplace, Professional and Enterprise Development, and Introduction to Management.	
SPECIALISED LEVEL 1*	• BSc (Hons) in Computer Science (Cyber Security)
SPECIALISED LEVEL 1*	<ul style="list-style-type: none"> • BSc (Hons) in Multimedia Technology • BSc (Hons) in Multimedia Technology with a specialism in VR/AR
SPECIALISED LEVEL 1*	• BSc (Hons) in Computer Games Development

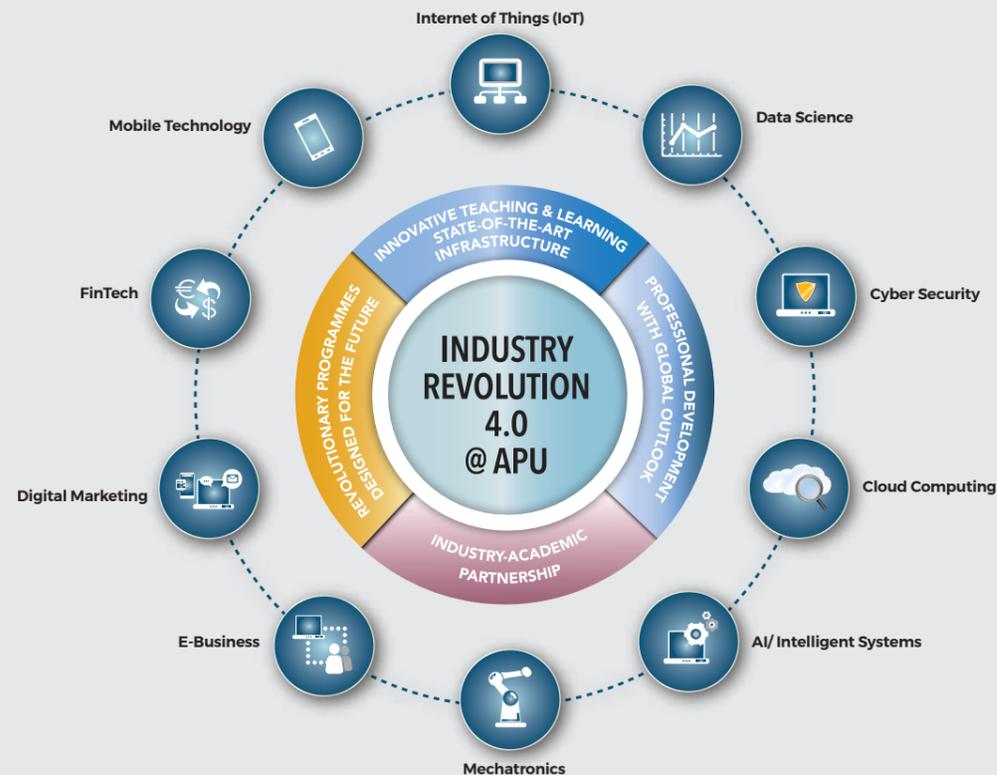
Note: *Although Semester 1 at Level 1 is common for some programmes, students who are on scholarships or loans (e.g. PTPTN, MARA etc) are required to decide on your degree upon commencement and are not allowed to change to another programme unless approved by the Loan/Scholarship provider. International Students are required to re-apply for a new Student Pass (visa) should they decide to change the programme.

Embracing the wave of Industry Revolution 4.0

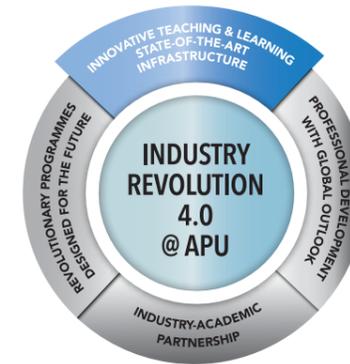
FUTURE-PROOFING THE WORKFORCE OF THE FUTURE

New waves of technological disruptions and the emergence of advanced technologies have resulted in the Fourth Industrial Revolution (Industry 4.0), where Robotics, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Cloud Computing, Data Science are going to transform the way businesses operate - routine, mundane jobs will be replaced and there is a growing need to develop "smarter" talents that can ride along the wave of digital transformation.

At APU, we developed our own IR 4.0 strategy to prepare our students to join the workforce of the future. We nurture the world's future innovators and uphold our Vision as a University of Technology and Innovation.

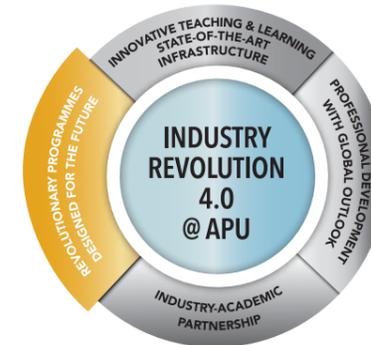


INDUSTRY REVOLUTION 4.0 @ APU



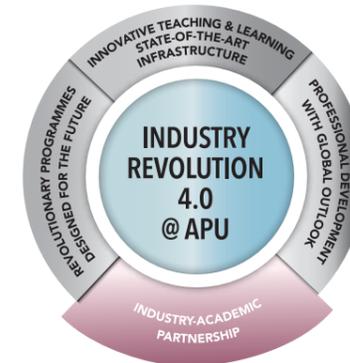
INNOVATIVE TEACHING & LEARNING STATE-OF-THE-ART INFRASTRUCTURE

In the era of Industry 4.0, learning is no longer confined within the classroom. Our iconic campus houses world-class facilities that aim to nurture Creativity & Innovation. Industrial-grade infrastructure are built to provide real-life exposure to our students, cultivating their practical skills aside from academic knowledge. We have also redesigned our teaching & learning methods to stimulate critical thinking, decision making, teamwork and build confidence.



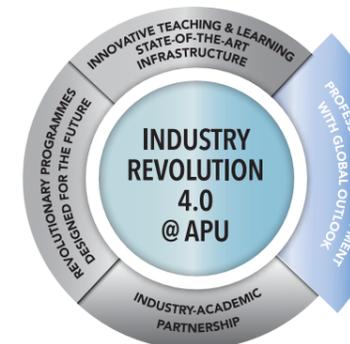
REVOLUTIONARY PROGRAMMES DESIGNED FOR THE FUTURE

New technologies mean new expertise, while this translates into a new need of talents in new areas. We address the needs of the industry, to help to build talents who can manage, operate and innovate under the new IR 4.0 environment, by carefully designing new programmes of the future. Our programmes are first-of-its-kind, such as in Cyber Security, Data Science, Internet of Things (IoT), Intelligent Systems, Financial Technology (FinTech), Digital Marketing, E-Business, Mechatronics, Cloud Computing and more.



INDUSTRY-ACADEMIC PARTNERSHIP

Industry 4.0 is all about the "industry". Our close relationship with our industry partners allows students to be exposed to real-life case studies, enabling them to formulate innovative solutions even before they graduate. Innovative accelerators such as GrowthX Academy and Supercharger create a platform for students to realize their world-changing ideas, inspiring them to build startups and develop world-changing solutions.



PROFESSIONAL DEVELOPMENT WITH GLOBAL OUTLOOK

Communication skills, professionalism and cultural sensitivity are 'people' element skills that cannot be replaced by machines and automation. Under our unique formula to nurture professionalism, we create an ecosystem that simulates the workplace on-campus. Global outlook, international understanding and respect are nurtured through continuous immersion in multicultural discourse, as our campus houses a community of 12,000 students from over 130 countries.

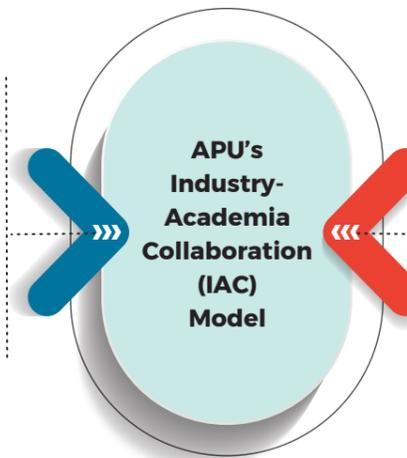
Collaborative Industrial Partners

Industry-academia collaboration is a strategic necessity to ensure the quality and relevance of our programmes. Through our Industry-Academia Collaboration (IAC) model, we design programmes in collaboration with inputs from the industry, that are also aligned with the government's initiatives to address the shortage of skilled talents. Over the years, APU has established collaborations with key industry players worldwide; we have been delivering highly-relevant programmes that help us develop skilled and professional graduates for the workforce.

COLLABORATIVE INDUSTRIAL PARTNERS

INDUSTRY

- Industry Advisory Panel (IAC)
- Joint Certifications
- Supply of Internationally-Recognised & Industry-Relevant Skills



GOVERNMENT

- Enhancing Employability of Graduates
- Simulation of Growth within ICT Industry
- Talent Development Plans to Address Job Needs



APU has signed a MoA with HILTI allowing for HILTI to sit in our industrial advisory panel for curriculum development. HILTI is where many of APU graduates are currently working having established OJTs in Liechtenstein and Switzerland. Traditionally APU academicians have been judges and students as participants in HILTI industrial competitions in which APU has done well constantly.



Microsoft has been an APU industrial partner for over two decades. APU is one of the frontier universities on the Microsoft Talent Development programme. Students at APU have continued to engage directly with professionals from Microsoft via workshops and talk sessions. Many of these students have also attained professional Microsoft certification allowing for greater job prospects. APU has also received the Microsoft Azure Educator Grant Award.



APU collaborated with IBM on academic initiative to deliver a series of technical workshop, technology talks, industry visits, etc. IBM academy collaboration has received overwhelming participations from APU students. APU has produced over 200 students as IBM certified solution designers and application developers so far.



APU continues to work closely with MDEC on the development of IT graduates feeding into the industry. APU has built itself as a top institution serving the needs of digital, computing and IT employability in Malaysia. This is further enhanced via student competitions and projects that APU has been directly involved with.

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COLLABORATIVE INDUSTRIAL PARTNERS



Under the Elevating IT Education (ELITE) program, a unique Education Outreach Program set up by Tecforte Group, a Security Operation Centre (SOC) is set up in APU to produce career-ready graduates that are able to "hit the ground running" upon graduation and are equipped with relevant cybersecurity skillsets that would meet the expectation from the industry. By manning the live industry-grade Security Operations Centre, students get to have practical hands-on & Industry-like experience from the People, Process and Technology perspectives.



The state-of-the-art Cisco Networking Academy laboratory in collaboration with Cisco is built to provide hands-on experience and vibrant environment to gain practical experience and learn modern concepts and industry practices in computer networks. Equipped with routers, switches and a multitude of academic and commercial software to design, simulate, test, monitor, analysis and manage computer networks, the laboratory is used by the Cisco Networking Academy program to equip students with hands-on digital skills training.



APU established Oracle Academy partnership which makes available CS education resources that are up-to-date, industry-relevant, and engaging. It also provides support in curriculum, Faculty Professional Development, Certifications and community building.



APU and F-Secure has been partners in joint students skills development enhancement in the areas of forensics and cyber security. F-Secure's prominent industrial level competitions have been constantly participated in by APU students and they have traditionally done extremely well.



Cyber Test Systems is a French company composed of experts with more than 20 years of experience in the field of cyber defense training. The Cyber Test Systems introduced the first of its kind cyber defence technologies called "Cyber Range" in Malaysia, that can simulate highly complex cyber-attacks in a hyper realistic environment, enabling cyber security professionals and students to prepare themselves in dealing with real cyber threat attack when it happens.



The collaboration between APU and KPMG is intended to drive Cyber Security capability building and students involvement within APU which is relevant to ICT industry requirements by tapping into KPMG's experience and network. KPMG has also been involved in industry review and feedback of APU's Cyber Security programmes.



APU and SAS have signed an MoA in partnership to develop Data Scientists in Malaysia. SAS also has endorsed the UG and PG level programmes in Data Analytics by providing tools and educational material support for learning and research purposes. All UG and PG Data Analytics graduates will received a Joint Professional Certificate from SAS.



MoU between APU and Fusionex has been signed during the Big Data Week in 2016. Fusionex has been supportive in providing Post Graduate case studies, UG final year projects and UG internships. Fusionex has guided and allowed the GIANT analytics tools to used for educational and learning purposed at the UG level Data Analytics courses.



APU is the first Amazon Web Services (AWS) Public Sector Transformation Partner in Malaysia. This partnership enables students & staff to obtain free computing resources, gain access to free workshops, trainings, boot camps and other activities organized by AWS. With the prestige under this partnership, students & staff also have the opportunities to work on research projects, that are funded by AWS to support our academic activities.



APU-ISACA Student Group is officially recognized by ISACA International Headquarters. It is the first officially recognized ISACA Student Group in Malaysia. ISACA Student Groups (ISGs) encourage education beyond the classroom by allowing students to network and learn from each other, and connect with a supportive group of professionals. Upon the establishment of this group, APU is accessible to ISACA's material, tools as well as a range of other benefits.

COLLABORATIVE INDUSTRIAL PARTNERS



The joint collaboration between APU and Salesforce is committed towards talent development of customer relationship management (CRM) professionals in Malaysia and the region. Salesforce is a developer, manufacturer and distributor of CRM technologies and with this partnership APU looks forward to having a working relationship with Salesforce in the teaching of CRM concepts to IT professionals for the industry.



Materialise and APU have collaborated to mutually work to facilitate opportunities for consultancy or project development services directly towards talent building in the field of computer engineering, online services and 3D printing. This agreement is intended to facilitate the industrial relationship between both parties concerning opportunities for consultancy services in the areas of expertise of APU.



The collaboration between APU and ASTRO is to mutually facilitate opportunities to benefit the growing need for software engineers in the current ICT industry and the requirements of digital transformation. This is in line with projects by APU students as part of their coursework assignments or final year projects as supervised by APU academicians with ASTRO professionals as the industry supervisors. A project working space in the name of APU-ASTRO Innovation Zone (AIZ) to be provided for students to work on live projects with an ASTRO stationed personnel.



APU and LuxTag have agreed to work mutually to facilitate opportunities for consultancy and development services to benefit the growing need for technology and innovation in the current ICT industry. As the main focus, LuxTag will provide knowledge sharing services on Blockchain Technology to the students of APU, starting with seminars and workshops that could be embedded as part of the curriculum. In addition, this would provide opportunities for students and lecturers to participate in Research & Development activities.



APU became the first university in Malaysia to partner with EMC under its successful EAA initiative and introduced courses on Data Science and Big Data Analytics, Cloud Infrastructure and Services, Information Storage & Management to undergraduate students.



APU has joined with Supercharger to develop future talents and academicians that are proficient in financial technology via Fin Tech Specialization Centre by allowing exchange of knowledge and expertise and to ensure talents are well prepared to enter the financial services industry.



APU joined MyUniAlliance SAP UAP in 2012. This alliance allows students to access SAP curriculums, demos, webinars, recorded videos and other learning platforms.



APU and Finterra Technologies have entered into a partnership to build on block chain capability by collaborating on industrial training and internship placements, industry inputs on academic programme development, student project supervision, guest lectures and adjunct appointments as well as on research and development.



APU became CompTIA's First Academic Partner in Malaysia. It provided an excellent opportunity for APU students to get vendor-neutral IT education embedded in their curriculum through CompTIA.



APU and Wizlynx have partnered to facilitate the industrial relationship and collaboration for research & development and for collaborative activities in IT Security and technology development.



BSc (Hons) in INFORMATION TECHNOLOGY

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- An understanding of frameworks and planning techniques for the strategic management of information systems in organisations.
- The ability to critically evaluate and apply appropriate strategies and techniques to the development of information technologies.

Career options

- Systems Analyst
- IT Executive
- IT Consultant
- Information Systems Analyst
- Chief Technology Officer (CTO)
- Technical Support Manager
- IT Sales Manager
- IT Application Developer
- IT Auditor
- IT Project Manager
- IT Helpdesk Manager
- System Administrator
- Systems Consultant

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of frameworks and planning techniques for the strategic management of information systems, programming languages and techniques, and further analysis and design skills. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in a broad range of information technologies and to refine their personal and professional development. Students will enhance their programming skills and move further into the areas of cloud computing and big data. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Fundamentals of Web Design and Development

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Mobile & Wireless Technology
- Web Applications
- Integrated Business Processes with SAP ERP Systems
- Human-Computer Interaction
- Probability & Statistical Modelling
- System & Network Administration
- Data Centre Infrastructure

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Mobile & Web Multimedia
- Advanced Database Systems
- Cloud Infrastructure & Services
- Computer Systems Management
- Entrepreneurship
- Investigations in Information Technology
- Information Technology Project

Elective Modules (Choose 2)

- Internet of Things: Concepts & Applications
OR Distributed Computer Systems
OR Blockchain Development
- Designing & Developing Applications on Cloud **OR** Knowledge Discovery & Big Data Analytics



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN INFORMATION SYSTEM SECURITY

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- A specialised and focused emphasis on information systems security as it applies in contemporary industry.
- The skills and knowledge required to critically evaluate and refine information systems security strategies and programmes.

Career options

- IT Security Officer
- IT Security Analyst
- IT Security Consultant
- IT Security Infrastructure Designer
- IT Security Solutions Designer
- IT Security Engineer
- IT Security Specialist
- Chief Technology Officer (CTO)
- Information Security Engineer
- Information Security Analyst
- Information Security Manager
- Technical Support Manager
- Network Security Engineer
- System Administrator

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. Some specialised modules will provide them basic knowledge of security and computer forensics. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of frameworks and planning techniques for the strategic management of information systems, along with specialised skills and knowledge required to critically evaluate and refine information systems security strategies and programmes. Students will gain solid technical knowledge of computer systems security with the appreciation to human security policies and actions. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in a broad range of information technologies and to refine their personal and professional development. Students will enhance their programming skills and move further into the areas of cloud computing and big data. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Introduction to Security and Forensic Technologies

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- System & Network Administration
- Mobile & Wireless Technology
- Network Security
- Ethical Hacking & Incident Response
- Human-Computer Interaction
- Web Applications
- Probability & Statistical Modeling

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Computer Systems Management
- Computer Systems Security
- Designing & Developing Applications on Cloud
- Wireless and Mobile Security
- Database Security
- Enterprise Programming for Distributed Applications
- Penetration Testing
- Investigations in Information Systems Security
- Information Systems Security Project



Note: The specialism will appear only in the academic transcript.



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN CLOUD COMPUTING

(R/482/6/0189)(08/20)(A6210)

At a glance

Module outline

Duration:

3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- An understanding of frameworks and planning techniques for the strategic management of cloud-based information systems in organisations.
- The ability to critically evaluate and apply appropriate strategies and techniques to the development of cloud computing technologies.

Career options

- Chief Technology Officer (CTO)
- Server Developer
- Cloud Solution Consultant
- Technical Support Manager
- IT Cloud Test Engineer
- Cloud Platform Developer
- IT Solution Manager
- Cloud Solution Development Engineer
- IT Cloud Application Developer
- Application Platform Services Specialist
- Cloud Architect
- Cloud Software Engineer
- Cloud Network Engineer
- Cloud Product Manager
- Cloud Consultant



Note: The specialism will appear only in the academic transcript.

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networks and databases. Some specialised modules will provide students with basic knowledge of security and computer forensics. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of frameworks and planning techniques for the strategic management of organisation computing resources, along with technical skills to evaluate, design, configure and maintain shared computing infrastructure. They will gain solid understanding of the importance of enterprise systems and network administration in virtual computing environments. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of cloud computing and to refine their personal and professional development. Students will move further into programming skills, management and planning techniques to develop and manage cloud-based systems in organisations. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Introduction to Security and Forensic Technologies

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Introduction to Virtualization
- Virtual Computing
- Mobile & Wireless Technology
- Web Applications
- Integrated Business Processes with SAP ERP Systems
- Systems & Network Administration
- Data Centre Infrastructure

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Enterprise Programming for Distributed Applications
- Advanced Database Systems
- Computer Systems Management
- Computer Systems Security
- Information Storage & Management
- Internet of Things, Concepts & Applications
- Designing & Developing Applications on Cloud
- Investigations in Cloud Computing
- Cloud Computing Project



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN NETWORK COMPUTING

(R/482/6/0189)(08/20)(A6210)

At a glance

Module outline

Duration:

3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- A specialised and focused emphasis on data communications and networking technologies.
- The skills and knowledge required to develop and critically evaluate network architectures and networked computing applications.

Career options

- Network Analyst
- Network Consultant
- Systems Engineer
- Network Designer
- Chief Technology Officer (CTO)
- Network Engineer
- Management Information System (MIS) Manager
- Technical Support Manager
- Quality Assurance (QA) Analyst
- System Network Consultant
- Data Centre Operator
- Network Administrator
- Network Planning Specialist
- Network Defense Analyst

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. Some specialised modules will provide them basic knowledge of security and computer forensics. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of network architectures and networked computing applications. They will gain solid understanding of programming skills needed in systems administration, network technologies, network design, and systems security. They will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of network computing and to refine their personal and professional development. Students will move further into in-depth understanding of network computing components, environments and techniques in appreciation of relevant issues. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)



Note: The specialism will appear only in the academic transcript.



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN MOBILE TECHNOLOGY

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- The ability to specify and manage the implementation of a range of mobile communications systems to support various activities.
- The ability to design, develop, and implement viable mobile technology solutions using appropriate platforms, tools, and techniques.

Career options

- IT Security Officer
- IT Security Analyst
- IT Security Consultant
- IT Security Infrastructure Designer
- IT Security Solutions Designer
- IT Security Engineer
- IT Security Specialist
- Chief Technology Officer (CTO)
- Information Security Engineer
- Information Security Analyst
- Information Security Manager
- Technical Support Manager
- Network Security Engineer
- System Administrator



Note: The specialism will appear only in the academic transcript.



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN INTERNET OF THINGS

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- The knowledge to design, engineer, and develop IoT- based solutions using various platforms in a broader and vendor neutral perspective.
- An understanding of important insights on sensor devices, internet based technologies, wireless communications, and cloud computing.

Career options

- Microcontroller Programmer
- Machine Learning Programmer
- Cloud Security Specialist
- Embedded Device Developer
- Data Scientist
- Network Developers
- Mobile Application Developer
- Web Developer
- Big Data Analysts
- Technology Consultant
- Web Development Engineer
- Project Manager - IoT
- IoT Innovation Manager
- IoT Software Developer
- Infrastructure and Test Engineer



Note: The specialism will appear only in the academic transcript.

Module outline

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. Some specialised modules will provide them basic knowledge of security and computer forensics. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of the platforms, tool and techniques needed to design, develop and implement viable mobile technology solutions. They will gain solid understanding of mobile and wireless technologies and mobile app development. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of mobile computing and to refine their personal and professional development. Students will move further into advanced programming skills for full range of mobile computing applications such as games, multimedia and enterprise-level mobile applications. A final year project requires them to investigate and develop a solution for a real-world problem – they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Introduction to Mobile Technologies

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- iOS Mobile App Development
- Mobile & Wireless Technology
- Computer Games Design, High Concept and Preproduction
- Mobile App Engineering
- Human-Computer Interaction
- Web Applications
- Probability & Statistical Modeling

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Computer Systems Management
- Advance Mobile Computing with Android
- Mobile and Web Multimedia
- Cloud Infrastructure and Services
- Multi-Platform Mobile Apps Development
- Entrepreneurship
- Mobile Commerce
- Investigations in Information Systems Security
- Information Systems Security Project

At a glance

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. Some specialised modules will provide them basic knowledge of programming and Internet of Things (IoT). The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain better understanding of the broad range of Internet of Things technologies, which include networking, systems programming and security. They will gain solid understanding of IoT as an enabler for an organisation. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of Internet of Things (IoT) and to refine their personal and professional development. Students will move further into the frameworks and planning techniques for strategic management of cloud-based IoT systems in organisations. A final year project requires them to investigate and develop a solution for a real-world problem – they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

LEVEL 1

Common Modules

- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Introduction to IoT
- Instrumentation & Measurement

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Mobile & Wireless Technology
- Web Applications
- Probability & Statistical Modelling
- System Programming & Computer Control
- Network Security
- LoWPAN & Ad-hoc Networking
- Enterprise Internet of Things

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Distributed Computer Systems
- Developing IoT Applications
- Computer Systems Management
- Cloud Infrastructure & Services
- Ubiquitous Computing
- Knowledge Discovery & Big Data Analytics
- HCI & Usability
- Investigations in Internet of Things
- Internet of Things Project



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN FINANCIAL TECHNOLOGY (FinTech)

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of information technologies and how they are used.
- Knowledge and skills in managing financial products, product development and working within the rapidly changing Global Banking and Finance Industry.

Career options

- Fin-Tech Systems Analyst
- IT and Fin-Tech Consultant
- Fin-Tech Infrastructure Administrator
- Chief Technology Officer (CTO)
- Global Business Solution Consultant
- IT Business Development Manager
- IT Business Analyst
- Technical Business Analyst
- Business Systems Analyst
- System Analyst
- Business Intelligence Manager
- CRM Business Analyst



Note: The specialism will appear only in the academic transcript.



BSc (Hons) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN BUSINESS INFORMATION SYSTEMS

(R/482/6/0189)(08/20)(A6210)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with a broad range of Information Systems and how they are used.
- An understanding of frameworks and planning techniques for the strategic management of information systems in organisations.
- The ability to critically evaluate and recommend appropriate information system to fulfill the organization's needs.

Career options

- IT Business Systems Developer
- IT Systems Analyst
- E-Commerce Consultant
- Chief Technology Officer (CTO)
- Management Information System (MIS) Manager
- Global Business Solution Specialist
- Global Business Solution Consultant
- IT Business Development Manager
- IT Quality Assurance (QA) Analyst
- IT Business Engagement Manager
- SAP Business Analyst
- Technical Business Analyst
- Business Systems Analyst
- System Analyst
- Business Intelligence Manager
- CRM Business Analyst



Note: The specialism will appear only in the academic transcript.

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through computer architecture, operating systems, networking and databases. Some specialised modules will provide the basic knowledge of business information technologies. The modules will also help them develop personal and organizational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of the broad range of Information Technologies, and the specialised skills to apply frameworks and planning techniques for the strategic management of financial technologies. They will gain solid understanding of the support of business information technologies in modern organizational operations. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of business information technologies and to refine their personal and professional development. A final year project requires them to investigate and develop a solution for a real world finance business problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Introduction to Management
- Computing & IT in the Workplace
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Fundamentals of Software Development
- System Analysis & Design
- Introduction to Databases
- Introduction to Networking
- Introduction To C Programming

Specialised Modules

- Fundamentals of Web Design and Development

LEVEL 2

Common Modules

- Programming for Data Analysis
- Object Oriented Development with Java
- System Development Methods
- Creativity & Innovation
- Research Methods for Computing and Technology
- Human-Computer Interaction
- Web Applications
- System and Network Administration
- Data Mining and Predictive Modelling
- Specialised Modules
- Financial Management
- Fin-tech Management

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management
- Project In Fin-Tech Management
- Computer Systems Management
- Entrepreneurship
- Investigations in Fin-Tech Management
- Cloud Infrastructure and Services

Specialised Modules

- Block-chain Development
- Robo Advisor
- Fin-Tech Governance, Risk Management and Compliance.

At a glance

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of the underlying computer system through Computer Architecture, operating systems, networking and databases. Some specialised modules will provide them basic knowledge of web development and programming. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of the broad range of information technologies, and the specialised skills to apply frameworks and planning techniques for the strategic management of information systems. They will gain solid understanding of the support of business information systems in modern organisational operations. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of business information systems and to refine their personal and professional development. Students will move further into the development of business proposals that introduce the development, deployment and business impact of information systems. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Introduction to Management
- Computing & IT in the Workplace
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Fundamentals of Software Development
- System Analysis & Design
- Introduction to Databases
- Introduction to Networking
- Introduction to C Programming

Specialised Modules

- Introduction to Information System

LEVEL 2

Common Modules

- Programming for Data Analysis
- Object Oriented Development with Java
- System Development Methods
- Creativity & Innovation
- Research Methods for Computing and Technology
- Human-Computer Interaction
- Web Applications
- Enterprise Systems
- Integrated Business Processes with SAP
- Probability & Statistical Modelling

Specialised Modules

- Management Information System
- E-Commerce

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management
- Internet of Things: Concepts & Applications
- Project In Information Systems
- Computer Systems Management
- Entrepreneurship
- Investigations in Information Systems

Specialised Modules

- Developing E-Commerce Applications with XML
- Information System Development Trends
- Building Customer Relationships
- Designing & Developing Applications on Cloud



BSc (Hons) in SOFTWARE ENGINEERING

(R/481/6/0714)(04/21)(MQA/FA0366)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Familiarity with the tools and rigorous methodologies used to develop mission-critical and safety-critical software systems.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to develop large-scale and complex software systems.
- A deep appreciation of the importance of software architecture, testing, documentation, and maintainability.

Career options

- Software Engineer
- Systems Analyst
- Project Manager
- Software Consultant
- Programmer
- Chief Technology Officer (CTO)
- Application Engineer
- Software Test Engineer
- Software Quality Assurance (QA) Specialist
- R&D Specialist
- Software Architect
- Systems Integration Engineer
- Senior Technical Lead
- Product Manager
- Solutions Architect
- Development Manager
- Senior System Designer



LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of programming, problem solving skills, algorithmic skills, mathematical techniques and systems analysis and design. Some specialised modules will provide students with basic knowledge of underlying computer systems such as computer architecture, operating systems, networking and databases. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of design paradigms, languages, and algorithms used for developing large-scale and complex software systems. They will gain solid understanding of software lifecycle, and methodologies for specification, design, development, testing, evaluation, analysis and maintenance of software systems. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of software engineering and to refine their personal and professional development. Students will move further into system design methods that help them improve on software design, organisation and maintainability to produce concise and powerful software applications. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Modules

- Introduction to Object Oriented Programming

Elective Modules (Choose 1)

- Introduction to Artificial Intelligence
- Fundamentals of Web Design & Development

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Computer Theory
- Data Structures
- Design Methods
- Requirements Engineering
- Software Architecture
- Enterprise Systems

Elective Modules (Choose 1)

- Concurrent Programming
- Further Web Design & Development
- Mobile App Engineering

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Advanced Programming Language Concepts
- Algorithmics
- Design Patterns
- Software Quality Engineering
- Designing & Developing Applications on Cloud
- Investigations in Software Engineering
- Software Engineering Project

Elective Modules (Choose 2)

- Advanced Database Systems
- Distributed Computer Systems
- Blockchain Development
- Enterprise Programming for Distributed Applications
- HCI & Usability
- Optimisation and Deep Learning



BSc (Hons) in COMPUTER SCIENCE

(R/481/6/0506)(06/24)(MQA/FA4622)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Technical knowledge, skills and background in the design and organization of computer systems.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to develop complex software systems.
- The ability to evaluate and respond to opportunities for developing and exploiting new technologies.

Career options

- Computer Engineer
- Systems Engineer
- Software Developer
- Programmer
- Chief Technology Officer (CTO)
- IT Technical Manager
- Technical Architect
- Technical Support Manager
- IT Service Desk Manager
- Application Engineer
- Mainframe Developer
- Software Architect
- Software Quality Assurance
- Data Warehouse Manager
- Applications Development Manager
- Applications Architect

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of programming, mathematical and algorithmic skills. Some specialised modules will provide them basic knowledge of underlying computer systems such as computer architecture, operating systems, networking and databases. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain better understanding of designing and implementing new software, and solving new computing problems through theoretical and algorithmic foundations. They will gain solid understanding of platform technology through modules in application development. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of computer science and to refine their personal and professional development. Students will move further into the development of advanced programming techniques and algorithms, interface design, networking, and/or multimedia. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Modules

- Introduction to Artificial Intelligence
- Introduction to C Programming

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Computer Theory
- Data Structures
- Concurrent Programming
- System & Network Administration
- Computer Systems & Low Level Techniques

Elective Modules (Choose 2)

- Mobile & Wireless Technology **OR** System Programming & Computer Control
- Imaging & Special Effects **OR** Network Security

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Algorithmics
- Real-Time Systems
- Emergent Technology
- HCI & Usability
- Investigations in Computer Science
- Computer Science Project

Elective Modules (Choose 2)

- Advanced Wireless Technology
- Distributed Computer Systems
- Image Processing, Computer Vision & Pattern Recognition
- Blockchain Development

(Choose 1)

- Designing & Developing Applications on Cloud
- Wireless & Mobile Security
- Optimisation and Deep Learning





BSc (Hons) in **COMPUTER SCIENCE WITH A SPECIALISM IN DATA ANALYTICS**

(R/481/6/0506)(06/24)(MQA/FA4622)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- The ability to develop technical knowledge, skills and background in the design and organisation of computer systems with an emphasis on data analytics.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to develop complex software systems.
- The ability to evaluate and respond to opportunities for developing and exploiting new technologies with data analytics concepts and tools.

Career options

- Software Tool Developer
- Data Analyst
- Data Scientist
- Data Wrangler/Munger/Miner
- Chief Technology Officer (CTO)
- Data Analytics Manager
- Business Process Engineer
- Business Analyst Manager
- Data Innovation Manager
- Business Intelligence Developer
- IT Risk Analyst
- Advance Analytics Professional
- Data Engineer
- Business Intelligence Analyst
- Machine Learning Scientist
- Business Intelligence Solutions Architect
- Analytics Manager
- Data Visualization Developer

Note: The specialism will appear only in the academic transcript.

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of programming, mathematical and algorithmic skills. Some specialised modules will provide them basic knowledge of underlying computer systems such as computer architecture, operating systems, networking and databases. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which students will gain better understanding of designing and implementing new software, and solving new computing problems through theoretical and algorithmic foundations. They will gain solid understanding of platform technology and data analytics through modules in application development and knowledge discovery techniques. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of computer science and to refine their personal and professional development. Students will move further into the focus on advanced analytics through business analytics and intelligence modules. A final year project requires them to investigate and develop a solution for a real-world problem – they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.



APU and SAS have signed an MoA in partnership to develop Data Scientists in Malaysia. SAS also has endorsed the UG and PG level programmes in Data Analytics by providing tools and educational material support for learning and research purposes. All UG and PG Data Analytics graduates will receive a Joint Professional Certificate from SAS.

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Modules

- Fundamentals of Artificial Intelligence
- Introduction to C Programming

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Computing Theory
- Data Structures
- Concurrent Programming
- Data Management
- Business Intelligence Systems
- Data Mining and Predictive Modelling
- Probability & Statistical Modelling

INTERSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Algorithmics
- Real-Time Systems
- Behavioral Science and Marketing Analytics
- Text Analytics and Sentiment Analysis
- Emergent Technology
- Optimisation and Deep Learning
- Database Security
- Investigations in Data Analytics
- Data Analytics Project

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)



BSc (Hons) in **COMPUTER SCIENCE WITH A SPECIALISM IN DIGITAL FORENSICS**

(R/481/6/0506)(06/24)(MQA/FA4622)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- The ability to develop technical knowledge, skills and background in the design and organisation of computer systems with an emphasis on digital forensics.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to perform advanced forensic investigation and incident response.
- The ability to evaluate and respond to opportunities for developing and exploiting new technologies with digital forensics methods and tools.

Career options

- Digital Forensics Investigator
- Forensic Compliance Investigator
- Computer Forensics Analyst
- Cyber Defense Forensics Analyst
- Cyber Defense Incident Response Analyst
- Ethical Hacker / Penetration Tester
- Intrusion Detection Analyst
- Forensic Analytics Specialist
- Secure Applications Engineer
- Information Security Analyst / Engineer
- Information Security Technical Specialist
- Software Developer
- Chief Technology Officer (CTO)
- Chief Information Security Officer (CISO)

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of programming, mathematical and algorithmic skills. A sound grasp of mathematical techniques and skills in algorithmic thinking are important pre-requisites for their second and third year studies in this area. Computer architecture, operating systems, networks, databases, security and forensic technologies are the underlying platform of digital forensics investigation. Introduction to management introduces the third key area, understanding personal and organisational development, along with independent learning and team working skills.

LEVEL 2

A broader range of skills will be learnt, in which students will be involved in designing and implementing software, devising new ways to use computers and developing effective ways to solve computing problems. It spans a wide range, from theoretical and algorithmic foundations to cutting edge developments in all areas of computing. Successful professionals with a degree in computer science are flexible in performing a range of computing tasks, and extend theories and practice in every area of computing. In the second year, the core modules take development skills to the next level and deepen the understanding of platform technology, while specialised modules will allow them to go further into advanced forensic methods, ethical hacking and incident response.

INTERSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of computer science and to refine their personal and professional development. Students will move further into the focus on advanced programming techniques and algorithms, and evaluating applications at the frontiers of current technology. Specialised modules allows them to extend the capabilities developed from previous studies of forensics methods and incident response specifically in the area of advanced cyber security, penetration testing, mobile forensics, deep learning for intrusion detection as well as legal and professional practice in the cyber world. A final year project requires them to investigate and develop a solution for a real-world problem – they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

Module outline

LEVEL 1

Common Modules

- Introduction to Management
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Fundamentals of Software Development
- System Analysis & Design
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Modules

- Introduction to Security Technologies
- Introduction to Forensic Tools & Techniques

LEVEL 2

Common Modules

- Programming for Data Analysis
- Creativity & Innovation
- System Development Methods
- Object Oriented Development with Java
- Data Structures
- Research Methods For Computing & Technology

Specialised Modules

- System & Network Administration
- Computing Theory
- Computer Systems & Low Level Techniques
- Advanced Forensic Methods
- Ethical Hacking & Incident Response
- Practical CTF Strategies

INTERSHIP (16 weeks)

LEVEL 3

Common Modules

- Project Management
- Innovation Management & New Product Development
- Emergent Technology

Specialised Modules

- Algorithmics
- Advanced Cyber Security
- Penetration Testing
- Mobile Forensics
- Deep Learning for Intrusion Detection
- Legal & Professional Practice in Cyber World
- Investigations in Digital Forensics
- Project in Digital Forensics

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)



BSc (Hons) in **COMPUTER SCIENCE** (**CYBER SECURITY**)

(N/481/6/0816)(08/24)(MQA/PA12440)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- The ability to develop technical knowledge, skills and background in the design and organisation of computer systems focusing on cyber security.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to develop complex software systems related to cyber security.
- The ability to evaluate and respond to opportunities for developing and exploiting new technologies and applications in cyber security.

Career options

- Cyber Security Engineer/ Architect
- Cyber Security Consultant/ Specialist
- Cyber Security Incident Response Analyst
- Security Operations Center (SOC) Analyst
- Intrusion Detection Analyst
- Cyber Threat Intelligence Advisor
- Ethical Hacker / Penetration Tester
- Secure Applications Engineer
- Information Security Analyst/ Engineer
- Information Security Technical Specialist
- Software Developer
- Cyber Security Governance & Compliance Manager
- Chief Technology Officer (CTO)
- Chief Information Security Officer (CISO)



LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of programming, mathematical and algorithmic skills. A sound grasp of mathematical techniques and skills in algorithmic thinking are important pre-requisites for their second and third year studies in this area. Computer architecture, operating systems, networks, databases, security and forensic technologies are the underlying platforms in cyber security. Introduction to management introduces the third key area, understanding personal and organisational development, along with independent learning and team working skills.

LEVEL 2

A broader range of skills will be learnt, in which students will gain better understanding in Cyber Security related areas. The students should be flexible in performing a range of computing tasks using extended theories and practice related to Cyber Security. In the second year, the core modules deepen the understanding of platform technology, while specialised modules allow them to go further into system & network administration, computing theory, computer systems & low level techniques and implementation of secure systems.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will draw on their previous studies and industrial experience to refine their personal and professional development in the field of computer science majoring in Cyber Security. Students will move further into Cyber Security by learning the core and specialised modules to enhance new skills and advanced knowledge on the current and future technologies. Elective modules are offered to strengthen their essential skills and knowledge. A final year project requires them to investigate and develop a solution for a real world problem. They will demonstrate the ability to combine technical knowledge, critical thinking, and analytical skills to produce personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Introduction to Management
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Fundamentals of Software Development
- System Analysis & Design
- Introduction to Networking
- Introduction to Databases

Specialised Modules

- Introduction to Security Technologies
- Introduction to Forensic Tools & Techniques

Elective Modules (Choose 1)

- Introduction to Object-Oriented Programming
- Introduction to C Programming

LEVEL 2

Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Data Structures
- Enterprise Systems
- Research Methods For Computing & Technology
- Creativity & Innovation

Specialised Modules

- System & Network Administration
- Computing Theory
- Computer Systems & Low Level Techniques
- Implementation of Secure Systems

Elective Modules (Choose 1)

- Human-Computer Interaction
- Web Applications
- Practical CTF Strategies

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Project Management
- Innovation Management & New Product Development

Specialised Modules

- Algorithmics
- Advanced Software Security
- Advanced Cyber Security
- Vulnerability Assessment & Penetration Testing
- Deep Learning for Intrusion Detection
- Investigations in Cyber Security
- Project in Cyber Security

Elective Modules (Choose 2)

- Cloud Infrastructure & Services **OR** Internet of Things: Concepts & Applications
- Wireless & Mobile Security **OR** Database Security



Duration:
3 years full-time

This programme is specifically designed to provide students with:

- The ability to design and develop systems that exploit artificial intelligence techniques such as machine learning, fuzzy logic, natural language processing, etc.
- The ability to critically evaluate design paradigms, languages, algorithms, and techniques used to develop complex software systems.
- The ability to evaluate and respond to opportunities for developing and exploiting new applications of artificial intelligence.

Career options

- Business Decision Support Engineer
- Robotics R&D Engineer
- Backend Game Developer
- Machine Learning Engineer
- Deep Learning Scientist
- Artificial Intelligence (AI) Engineer
- Artificial Intelligence (AI) Specialist
- Algorithm specialist
- Machine Vision Engineer
- AI Platform Architect
- Artificial Intelligence Analyst
- NLP Engineer



Bachelor of Computer Science (Hons) (**INTELLIGENT SYSTEMS**)

(R/481/6/0505)(06/24)(MQA/FA4621)

At a glance

LEVEL 1

Students will learn fundamental skills required by every IT professional, and the basic understanding of artificial intelligence techniques and algorithmic thinking. Some specialised modules will provide them basic knowledge of underlying computer systems such as computer architecture, operating systems, networks and databases. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

A broader range of skills will be learnt, in which the students will gain a better understanding of artificial intelligence techniques such as machine learning, fuzzy logic, and natural language processing. They will gain solid understanding of techniques used to develop complex software systems that include data acquisitions via various sensors. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of intelligent systems and to refine their personal and professional development. Students will move further into artificial intelligence design paradigms and algorithms, programming techniques and statistical techniques applicable to artificial intelligence. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Computing & IT in the Workplace
- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Modules

- Introduction to Artificial Intelligence

Elective Modules (Choose 1)

- Introduction to Object-Oriented Programming
- Introduction to C Programming

LEVEL 2

Common Modules

- Object Oriented Development with Java
- System Development Methods
- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- AI Methods
- Probability & Statistical Modeling
- Human-Computer Interaction
- Data Structures
- Imaging & Special Effects
- System Programming & Computer Control

Elective Modules (Choose 1)

- Queuing System & Simulation
- Enterprise Internet of Things

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Further Artificial Intelligence
- Image Processing, Computer Vision & Pattern Recognition
- Emergent Technology
- Knowledge Discovery and Big Data Analytics
- Investigations in Intelligent Systems
- Intelligent Systems Project

Elective Modules (Choose 2)

- Algorithmics **OR** Text Analytics & Sentiment Analysis
- Ubiquitous Computing **OR** Critical Issues in Managing IS in Organisations



BSc (Hons) in MULTIMEDIA TECHNOLOGY

(R/481/6/0713)(04/21)(MQA/FA0364)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- In depth knowledge of multimedia concepts, principles, and technologies.
- The knowledge and skills required to work in the multimedia industry as an author, animator, or modeller.
- The specific skills required to create 3D models and animation, digital music, video, and similar creative assets.

Career options

- Multimedia Designer
- Animator
- Multimedia Content Designer
- Digital Media Specialist
- Video Editor
- Creative Director
- 2D/3D Graphic Designer
- Multimedia Artist
- Web Designer
- Graphic Designer



Module outline

LEVEL 1

Students will learn fundamental skills required by technical multimedia professionals, and the basic understanding of programming and system design. Some specialised modules will provide them basic knowledge of multimedia techniques such as 3D graphics, digital image and more. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation. On the other hand, an exciting delivery approach of multimedia content in virtual reality and augmented reality is highlighted in the Introduction to VRAR.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of wide range of multimedia applications through components, frameworks, guidelines and techniques in animation, audio and visual. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace. Besides, the importance of copyright of digital content is mentioned in this level.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of multimedia technology and to refine their personal and professional development. Students will move further into media scripting technology and more advanced multimedia development and techniques. Furthermore, you are required to learn and analyse the perceptions and feedback of your users, for example, socio-economic factor, cultures and regional considerations in User Experience and HCI and Usability. A final year project requires them to investigate and develop a solution for a real-world problem – they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

LEVEL 1

Common Modules

- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing

Specialised Modules

- Introduction to VRAR
- Web Design and Development
- Audio Visual Technology
- Introduction to Graphics & Basic 3D Applications
- Digital Image Production

Elective Modules (Choose 2)

- Introduction to Management **OR** Computing and IT at the Workplace
- Introduction to Object-oriented Programming **OR** Introduction to Visual Programming

LEVEL 2

Common Modules

- Programming for Data Analysis
- Creativity & Innovation
- Research Methods for Computing and Technology

Specialised Modules

- Multimedia Applications
- Interactive Content Development
- Basic 3D Computer Character Modelling
- Digital Audio and Video
- Synthesiser Technology
- Principles of Creative Animation
- Intellectual Property, Ethics & Legal Issues
- Web Multimedia

Elective Modules (Choose 1)

- Web Applications
- Human Computer Interaction

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Advanced Multimedia
- HCI and Usability
- Advanced 3D Character Modelling and Animation
- Multimedia Scripting
- Multimedia Techniques for Animation, Games & Films Effects
- User Experience
- Investigations in Multimedia Technology
- Multimedia Technology Project

Elective Modules (Choose 1)

- Mobile and Web Multimedia
- Audio for Computer Games



BSc (Hons) in MULTIMEDIA TECHNOLOGY WITH A SPECIALISM IN VR/AR

(R/481/6/0713)(04/21)(MQA/FA0364)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- In depth knowledge of multimedia concepts, principles, and technologies.
- The knowledge and skills required to work in the multimedia industry as an author, animator, or modeller.
- The specific skills required to create 3D models and animation, digital music, video, and similar creative assets.

Career options

- Visual Developer
- Motion Graphic Designer
- User Interface Developer (VR)
- VR Scenario Developer
- VR Video Engineer
- Multimedia Designer (Video Editing)
- Graphics and Multimedia Executive
- Interactive Developer/ Creative Multimedia Programmer

LEVEL 1

Students will learn fundamental skills required by technical multimedia professionals, and the basic understanding of programming and system design. Some specialised modules will provide them basic knowledge of multimedia techniques such as 3D graphics, digital image and more. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation. On the other hand, an exciting delivery approach of multimedia content in virtual reality and augmented reality is highlighted in the Introduction to VRAR.

LEVEL 2

A broader range of skills will be learnt, in which students will gain a better understanding of wide range of multimedia applications through components, frameworks, guidelines and techniques in animation, audio and visual. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace. Besides, the importance of copyright of digital content is mentioned in this level. Moreover, you dive into the context of virtual reality (VR) and augmented reality (AR) with principles and technology of VR and AR used theoretically and practically in the market and projects.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of multimedia technology and to refine their personal and professional development. Students will move further into media scripting technology and more advanced multimedia development and techniques. Furthermore, you are required to learn and analyse the perceptions and feedback of your users, for example, socio-economic factor, cultures and regional considerations in User Experience and HCI and Usability. In this year, you have an opportunity to develop the academic and practical aspects of your areas of study via student-project. Additionally, you will again equip yourself based on your area of studies such as the generation of virtual environment and superimpose of computer-generated images on a user's view of the real world.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing

Specialised Modules

- Introduction to VR/AR
- Web Design and Development
- Audio Visual Technology
- Introduction to Graphics & Basic 3D Applications
- Digital Image Production

Elective Modules (Choose 2)

- Introduction to Management **OR** Computing and IT at the Workplace
- Introduction to Object-oriented Programming **OR** Introduction to Visual Programming

LEVEL 2

Common Modules

- Programming for Data Analysis
- Creativity & Innovation
- Research Methods For Computing and Technology

Specialised Modules

- Multimedia Applications
- Interactive Content Development
- Basic 3D Computer Character Modelling
- Digital Audio and Video
- VRAR Design Principles
- Advanced Virtual Reality Technology
- Intellectual Property, Ethics & Legal Issues
- Simulation, Visualisation and Virtual Reality

Elective Modules (Choose 1)

- Web Applications
- Human Computer Interaction

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Stereoscopic Vision system
- HCI and Usability
- Advanced 3D Character Modelling and Animation
- Multimedia Scripting
- VRAR Design Project
- User Experience
- Investigations in Multimedia Technology
- Multimedia Technology Project

Elective Modules (Choose 1)

- Mobile and Web Multimedia
- Audio for Computer Games

Computer Games Development

The BSc (Hons) in Computer Games Development programmes equip students with the necessary technical skills and knowledge needed for a professional within the computer games industry. Based on the statistical data provided by newzoo.com, an online market research company, it has been reported that in year 2014, there was a total of 81.5 billion dollar of revenue generated in the global games market. In Malaysia, there was 293 million dollars of revenue generated by the games industry. The significant development within the computer games industry has inspired us to incorporate elements of creativity and innovation within our programmes, not forgetting the values of professionalism and good communication skills.

Our Success Stories, Our Pride in the Computer Games industry



Wan Hazmer - Ex-Lead Game Designer of Final Fantasy XV, Square Enix and Founder, CEO and Game Director at Metronomik Sdn Bhd

Years before joining SQUARE ENIX Tokyo in 2010, Hazmer was a student in APIIT. He became a programmer in an advertising agency, then moved on to lecturing in APU while creating indie games on the side. In 2008, he took the great leap to Tokyo to join the Japanese game industry. After working on FINAL FANTASY TYPE-0 as a Game Designer, he now brings life to the exotic locales of FINAL FANTASY XV as Lead Game Designer of the Culture Team, mixing the real and fantastic to achieve new levels of immersive gameplay.

In December 2017, with aims to contribute to the Malaysian gaming industry scene, Hazmer returned to Malaysia and founded Metronomik Sdn Bhd. With his contribution, we anticipate the formation of a new realm of games development within the country.



Jussi Pekka Tuomi - Developer of Flail Rider and Super Flail Rider

Jussi graduated from the BSc (Hons) in Computer Games Development at APU. When he was a full-time student from Finland, Jussi is also the Developer of Flail Rider, a game inspired by his Ludum Dare project. To date, the game has been downloaded for more than 2 million copies on App Store and Google Play. In January 2017, Jussi participated the Taipei Game Show, in which he demonstrated his creation to over 400,000 computer games enthusiasts.



BSc (Hons) in COMPUTER GAMES DEVELOPMENT

(R/213/6/0245)(08/20)(A6216)

At a glance

Duration:
3 years full-time

This programme is specifically designed to provide students with:

- Knowledge, skills, and abilities required by a technical professional in the field of computer games.
- The ability to critically evaluate the design, logic, and implementation of computer games.
- Facility with advanced techniques for computer graphics and 3D digital animation.

Career options

- Games Programmer
- Games Developer
- Games Quality Assurance Tester
- Technical Director
- Team Manager
- Mobile Game Developer
- Game Designer
- Level Editor
- Games Producer
- Gameplay Programmer
- Games Community Manager

LEVEL 1

Students will learn fundamental skills required by technical Games Development professionals, and the basic understanding of programming and systems design. Some specialised modules will provide them basic knowledge of interactive computer games development, such as logic design, graphics and more. The modules will also help them develop personal and organisational skills, as well as nurture creativity and innovation.

LEVEL 2

In-depth games analysis and design skills will be learnt, in which students will gain a better understanding of the complete computer games production lifecycle, that includes character modelling, special effects, computer graphics, animation, mathematics and more. We will further nurture their creativity and innovation as well as independent learning to prepare them for the workplace.

INTERNSHIP

Students will undertake an Internship/Industrial Training for a minimum period of 16 weeks to prepare them for a smooth transition from the classroom to the working environment.

LEVEL 3

Students will make use of their previous studies and industrial experience to extend their familiarity in the field of Computer Games Development and to refine their personal and professional development. Students will move further into advanced techniques for computer graphics and animation. A final year project requires them to investigate and develop a solution for a real-world problem - they will demonstrate their ability to combine technical knowledge, critical thinking and analytical skills to produce a personal achievement portfolio.

MQA Compulsory Subjects*

- Ethnic Relations (M'sian Students)
- Islamic & Asian Civilisation (M'sian Students)
- Malaysian Studies (Int'l Students)
- Malay Communication Language (Int'l Students)
- Workplace Professional Communication Skills
- Employee & Employment Trends
- Co-Curriculum

(*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

Module outline

LEVEL 1

Common Modules

- Introduction to Management
- System Analysis & Design
- Fundamentals of Software Development
- Mathematical Concepts for Computing

Specialised Modules

- Computer Games Design: Documentation
- Computer Games Level Design
- Introduction to Graphics & Basic 3D Applications
- Introduction to Scripting for 3D Applications
- Digital Imaging Production

Elective Modules (Choose 1)

- Introduction to Object-Oriented Programming
- Introduction to C Programming

LEVEL 2

Common Modules

- Programming for Data Analysis
- Creativity & Innovation
- Research Methods For Computing and Technology

Specialised Modules

- Analogue Games
- Basic 3D Computer Character Modelling
- Believable Models for Games & Virtual Reality
- Computer Games Design: High Concept and Preproduction
- Computer Games Design: Production and Testing
- Computer Graphics
- Games Engines
- Imaging & Special Effects
- Mathematics for Computer Graphics

INTERNSHIP (16 weeks)

LEVEL 3

Common Modules

- Innovation Management & New Product Development
- Project Management

Specialised Modules

- 3D Computer Graphics
- Advanced 3D Character Modelling and Animation
- Audio For Computer Games
- Multimedia Techniques For Animation, Games & Film Effects
- Programming Techniques for Animation & Computer Games
- Investigations in Computer Games Development
- Computer Games Development Project

Elective Modules (Choose 2)

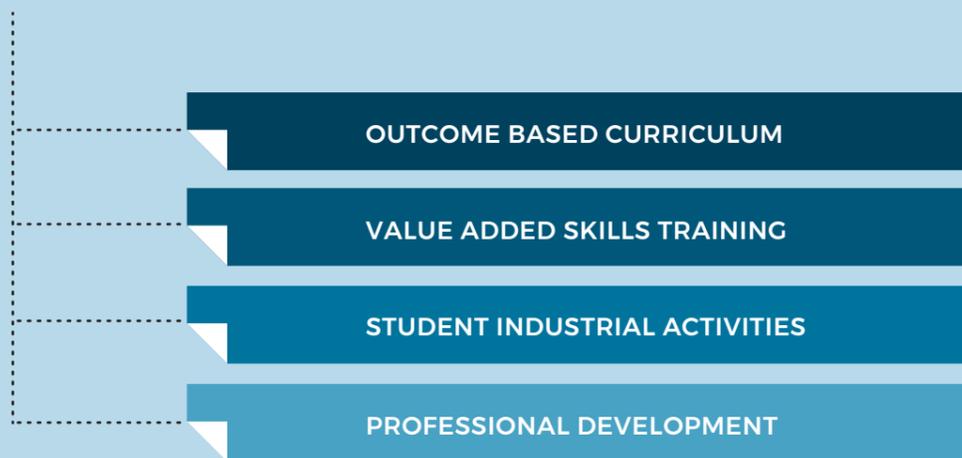
- Mobile Multimedia & Gaming **OR** MMOG Services & Communities
- HCI & Usability **OR** Experimental Gameplay





Leading Your Way To Innovation

APU'S SCHOOL OF COMPUTING & TECHNOLOGY,
OUR ULTIMATE FORMULA TO SUCCESS:



COMPUTING & TECHNOLOGY PROGRAMME STRENGTHS

Outcome Based Education

Our curriculum is a collaborative effort, between our team of dedicated academicians and our credible Industry Advisory Panel (IAP). We design our curriculum based on the needs of the industry, to ensure Employability Edge among our students, while maintaining our standards, by ensuring our programmes are full-accreditation compliant.

The trend of our programme delivery is based on Outcome Based Education (OBE), in which high graduates' employability is our end result.



Value-added Skills Training

Apart from technical knowledge in the IT/Computing field, we highly believe that students should also possess life skills such as critical thinking, communication and professionalism. Our Problem Based Learning (PBL) leads to producing critical and innovative graduates, in which multiple winnings in various industry-standard-competitions are our best testaments of success.

Student Experiences

Our academicians believe that learning should not be confined within classrooms and lecture halls. As early as the first year of their study, students possess the opportunities to gain hands-on exposure to the industry, to experience the lives as an IT/Computing Professional, as well as to build connections with IT/Computing Professionals through regular industrial visits to Gaming Studios, Microsoft Academy and HILTI Asia Pacific Development Centre.





I am APU

WHAT DO OUR ALUMNI SAY...

WONG MUN CHOONG, ALEXANDER (Malaysia)

Diploma in Information Technology (2010)
BSc (Hons) in Computing with a specialism in Software Engineering, Class of 2012
Senior Software Engineer - Consolsys Sdn Bhd

"I would describe these place as exciting and opportunistic. Every day, there are constantly new adventure to tried up, ranging from hackathon and competition that are constantly recommended by the professor or tutor in order to push our limit. In fact, what benefit me most is the encouragement and support provided by staff and tutor during the entire journey as an APIITian and prepped me in every challenge faced throughout career. What you learned in classroom will never be enough. Take the opportunity you have as student and challenge yourself to the limit. You will be surprise the amount of experience you will get from these."

CHRISTOPHER PRATAMA (Indonesia)

BSc (Hons) in Computer Science, Class of 2018
Soluton Engineer - Oracle

"APU is a great university to attend. You can connect with people from all across the world. In APU, learning will not be just in the lecture hall since students are given chances to have hands-on experience in the industrial training. Graduating from APU gives you the edge when applying for a job and show people that you are more than just a student."

WHAT DO OUR ALUMNI SAY...

LIM KAI YUAN (Malaysia)

BSc (Hons) in Information Technology, Class of 2014
Software Engineer (DevOps) - zooplus, Germany

I am so glad that the lecturers in APU are helpful, especially one of the lecturers whom I met during my final year. Being knowledgeable and experienced in the Software industry as he was, yet he was still down to earth. He always inspires me to learn more and tell me that it is okay to say "I don't know" as long as you are willing to learn.

ADRI AHMAD BIN ADLAN (Malaysia)

BSc (Hons) in Computer Games Development, Class of 2014
Quality Assurance Artist - Lemon Sky

Studying in APU has been an unforgettable experience. I entered APU with such hopes of becoming a video game developer but what I got instead were something more than that. Throughout my years in APU, I did a lot of things. Being a librarian in the library, joined various Homestay events, became president for the APU Malay Cultural Society, co-founded an anime club called Manga, Anime and Games (M.A.G.) Club, join more fun events and so much more! I've encountered many people and hold many positions but those accumulated into a huge experience that I will never forget. So I would like to give a special thanks to the staff, the lecturers, my fellow course mates and classmates for making APU a great place to not only to acquire knowledge but also allows you to become someone better that you did not imagine before. I can say that not only I learn the fundamentals of video game development from the classes APU provides but I learn the fundamentals of life from the people I meet here in APU.

BIBI JEHAAN NAAILAH GHASEETA (Mauritius)

B.Sc (Hons) in Information Technology (specialism in Forensic Computing, Class of 2016
Security Management Specialist - SWIFT Malaysia

APU has not only given me the chance to study what I wanted but it has also helped me develop the essential skills I needed to secure my dream job right after graduation! Studying and working alongside with people from all over the world was a knowledge-and-exposure enriching experience. My lecturers and other staffs were very friendly and helpful. The excellent study resources and facilities provided to us were top-notch and APU always encouraged me to think "outside-the-box" and opened my eyes into a whole new horizon. I was a also proud member of the Student Welcome Team and Student Ambassadors Team. The challenges that I went through in my student life being away from my family and beloved Mauritius had actually transformed me into the independent and responsible person that I am today. I am now working in the IT Security Team of an international company in Malaysia and I'm proud to say that I'm an APU Graduate!

KEE HONG CHENG (Malaysia)

BSc (Hons) in Software Engineering, Class of 2014
Lead Developer - Sitecore Malaysia Sdn Bhd

While I was studying at APU, the modules that I learnt gave me a strong foundation in programming and IT concepts. This has shaped my adaptability in multiple IT application development environments throughout my career. The formal dress code and strong emphasis on professionalism prepares me better for the working place, as I have become more confident in workplace communication.

PO STEFANIE ANDRIANTA (Indonesia)

BSc. (Hons) in Information Technology with specialization in Intelligent System, Class of 2010
Senior Software Engineer - Orchard Global Asset Management (S) Pte. Ltd., Singapore

I didn't have any problem finding a job after graduated and didn't have any difficulties adapting to the real job. APU has prepared me well for the 'real' world. Apart of the basic knowledge of programmings, they taught me leadership, communication, business, and teamwork. I would definitely recommend APU to anyone who is looking for the best IT / Computing programs.

World-class R&D and Innovation

ACADEMIC RESEARCH

For our staff, learning is a continuous journey where we keep abreast with the latest knowledge in a variety of fields. Our academic staff publish papers and present them at conferences worldwide. Some of the areas of research include:

- Embedded Systems & RFID
- Biometrics
- Games Engines
- 3D Graphics and Virtual Reality
- Security
- New Media Technologies
- Knowledge Management
- Mobile Learning
- Wireless Networks and Internet of Things (IoT)
- Adding Facial Expressions to Talking Head Models
- Two and Three Dimension Audio-Visual Speech Synthesis
- Handwritten Signature Verification Using a Single Master Signature
- Healthcare Informatics
- Gamification
- Sociotechnology
- Ram-Less Computers
- Deep Learning
- Cyber Security
- Natural Language Processing
- Digital Forensics
- Image Processing
- Artificial intelligence

INNOVATIVE INDUSTRY-BASED RESEARCH CENTRES @ APU



Malaysia's First Integrated Cybersecurity Talent Zone is Located Within APU's Campus

APU's Cybersecurity Talent Zone is a clear and perfect example of how APU collaborates closely with industry leading organisations to expose students to best-in-class technologies and systems. This Zone features a fully-functional Security Operations Centre (SOC) that allows students to have hands-on cybersecurity operations experience. APU's Cyber Security students are able to actively analyse occurrences of cyber-attacks and plan counteractive measures towards cyber threats through real-time data.

In addition, a full-fledged Cyber Threats Simulation and Response Centre (also known as a Cyber Range) is also located within the Cyber Security Talent Zone. The Cyber Range incorporates latest technologies and a military grade cyber-defense system that can simulate highly complex cyber-attacks in a hyper realistic environment, enabling students to understand and formulate defence strategies, and practice the entire chain of cyber defence, while preparing them to deal with real cyber threat attack when it happens. The Cyber Range is among the best-equipped facility of its kind across the Asia Pacific region.

APU's CISCO Networking Academy, its Centre for Research and Development in IoT (CREDIT) and its Forensic and Security Research centre also make up the APU CyberSecurity Talent Zone, which is truly a unique, end-to-end integrated facility to provide hands-on experience to our students - the global cybersecurity, networking and IoT talents of the future.

Asia Pacific Centre of Analytics (APCA)

Asia Pacific Centre of Analytics - APCA is established in association of multi-discipline expertise from various schools in APU. The vision of APCA is to establish the foundation to develop young data scientists to meet the demands in Malaysia and global. The expertise and experience cover areas of Data Management, Machine Learning, Behavioral Studies, Business Cases, Statistics and Engineering. The formation directs to broad activities in Big Data ecosystem, in line with National vision to make Big Data Analytics the catalyst for nation's economic development: Creating new area in BDA studies, Embedding BDA topics into Undergraduate and Postgraduate studies, Development of Educational and Industrial Framework, Creating Project Marketplace, Research project commercialization and crowdfunding, Consultancy and Training Services.



Centre for Research and Development of IoT (CREDIT)

The establishment of Centre for Research and Development of IoT (CREDIT) is a significant milestone that supports the objectives of the Malaysia National IoT Strategic Roadmap initiative⁴. CREDIT aims to provide students and academic staff the opportunities to access IoT-related knowledge and know-how through various activities. It also acts as a hub to support commercialising potential state-of-the-art solutions resulting from R&D projects.



APU IEEE Student Branch

APU IEEE Student Branch, which is part of the Malaysia Section under Region 10 (Asia and Pacific), was formulated in 2014. As a member of IEEE, APU students have a wide variety of resources and valuable opportunities to advance their knowledge and future career. APU Student Branch provides numerous educational, technical, and professional development for its members through special projects, activities, meetings, tours and field trips.



Forensic and Cyber Security Research Centre (FSEC)

The establishment of Forensics & Cyber Security (FSec) center is to be a recognized Forensics and Cyber Security Research and Development Centre which acts as an international resource for government, industry and academia. This vision has kept us on the toe and with the closing of all cases including expert testimonies given by our dedicated analysts.





Awards received by the university and our students at local, regional and international competitions are a testimony to their knowledge, skills and professional attributes.

CYBERSECURITY EXCELLENCE AWARDS

- 2020 - Gold Winner (Best CyberSecurity Education Provider in Asia)
- 2019 - Gold Winner (Best CyberSecurity Education Provider)

ACCA POWER OF ETHICS COMPETITION

- 2020 - Champion of 'Most Creative Promotional Video'
- 2020 - 1st Runner Up of 'Best In-Campus Promotional Campaign'

ASIA PACIFIC ICT AWARDS (APICTA) MALAYSIA (MULTIMEDIA DEVELOPMENT CORPORATION)

- 2019 - Winner of 'Best of Tertiary Student Project'
- 2016 - Top Award for 'Best of Tertiary Student Project'
- 2013 - Top Award for 'Best of Tertiary Student Project'
- 2012 - Top Award for 'Best of Tertiary Student Project'
- 2011 - Winner of 'Special Jury Award' by the Prime Minister
- 2011 - Top Award for 'Best of Tertiary Student Project'
- 2011 - Merit Award for 'Best of Tertiary Student Project'
- 2011 - Merit Award for 'Best of Tertiary Student Project'
- 2010 - Top Award for 'Best of Tertiary Student Project'
- 2008 - Top Award for 'Best of e-Inclusion & e-Community'
- 2005 - Top Award for 'Best of Applications & Infrastructure Tools'
- 2004 - Top Award for 'Best of Education & Training'
- 2004 - Top Award for 'Best of Applications & Infrastructure Tools'
- 2004 - Merit Award for 'Best of Research & Development'
- 2003 - Merit Award for 'Best of Research & Development'
- 2002 - Merit Award for 'Best of Smart Learning Applications'
- 2001 - Merit Award for 'Best of Smart Learning Applications'
- 2000 - Merit Award for 'Best of Smart Learning Applications'
- 2000 - Top Award for 'Best of Student Projects'
- 1999 - Merit Award for 'Best of Student Projects'

REGIONAL CYBER CHALLENGE (RCC)

- 2019 - Champion
- 2019 - 1st Runner Up

INTERNATIONAL ICT INNOVATIVE SERVICES AWARDS

- 2019 - Best Innovation Prize

TERADATA UNIVERSE DATA ANALYTICS CHALLENGE

- 2019 - Winner of 'Best People's Choice Award'

KPMG CYBER SECURITY CHALLENGE

- 2019 - 1st Runner Up
- 2018 - Top University Award
- 2018 - Champion ("APT, Malware & Cyber powered by FireEye" track)
- 2018 - Champion ("Engineering & Cyber - powered by IET" track)
- 2018 - 2nd Runner Up (Cyber Security Challenge 2018 -National Finals)

INTERNATIONAL UNIVERSITY CARNIVAL ON E-LEARNING (IUCEL)

- 2019 - Gold
- 2019 - Gold
- 2019 - Silver
- 2018 - Gold
- 2018 - Gold
- 2018 - Silver

INTERNATIONAL ENERGY INNOVATION COMPETITION (EIC) SINGAPORE

- 2019 - Merit Prize
- 2019 - Merit Prize
- 2019 - Merit Prize
- 2016 - 4th Place
- 2015 - 1st Runner-up
- 2015 - 4th Place

WORLDSKILLS MALAYSIA (CLOUD COMPUTING) LEAGUE

- 2019 - Champion

INTERNATIONAL INNOVATION, CREATIVITY AND TECHNOLOGY EXHIBITION (i2CreATE)

- 2019 - Gold Medal
- 2019 - Silver Medal

INTERNATIONAL INVENTION, INNOVATION & TECHNOLOGY EXHIBITION (ITEX)

- 2019 - 1 Gold Award for the Invention, Innovation and Technology category
- 2018 - 1 Bronze Award for the Invention, Innovation and Technology category
- 2018 - 1 Silver Award for the Invention, Innovation and Technology category
- 2018 - 1 Silver Award for the Invention, Innovation and Technology category
- 2017 - 1 Silver Award for the Invention, Innovation and Technology category
- 2016 - 1 Gold Award for the Invention, Innovation and Technology category
- 2016 - 1 Silver Award for the Invention, Innovation and Technology category
- 2016 - Best Green Invention Award
- 2015 - 1 Gold Award for the Invention, Innovation and Technology category
- 2015 - 1 Bronze Award for the Invention, Innovation and Technology category
- 2014 - 1 Gold Award for the Invention, Innovation and Technology category
- 2014 - 1 Bronze Award for the Invention, Innovation and Technology category
- 2013 - 2 Silver Medals for the Invention, Innovation and Technology category
- 2013 - 2 Gold medals for the innovator category

3 DAYS OF CODE CHALLENGE

- 2019 - Champion
- 2019 - 1st Runner Up
- 2018 - 2nd Runner Up
- 2018 - Special Prize

OPEN GOV ASIA RECOGNITION FOR EXCELLENCE

- 2019 - Recognition for Excellence

INSTITUTE OF ENGINEERS MALAYSIA (IEM) AWARD

- 2019 - Gold Award
- 2018 - Gold Award
- 2017 - Gold Award
- 2016 - Gold Award
- 2015 - Gold Award
- 2014 - Gold Award

CYBER HEROES COMPETITION

- 2019 - Champion
- 2019 - Most Valuable Player (MVP)
- 2017 - 3rd Place
- 2017 - 4th Place

ERNST & YOUNG (EY) ASIA-PACIFIC CYBER HACKATHON CHALLENGE

- 2019 - Champion

Awards & Accolades



APIIT Education Group is the proud recipient of **PRIME MINISTER'S AWARD**

and Export Excellence Award (Services) for Industry Excellence Awards - March 2011

The APIIT Education Group received the prestigious Prime Minister's Industry Excellence Award from the Prime Minister of Malaysia. Only one organisation was selected to receive the Prime Minister's Industry Excellence Award from among nearly 30 other award recipients in 8 different categories.

The Industry Excellence Awards, organised by the Ministry of International Trade & Industry (MITI), recognises and rewards organisations for organisational excellence including competitiveness, innovativeness, market presence and export performance. Winning the Prime Minister's Industry Excellence Award is a significant milestone and an honour for APU as a leader in higher education. The award truly reflects our commitment and focus on quality, innovation, graduate employability and internationalisation.

