



**A · P · U**

**ASIA PACIFIC UNIVERSITY  
OF TECHNOLOGY & INNOVATION**

# I am innovative

COMPUTING, TECHNOLOGY & GAME DEVELOPMENT

INNOVATIVE  
THINKING  
CAN CHANGE  
YOUR WORLD



# First and Only Malaysian University with QAA UK Accreditation 2024



## APU achieves Global Quality Accreditation from QAA UK

Asia Pacific University of Technology & Innovation (APU), a leading Malaysian University has achieved a significant milestone by securing accreditation from the Quality Assurance Agency for Higher Education (QAA) in the United Kingdom. This accreditation underscores APU's commitment to excellence, rigorous quality assurance processes, and student-centered education.

The Quality Assurance Agency (QAA) carries out Quality Assurance for UK higher education institutions.

- APU underwent a thorough review process conducted by independent reviewers appointed by QAA. This involved almost a year of intense preparation and preparation of documentation.
- A comprehensive physical Audit was held at APU in March 2024. Based on the Audit, APU has been deemed to have achieved Accreditation by the QAA - the FIRST ever Malaysian University to have achieved this.
- The Audit Panel confirmed that APU meets all ten UK and European Quality Assurance standards covering areas such as teaching & learning, student support, research, facilities, resources and governance.
- APU Degrees will now be recognised on an equal basis with Degrees from UK universities due to QAA Accreditation of APU as a QAA Accredited Institution.
- APU graduates will benefit from this prestigious recognition of their qualifications in Malaysia, the UK and beyond.

APU's commitment to continuous improvement and adherence to international best practices played a pivotal role in achieving this accreditation. QAA accreditation enhances APU's global reputation and validates its commitment to quality education. APU will continue to uphold the QAA standards and strive for further excellence with pride.

# 1<sup>st</sup> Malaysian University

1 of 23 in the world



**ONLY Malaysian University to achieve both QS 5-Stars Plus+ Rating & being Ranked in QS World Rankings 2025**

## Facts regarding APU's achievements in the latest QS World University rankings:



- Ranked **TOP 2.1%** in the World
- Ranked **#611-620** in the World
- Ranked **No. 186** in Asia
- Ranked **No.1** for International Students in Malaysia
- Ranked **No.16** in the World for International Students
- Ranked **Top 200** for International Faculty in the World
- Ranked **among Top 13** Universities in Malaysia
- Ranked **among Top 6** Private Universities in Malaysia

(QS World University Ranking 2025)



## APU Rises in the QS World University Rankings : Asia 2025

APU is proud to be ranked among the Top 50 Universities in the latest QS World University Rankings : Asia 2025, among South-Eastern Asia Universities. APU is Ranked #190 and is among the Top 200 Universities in the QS Rankings announced on 6th Nov 2024.

## AppliedHE™ Public & Private University Ranking ASEAN 2025

### RANKED NO.2 IN MALAYSIA & NO.4 IN ASEAN

APU has achieved outstanding recognition in the AppliedHE ASEAN Private University Rankings 2025. This remarkable achievement reflects our unwavering commitment to academic excellence, innovation, and global impact. The AppliedHE Private University Ranking: ASEAN was created with the goal of measuring the things about private universities that students deciding on their higher education journey find most important. The ranking measures what is important to students: the quality of teaching and learning, Employability, Research, Internationalisation, Community Engagement and Institution Reputation.

## QS WORLD UNIVERSITY RANKINGS 2025

### RANKED NO.1 FOR INTERNATIONAL STUDENTS IN MALAYSIA AND NO.16 IN THE WORLD

APU is the ONLY Malaysian University to achieve the double distinction of achieving the QS 5-Stars Plus Rating as well as being Ranked in the QS World University Ranking 2025, where APU is ranked in the Top 2.1% in the World. APU is Ranked No.1 for International Students in Malaysia and No. 16 for International Students in the World.



### APU IS AWARDED 2024 EMPLOYERS' CHOICE OF UNIVERSITY

Renowned for its 100% employability rate among graduates, APU underlined its strengths by being selected as the 2024 Employers' Choice of University in Talentbank's annual survey of employers. Talentbank also announced that APU graduates were voted Champions of Employers' Top Choice in the fields of Computing & IT, Game Design and Development, Animation, and Finance & Islamic Finance. Additionally, graduates of Actuarial Science, Mechatronic Engineering, Multimedia and Communication & Broadcasting are also employers' preferred options with 6 Star Ratings.



### APU IS AWARDED BEST TECH UNIVERSITY & BEST FUTURE READY UNIVERSITY FOR 2024 - PC.COM AWARDS

The PC.com Awards are prestigious accolades that recognise organisations that demonstrate excellence and leadership in the field of technology and innovation. In the 2024 Awards, Asia Pacific University of Technology & Innovation (APU) shone brightly, winning both the Best Tech University and Best Future Ready University awards, as voted by PC.com readers. This recognition reflects APU's unwavering commitment in offering cutting-edge digital technology programmes & preparing students for the future. APU is a repeat winner, having also won the PC.Com Best Tech University Award in 2023.

## APU'S LIST OF FIRSTS:

- 1<sup>st</sup> Malaysian University to achieve Five Stars Plus in the latest QS Stars Rating
- 1<sup>st</sup> Local Institute awarded Multimedia Super Corridor Status
- 1<sup>st</sup> Institute awarded the MSC Research & Development Grant
- 1<sup>st</sup> Institute awarded MS ISO 9002 Quality Certification
- 1<sup>st</sup> Institute appointed Novell Education Academic Partner
- 1<sup>st</sup> Institute appointed Authorised Sun Education Centre
- 1<sup>st</sup> Institute appointed Microsoft Training Partner
- 1<sup>st</sup> Institute listed in Enterprise 50 Award Programme
- 1<sup>st</sup> Institute appointed University Alliance Partner by SAP
- 1<sup>st</sup> XR Studio - Mixed & Extended Reality Infrastructure in Asia
- 1<sup>st</sup> Integrated Cybersecurity Talent Zone in Malaysia



QS defines rating as “The system evaluates universities across a wide range of important performance indicators as set against pre-established international standards. By covering a broader range of criteria than any world ranking exercise, QS Stars™ shines a light on both the excellence and the diversity of the rated institution”.

*"The QS Stars university rating system audits and rates over 600 universities globally in a broader range of criteria than any world ranking exercise. Comprehensive audits are also independently carried out as part of the rating exercise. QS Stars™ shines a light on both the excellence and the diversity of the rated institution. Congratulations to Asia Pacific University (APU) for being the first-ever QS 5-Stars Plus rated institution in Malaysia and being 1 amongst 20 in the world."*

*Leigh Kamolins - Head of Evaluation, QS Intelligence Unit*

OUTSTANDING



# Rated for Excellence

## Asia Pacific University of Technology & Innovation

The QS Intelligence Unit has, through rigorous and independent data collection and analysis of performance metrics as set out in the QS Stars™ methodology, rated Asia Pacific University of Technology & Innovation as a Five Stars Plus institution.



Teaching



Employability



Online Learning



Internationalisation



Academic Development



Facilities



Accounting & Finance



Social Responsibility



Inclusiveness



The QS Stars™ rating system is operated by the QS Intelligence Unit, the independent compiler of the QS World University Rankings® since 2004. The system evaluates universities across a wide range of important performance indicators as set against pre-established international standards. By covering a broader range of criteria than any world ranking exercise, QS Stars shines a light on both the excellence and the diversity of the rated institution.

Leigh Kamolins, Head of Evaluation

# Inspiring

## COMPUTING, TECHNOLOGY MULTIMEDIA & GAMES DEVELOPMENT PROGRAMMES

### DEGREE PROGRAMMES

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security
  - Cloud Engineering
  - Internet of Things (IoT)
  - Digital Transformation
  - Financial Technology (FinTech)
  - Business Information Systems
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics
  - Digital Forensics
- Bachelor of Science (Honours) in Computer Science (Cyber Security)
- Bachelor of Computer Science (Hons) (Artificial Intelligence)
- Bachelor in Interactive Media and Immersive Technology (Honours)
- Bachelor in Interactive Media and Immersive Technology (Honours) with a specialism in:
  - VR/AR
- Bachelor of Science (Honours) in Computer Games Development

IT STARTS NOW..... IT STARTS HERE

Once again!  
**Outstanding  
Faculty Award 2022 & 2023**

1 of 22 Premier Digital Tech Institutions

MDEC: Malaysia Digital Economy Corporation

#### APU - A 5-STAR (EXCELLENT) RATED INSTITUTION



APU has consistently received the highest ratings among emerging Universities through the SETARA Ratings exercise conducted by the Ministry of Higher Education, ever since the SETARA Ratings system was introduced, including having attained 5 STARS in the latest ratings announced in Dec 2020.

The SETARA ratings system employs a rigorous assessment methodology to rate an education institution's three core functions, namely teaching, research and services.

#### APU IS A PREMIER DIGITAL TECH INSTITUTION - MALAYSIA DIGITAL ECONOMY CORPORATION



APU was among the first institute in Malaysia awarded Premier Digital Tech Institution status by the Malaysia Digital Economy Corporation (MDEC) and Ministry of Higher Education (MOHE). 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.

#### APU IS AWARDED BEST TECH UNIVERSITY & BEST FUTURE READY UNIVERSITY FOR 2024 - PC.COM AWARDS



The PC.com Awards are prestigious accolades that recognise organisations that demonstrate excellence and leadership in the field of technology and innovation. In the 2024 Awards, Asia Pacific University of Technology & Innovation (APU) shone brightly, winning both the Best Tech University and Best Future Ready University awards, as voted by PC.com readers. This recognition reflects APU's unwavering commitment in offering cutting-edge digital technology programmes & preparing students for the future. APU is a repeat winner, having also won the PC.Com Best Tech University Award in 2023.

#### APU - FIRST EVER MALAYSIAN UNIVERSITY WITH QAA UK ACCREDITATION



# 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.



## 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

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

Asia Pacific University of Technology & Innovation (APU)'s Ultra-Modern University Campus in MRANTI - Technology Park Malaysia 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.



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.

<p><b>Ranked No.1</b> for International Students in Malaysia</p> <p>QS World University Rankings 2025</p>	<p><b>MALAYSIA'S AWARD WINNING UNIVERSITY</b></p>	<p>Engineering Degrees Accredited under <b>WASHINGTON ACCORD</b></p> <p>(Accepted Worldwide)</p>	<p><b>100%</b> Employability*</p>	<p><b>Ranked No.2</b> in Malaysia</p> <p>AppliedHE ASEAN Private University Rankings 2025</p>	<p><b>FIRST IN MALAYSIA TO ACHIEVE 5-STARS PLUS IN QS RATINGS</b></p>
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\* Latest Graduate Tracer Study by Ministry of Higher 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.

*\* Latest Graduate Tracer Study by Ministry of Higher Education, Malaysia.*



### Industry Ready Graduates

The APU Career Centre connects and engages with over 12,000 Employers to ensure that our graduates are highly employable 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 to ensure that the skills and knowledge taught at APU are up-to-date and in high demand.

### Outstanding Support

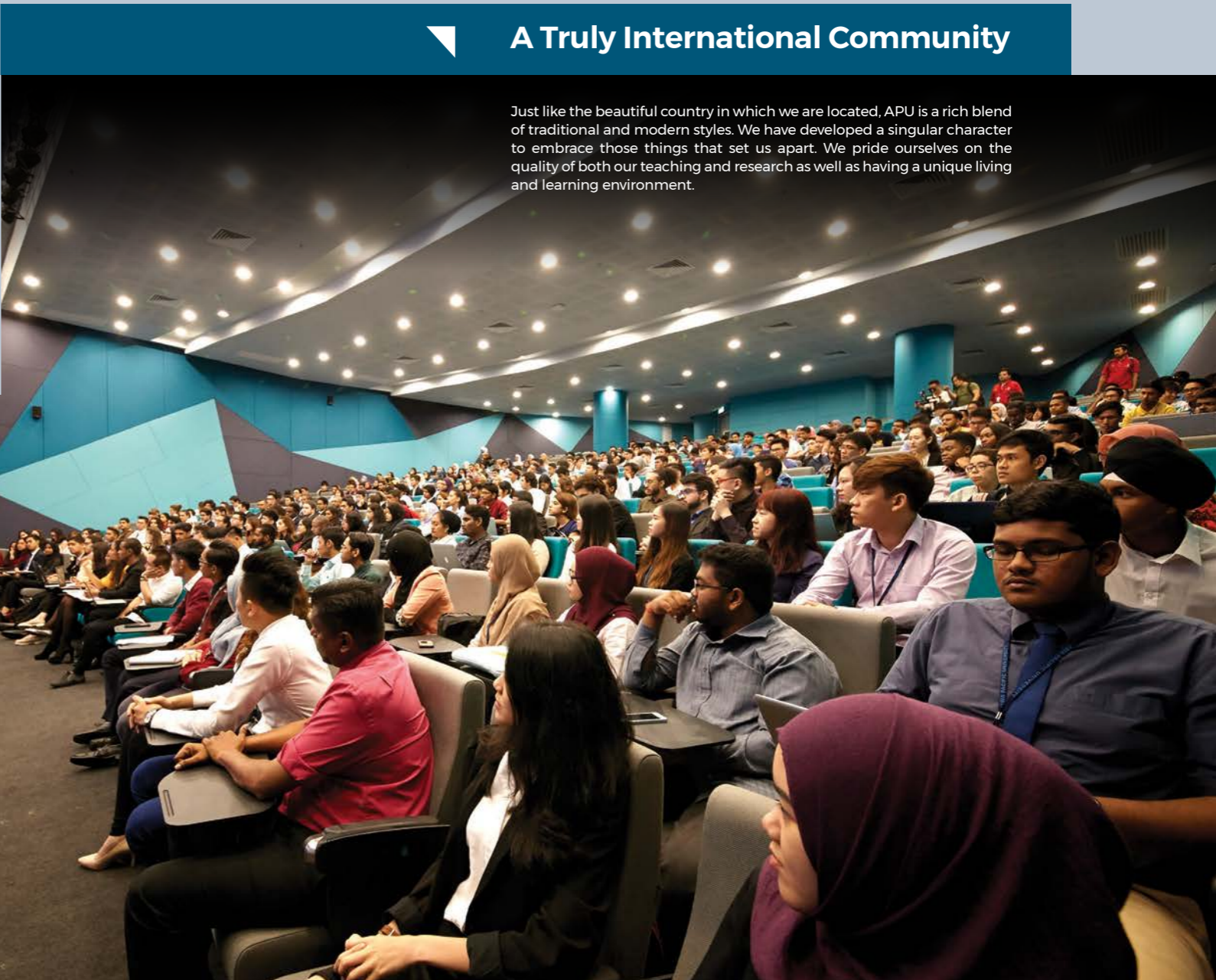
Regardless of the programme you choose, you will be supported by highly qualified and enthusiastic professionals. Many enjoy an international reputation for their research and actively engage with leading names in the industry.



**RANKED #1** for International Students in Malaysia  
**#16 in the World**  
 QS World University Rankings 2025

**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 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, Latin America 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.



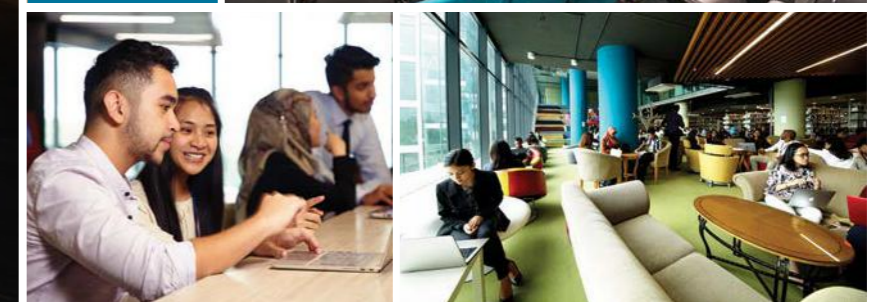
# World-class

## 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 your study experience at APU.



### Cutting-Edge Technologies

The Campus blends technology, integration, innovation and creativity under one roof. It provides not just a 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 socialisation 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.

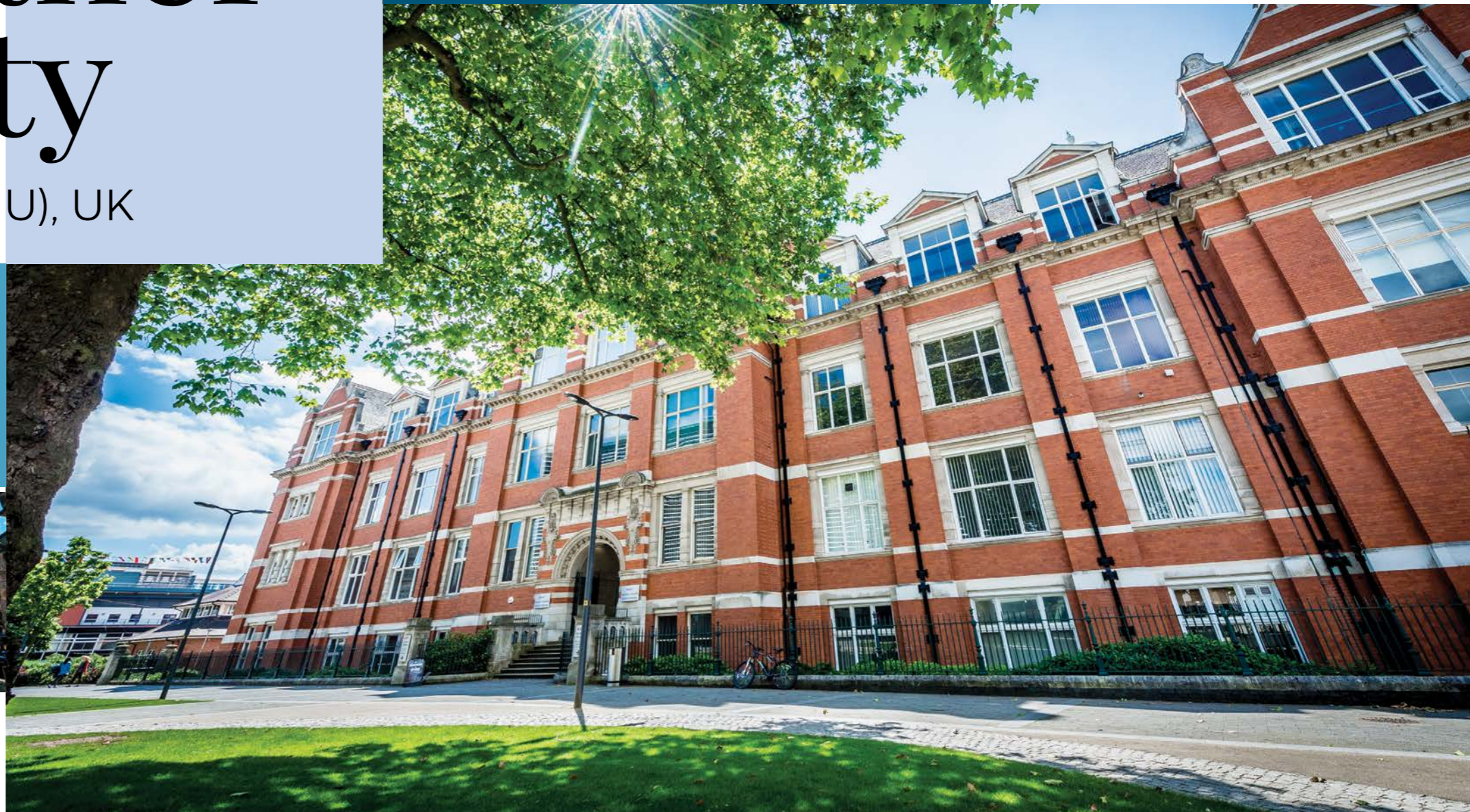
### An Integrated Community

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 Industry Revolution 4.0.



# Our Partner in Quality

De Montfort University (DMU), UK



De Montfort University Leicester (DMU) is a dynamic, 21st-century UK university with a global outlook based in the city of Leicester which is a great place to be a student.

## Find your new home at DMU

At DMU, our supportive and nurturing community will empower you to realise your dreams. Our courses are carefully designed and taught by expert academics to help you gain the skills needed to enter today's competitive jobs market and succeed in your career.

The university is organised into four faculties; Arts, Design and Humanities, Business and Law, Health and Life Sciences and Computing, Engineering and Media.

Our award-winning careers and employability service, DMU Works provides guaranteed work experience opportunities, including placements, internships and career mentoring.

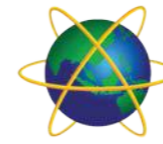


## About DMU

- DMU has over 150 years of history in providing higher education to students from around the globe.
- Leicester offer everything students could need and it has been named the fourth most vibrant city in the UK (Top Cities Vibrancy Report, 2022), as well as the best city in the East Midlands region to live and work (Good Growth for Cities Index, 2022).
- De Montfort University is the only higher education institution in Britain to be a global hub for one of the Sustainable Development Goals - SDG 16 to promote peace, justice and strong institutions.
- Each year, international students from more than 130 countries choose to study at DMU.
- DMU is rated a 5-star 'excellent' institution by QS, a world leader in evaluation higher education performance.
- DMU facilities have been shortlisted among the UK's best in the 2023 Whatuni Student Choice Awards, as voted for by students.

# Double your Advantage

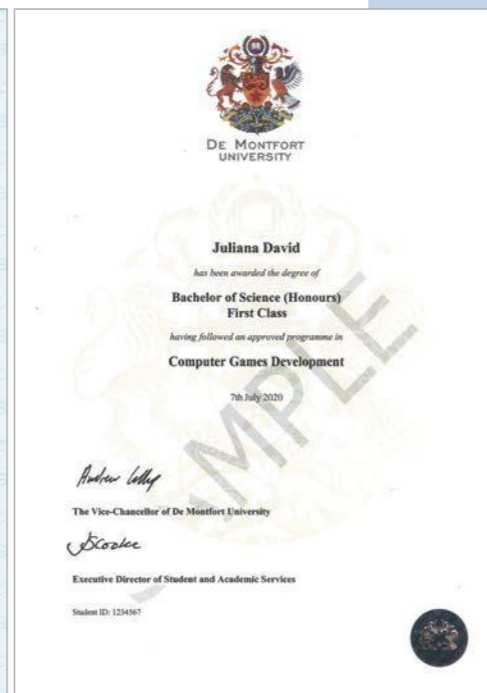
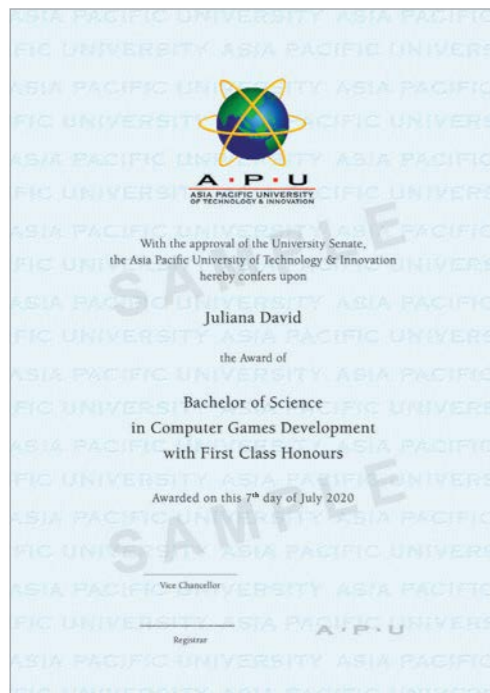
## APU-DMU Dual Degree Programme



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**DE MONTFORT  
UNIVERSITY  
LEICESTER**

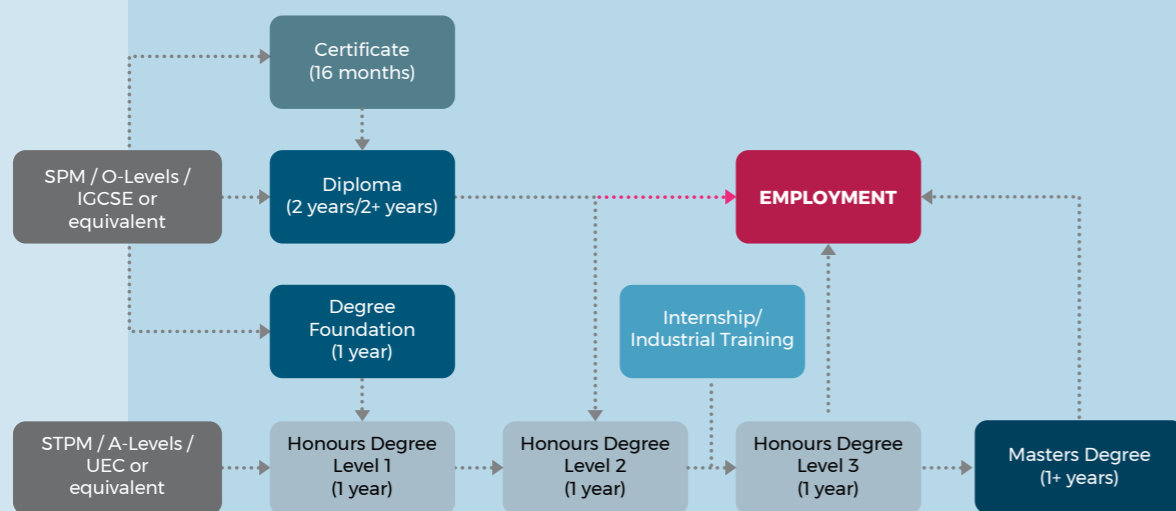


- APU's partnership with DMU enables students to be awarded Dual Awards - separate degree certificates from each institution - and enhances not just teaching and learning experiences, but also career prospects.
- Upon graduation, students will receive 2 Degree Certificates & Transcripts: 1 from APU, Malaysia and 1 from DMU, UK.
- Both degrees are recognised locally & internationally.
- The APU-DMU Dual Degree Programmes are offered under an approved collaboration in accordance with the QAA UK Quality Code for Higher Education for the Assurance of Academic Quality and Standards in Higher Education as published by the United Kingdom Quality Assurance Agency (QAA).



# Pathways & Admission Requirements

## YOUR STUDY PROGRESSION



## ADMISSION REQUIREMENTS

### BACHELORS (HONS) DEGREE PROGRAMMES

Entry Qualification	Computer Science / Software Engineering / Cyber Security / Artificial Intelligence	Information Technology	Multimedia Technology / Computer Games Development
<b>STPM</b>	<ul style="list-style-type: none"> <li>2 Passes in STPM in Science stream with minimum Grade C (GPA 2.0) in Mathematics and one Science or ICT Subject.</li> <li><b>OR</b></li> <li>2 Passes in STPM with minimum Grade C (GP 2.0) in any subject with a credit in Additional Mathematics at SPM.</li> <li><b>OR</b></li> <li>2 Passes in STPM with minimum Grade C (GP 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></li> </ul>	<ul style="list-style-type: none"> <li>2 Passes in STPM with minimum Grade C (GP 2.0) in any subject with a Credit in Mathematics at SPM.</li> </ul> <p><i>Note: Candidates who have obtained a Pass in Mathematics, but do not have a Credit Pass in Mathematics at SPM/IGCSE or equivalent, need to take a Pre-Requisite Mathematics module prior or at the beginning of the study.</i></p>	<ul style="list-style-type: none"> <li>2 Passes in STPM with minimum Grade C (GP 2.0) in any subject with a Pass in Mathematics at SPM.</li> <li>Pass an interview or a portfolio review.</li> <li><i>*Strong Mathematics would be an added advantage.</i></li> </ul>
<b>A-LEVEL</b> <small>Overseas qualification that are equivalent to 12th Grade/ A-Level/ HSC are accepted.</small>	<ul style="list-style-type: none"> <li>2 Passes (Grade A-D) in A-Level in Science stream with a Pass in Mathematics and one Science or ICT subject.</li> <li><b>OR</b></li> <li>2 Passes (Grade A-D) in A-Level with a Credit in Additional Mathematics at SPM/ O-Level/ IGCSE or equivalent</li> <li><b>OR</b></li> <li>2 Passes (Grade A-D) in A-Level with a Credit in Mathematics and Science or ICT subjects at SPM/ O-Level/ IGCSE or equivalent. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i></li> </ul>	<ul style="list-style-type: none"> <li>2 Passes (Grade A-D) in A-Level and with a Credit in Mathematics at SPM/IGCSE or equivalent.</li> </ul> <p><i>Note: Candidates who have obtained a Pass in Mathematics, but do not have a Credit Pass in Mathematics at SPM/IGCSE or equivalent, need to take a Pre-Requisite Mathematics module prior or at the beginning of the study.</i></p>	<ul style="list-style-type: none"> <li>2 Passes (Grade A-D) in A-Level and with a Pass in Mathematics SPM/ O-Level/ IGCSE or equivalent.</li> <li>Pass an interview or a portfolio review.</li> <li><i>*Strong Mathematics would be an added advantage.</i></li> </ul>
<b>UEC</b>	<ul style="list-style-type: none"> <li>5 Grade B Passes in UEC in any subject including Mathematics and one Science or ICT subject.</li> <li>5 Grade B Passes in UEC in any subject including Additional Mathematics.</li> <li>5 Grade B Passes in UEC in any subjects with Credit in Mathematics and Science or ICT Subject at SPM or equivalent. <i>Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme.</i></li> </ul>	<ul style="list-style-type: none"> <li>5 Grade B Passes in UEC in any subjects including Mathematics.</li> </ul> <p><i>Note: Candidates who have obtained a Pass in Mathematics, but do not have a Credit Pass in Mathematics at SPM/IGCSE or equivalent, need to take a Pre-Requisite Mathematics module prior or at the beginning of the study.</i></p>	<ul style="list-style-type: none"> <li>5 Grade B Passes in UEC in any subjects including a Pass in Mathematics.</li> <li>Pass an interview or a portfolio review.</li> <li><i>*Strong Mathematics would be an added advantage.</i></li> </ul>
<b>FOUNDATION/ MATRICULATION</b>	<ul style="list-style-type: none"> <li>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></li> <li><b>OR</b></li> <li>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></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul> <p><i>Note: Candidates who have obtained a Pass in Mathematics, but do not have a Credit Pass in Mathematics at SPM/IGCSE or equivalent, need to take a Pre-Requisite Mathematics module prior or at the beginning of the study.</i></p>	<ul style="list-style-type: none"> <li>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.</li> <li>Pass an interview or a portfolio review.</li> </ul>
<b>ICT RELATED DIPLOMAS</b>	<ul style="list-style-type: none"> <li>Diploma with a minimum CGPA of 2.50.</li> </ul> <p><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></p>	<ul style="list-style-type: none"> <li>Diploma in Computing related areas with a minimum CGPA of 2.50 and fulfilment of requirements for Credit Transfer is subject to approval by the APU Academic Board.</li> </ul> <p><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></p>	<ul style="list-style-type: none"> <li>Diploma with a minimum CGPA of 2.0 and a Pass in Mathematics at SPM/IGCSE/ O-Level or its equivalent.</li> <li>Pass an interview or a portfolio review.</li> </ul>

*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.

### ENGLISH REQUIREMENTS (only applicable to International Students)

Programmes	Requirements
Foundation and Diploma Programmes	<ul style="list-style-type: none"> <li>IELTS : 4.0</li> <li>TOEFL IBT : 30-31</li> <li>Pearson (PTE) : 36</li> <li>MUET : Band 3</li> </ul>
Bachelor (Hons) Degree Programmes	<ul style="list-style-type: none"> <li>IELTS : 5.0</li> <li>TOEFL IBT : 40</li> <li>Pearson (PTE) : 47</li> <li>MUET : Band 3.5</li> </ul>
BSc (Hons) in Multimedia Technology BSc (Hons) in Computer Games Development	<ul style="list-style-type: none"> <li>IELTS : 5.5</li> <li>TOEFL IBT : 46</li> <li>Pearson (PTE) : 51</li> <li>MUET : Band 4</li> </ul>

Please note that under Ministry of Higher 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)

(R3/0011/3/0089)(11/29)(A10955)

## 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, Psychology, Business & Management, Computing & Technology, Engineering, Industrial Design, Animation and Visual Effects.

## 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 consists 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.

## ADMISSION REQUIREMENTS

- 5 Credits in at least 5 subjects at SPM level with a minimum of a pass in Bahasa Malaysia and Sejarah (History);
- 5 Credits (Grade C & above) in at least 5 subjects at IGCSE/O-Levels;
- 3 Credits (Grade B & above) in at least 3 subjects in UEC.
- A qualification that APU accepts as equivalent to the above.
- \* Some Degree Programmes may require a Credit in Mathematics at SPM/IGCSE/O-Level or equivalent.
- \* Engineering Degree Programmes require a Credit in Mathematics and Physics or Chemistry at SPM/IGCSE/O-Level or equivalent.
- \* Foundation in Computing (ODL) - 100% Online requires a Credit Pass in Mathematics

SEMESTER 1	COMMON SEMESTER 1				
	• English for Academic Purposes	• Communication Skills	• Personal Development & Study Methods	• Essentials of Web Applications	• Mathematics
ROUTES	BUSINESS, FINANCE & SOCIAL SCIENCES	COMPUTING & TECHNOLOGY	ENGINEERING	ARCHITECTURE & DESIGN	
SEMESTER 2	<ul style="list-style-type: none"> <li>• Introduction to Business</li> <li>• Fundamentals of Finance</li> <li>• Global Business Trends</li> <li>• Public Speaking in English</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Business</li> <li>• Introduction to Computer Architecture &amp; Networking</li> <li>• Introduction to Visual &amp; Interactive Programming</li> <li>• Public Speaking in English</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanics for Engineers</li> <li>• Engineering Mathematics</li> <li>• Introduction to Visual &amp; Interactive Programming</li> <li>• Public Speaking in English</li> </ul>	<ul style="list-style-type: none"> <li>• Fundamentals of Drawing</li> <li>• Life Drawing</li> <li>• Design Studies</li> <li>• Public Speaking in English</li> <li>• Major Project 1</li> </ul>	
SEMESTER 3	<ul style="list-style-type: none"> <li>• Academic Research Skills</li> <li>• Economics for Business</li> <li>• Perspectives in Technology / Further Mathematics**</li> <li>• Co-Curricular</li> </ul> <p>Choose <b>one</b> of the following modules:</p> <ul style="list-style-type: none"> <li>• Principles of Accounts</li> <li>• Discovering Media in the Digital Age</li> <li>• Psychology &amp; Behavioral Science</li> <li>• Fundamentals of Hospitality and Tourism Industry</li> </ul>	<ul style="list-style-type: none"> <li>• Academic Research Skills</li> <li>• Further Mathematics</li> <li>• Introduction to Multimedia Applications</li> <li>• Co-Curricular</li> </ul> <p>Choose <b>one</b> of the following modules:</p> <ul style="list-style-type: none"> <li>• Perspectives in Technology</li> <li>• Discovering Media in the Digital Age</li> <li>• Psychology &amp; Behavioral Science</li> <li>• Fundamentals of Hospitality and Tourism Industry</li> </ul>	<ul style="list-style-type: none"> <li>• Academic Research Skills</li> <li>• Science for Engineers</li> <li>• Perspectives in Technology</li> <li>• Design Thinking – Fraunhofer – IEM</li> <li>• Co-Curricular</li> </ul>	<ul style="list-style-type: none"> <li>• Academic Research Skills</li> <li>• History of Design and Media</li> <li>• Introduction to Digital Photography</li> <li>• Major Project 2</li> <li>• Co-Curricular Studies</li> </ul>	
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"> <li>- Business, Management, Hospitality &amp; Tourism</li> <li>- Accounting, Finance, Banking &amp; Actuarial Studies</li> <li>- Media, Communication &amp; Psychology</li> </ul>	<ul style="list-style-type: none"> <li>- Computing &amp; Technology</li> <li>- Multimedia &amp; Games Development</li> </ul>	<ul style="list-style-type: none"> <li>- Engineering</li> </ul>	<ul style="list-style-type: none"> <li>- Industrial Design, Visual Effects, Animation &amp; Digital Advertising</li> <li>- Architecture</li> </ul>	
ALTERNATIVE PATHWAYS	<p>Students may alternatively choose the following:</p> <ul style="list-style-type: none"> <li>- Computing &amp; Technology</li> <li>- Multimedia &amp; Games Development</li> <li>- Industrial Design, Visual Effects, Animation &amp; Digital Advertising</li> <li>- International Relations</li> <li>- Architecture</li> </ul>	<ul style="list-style-type: none"> <li>- Business, Management, Hospitality &amp; Tourism</li> <li>- Accounting, Finance, Banking &amp; Actuarial Studies</li> <li>- Industrial Design, Visual Effects, Animation &amp; Digital Advertising</li> <li>- International Relations</li> <li>- Media, Communication &amp; Psychology</li> <li>- Architecture</li> </ul>	<ul style="list-style-type: none"> <li>- Computing &amp; Technology</li> <li>- Multimedia &amp; Games Development</li> <li>- Accounting, Finance, Banking &amp; Actuarial Studies</li> <li>- Business, Management, Hospitality &amp; Tourism</li> <li>- Industrial Design, Visual Effects, Animation &amp; Digital Advertising</li> <li>- International Relations</li> <li>- Media, Communication &amp; Psychology</li> <li>- Architecture</li> </ul>	<ul style="list-style-type: none"> <li>- Computing &amp; Technology</li> <li>- Multimedia &amp; Games Development</li> <li>- Accounting, Finance, Banking &amp; Actuarial Studies</li> <li>- Business, Management, Hospitality &amp; Tourism</li> <li>- International Relations</li> <li>- Media, Communication &amp; Psychology</li> </ul>	

## YOUR FOUNDATION PATHWAY TO A DEGREE OF YOUR CHOICE

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

### CREDIT / GRADE C in SPM / O-Level / IGCSE is required in:

#### Mathematics

Leading from APU Foundation to your Choice of Degree Studies; please note that a Credit Pass in Mathematics at SPM / O-Level / IGCSE is required for the following programmes:

#### Computing & Technology

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in
  - Information System Security
  - Cloud Engineering
  - Internet of Things (IoT)
  - Digital Transformation
  - Financial Technology (FinTech)
  - Business Information Systems
  - Sustainable Computing
- Bachelor of Science (Honours) in Computer Science\*
- Bachelor of Science (Honours) in Computer Science with a specialism in
  - Data Analytics\*
  - Digital Forensics\*
- Bachelor of Science (Honours) in Computer Science (Cyber Security)\*
- Bachelor of Science (Hons) in Software Engineering\*
- Bachelor of Computer Science (Hons) (Artificial Intelligence)\*

#### Multimedia & Games Development

- Bachelor in Interactive Media and Immersive Technology (Honours)
- Bachelor in Interactive Media and Immersive Technology (Honours) with a specialism in VR/AR
- Bachelor of Science (Honours) in Computer Games Development

#### Accounting, Banking, Finance & Actuarial

- Bachelor of Accounting and Finance (Honours)
- Bachelor of Accounting and Finance (Honours) with a specialism in
  - Forensic Accounting
  - Forex and Investments
  - Accounting Technology
- Bachelor in Banking and Finance (Hons)
- Bachelor in Banking and Finance (Hons) with a specialism in
  - Investment Analytics
  - Financial Technology
- Bachelor of Financial Technology (Honours)
- Bachelor of Science (Honours) in Actuarial Studies
- Bachelor of Science (Honours) in Actuarial Studies with a specialism in
  - Data Analytics
  - Financial Technology

A Pass in Mathematics at SPM / O-Level / IGCSE is required for these programmes. (Strong Mathematics would be an added advantage)

### CREDIT / GRADE C in SPM / O-Level / IGCSE is required in:

#### Mathematics

#### Physics OR Chemistry OR Technical Science

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 / IGCSE is required for the following programmes:

#### Engineering

- Bachelor of Electrical and Electronic Engineering with Honours
- Bachelor of Mechatronic Engineering with Honours
- Bachelor of Mechanical Engineering with Honours
- Bachelor of Computer Engineering with Honours
- Bachelor of Petroleum Engineering with Honours

### CREDIT / GRADE C in SPM / O-Level / IGCSE is required in:

#### Mathematics

#### Science OR Physics OR Chemistry OR Biology

Leading from APU Foundation to your Choice of Degree Studies; please note that a Credit Pass in Mathematics and Science OR Physics OR Chemistry OR Biology and a Pass in English at SPM / O-Level / IGCSE is required for the following programme:

#### Psychology

- Bachelor of Science (Honours) in Psychology

Leading from APU Foundation to your Choice of Degree Studies:

#### Business, Management, Marketing, Digital Marketing & Tourism

- Bachelor of Arts (Honours) in Business Management
- Bachelor of Arts (Honours) in Business Management with a specialism in
  - E-Business
  - Digital Leadership
  - Business Analytics
- Bachelor of Arts (Honours) in Human Resource Management
- Bachelor of Arts (Honours) in International Business Management
- Bachelor of Arts (Honours) in Marketing Management
- Bachelor of Arts (Honours) in Marketing Management with a specialism in
  - Digital Marketing

#### Global Hospitality & Tourism

- Bachelor of Science (Honours) in Global Hospitality and Tourism
- Bachelor of Science (Honours) in Global Hospitality and Tourism with a specialism in
  - Hospitality Innovation
  - Food Science and Technology
  - Events Management
  - Tourism Logistics
  - Halal Tourism
  - Aviation Management
- Bachelor of Arts (Honours) in Tourism Management
- Bachelor of Arts (Honours) in Tourism Management with a specialism in
  - Hospitality

#### Media and International Relations

- Bachelor of Arts (Honours) in Media and Communication Studies
- Bachelor of Arts (Honours) in International Relations

#### Industrial Design, Animation & Visual Effects

- Bachelor of Arts (Honours) in Industrial Design
- Bachelor of Arts (Honours) in Visual Effects
- Bachelor of Arts (Honours) in Animation
- Bachelor of Arts (Honours) in Digital Advertising



\* Students who choose to progress to Computer Science, Software Engineering, Data Analytics, Cyber Security, Digital Forensics and Artificial Intelligence programmes will be required to undertake Foundation Pathways from the **Computing & Technology** route or **Engineering** route if the student does not have a credit in Additional Mathematics at SPM / O-Level / IGCSE or equivalent.

\* Students who have completed Foundation from other routes apart from the above are required to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of the Degree Programme, provided they also still have Credit in Maths and Science or ICT subject at SPM / O-Level / IGCSE or equivalent.

\*\* Further Mathematics module is Compulsory for students who choose to progress to Bachelor of Science (Honours) in Actuarial Studies.

## Synchronous and Asynchronous Modules for Foundation in Computing (ODL)

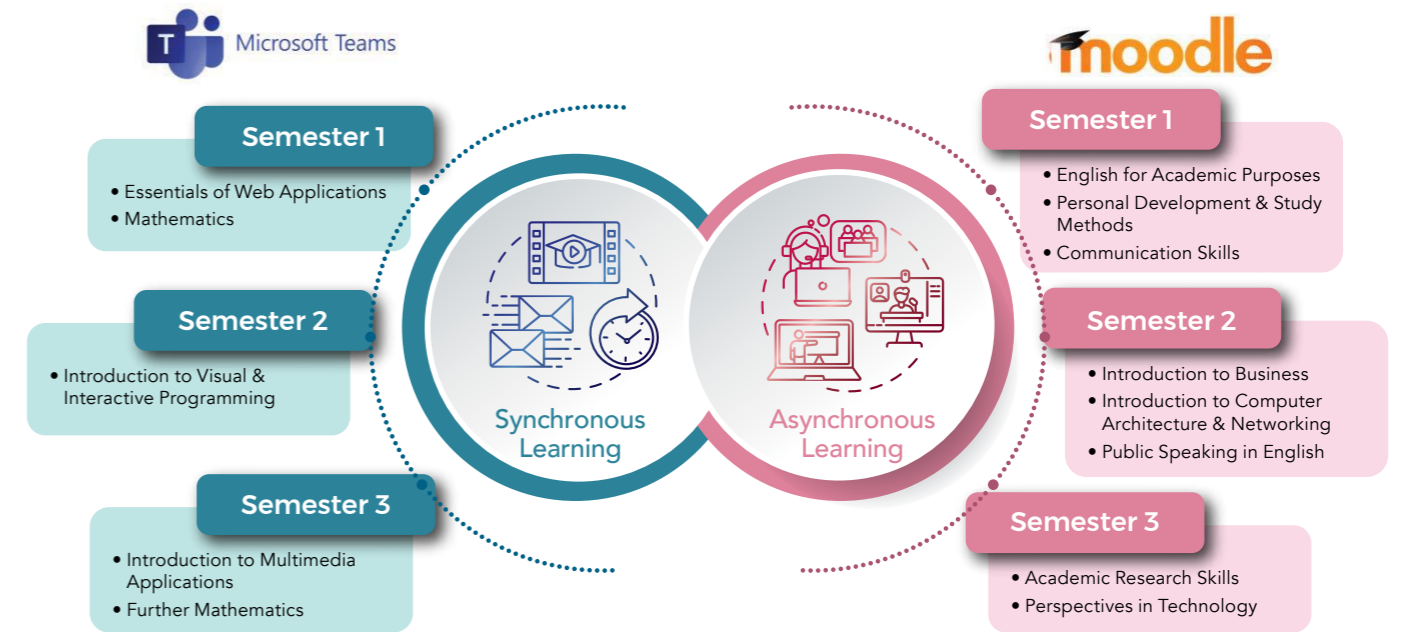
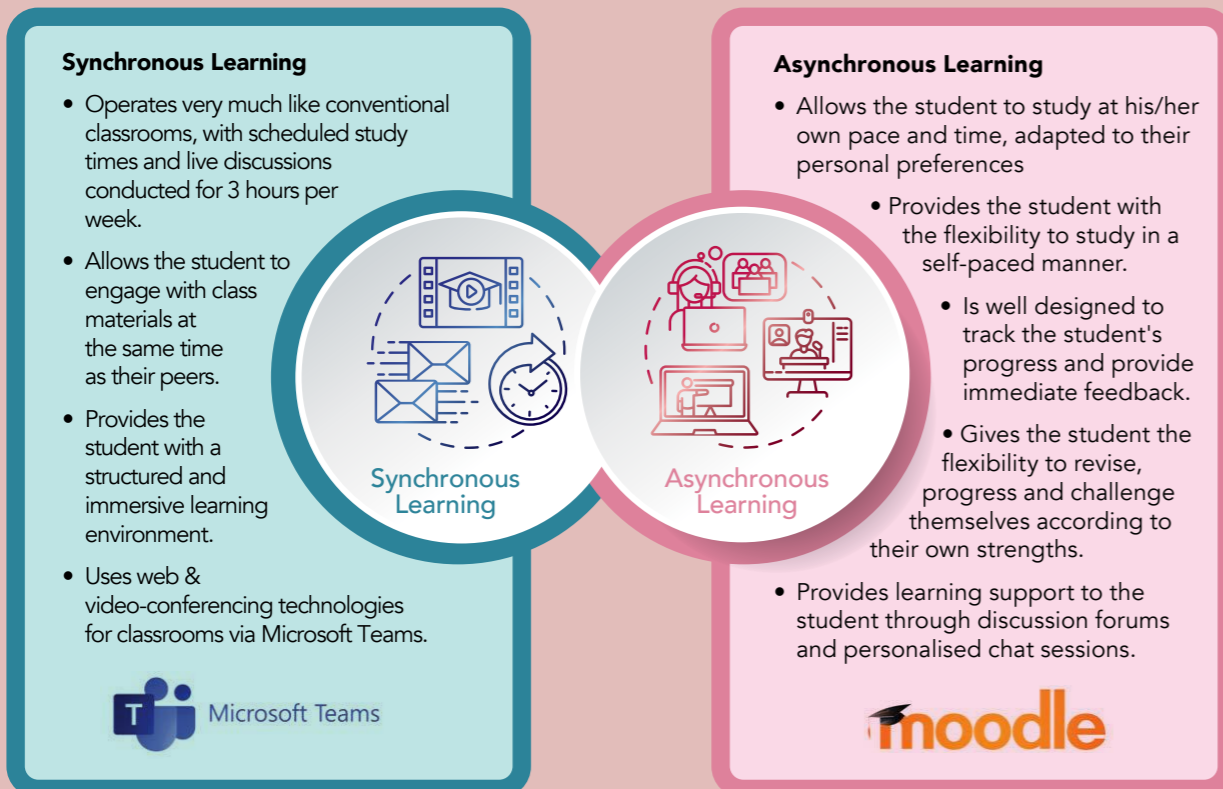
100% Online

APU FOUNDATION PROGRAMME (ODL-100% ONLINE)

# Foundation in Computing (ODL)

- The Foundation in Computing (ODL) allows young students the opportunity to gain a solid Pre-University qualification from the comforts of their home or country.
- Open Distance Learning (ODL) as practiced at APU provides a high-quality and flexible learning experience for students utilising state-of-the-art technological innovations & pioneering teaching and learning practices.
- This flexibility is also an ideal option for families who wish for their children to obtain an innovative and high quality education yet remain connected to their communities of origin.

### METHOD OF DELIVERY - Synchronous & Asynchronous Learning



In summary, these are the modules you will be taking during your Foundation in Computing (ODL) programme:

SEMESTER 1	SEMESTER 2	SEMESTER 3
<p><b>Modules</b></p> <ul style="list-style-type: none"> <li>• English for Academic Purposes</li> <li>• Communication Skills</li> <li>• Personal Development and Study Methods</li> <li>• Essentials of Web Applications</li> <li>• Mathematics</li> </ul>	<p><b>Modules</b></p> <ul style="list-style-type: none"> <li>• Introduction to Business</li> <li>• Introduction to Computer Architecture and Networking</li> <li>• Introduction to Visual and Interactive Programming</li> <li>• Public Speaking in English</li> </ul>	<p><b>Modules</b></p> <ul style="list-style-type: none"> <li>• Academic Research Skills</li> <li>• Perspectives in Technology</li> <li>• Introduction to Multimedia Applications</li> <li>• Further Mathematics</li> </ul>

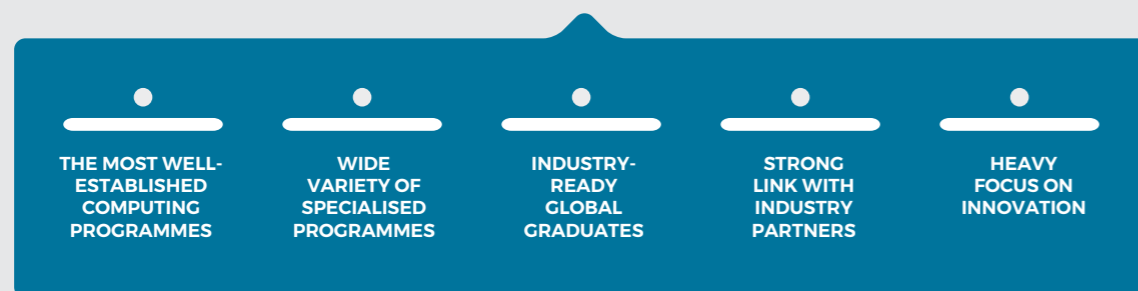
### Further Studies

Upon successful completion of this programme, you will be eligible to progress into any of the following degree pathways offered at APU. Students will also have the option to opt-in for the APU-DMU Dual Degree Scheme.

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Bachelor of Science (Honours) in Information Technology</li> <li>• Bachelor of Science (Honours) in Information Technology with a specialism in:                             <ul style="list-style-type: none"> <li>- Information System Security</li> <li>- Cloud Engineering</li> <li>- Internet of Things (IoT)</li> <li>- Digital Transformation</li> <li>- Financial Technology (FinTech)</li> <li>- Business Information Systems</li> <li>- Sustainable Computing</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Bachelor of Science (Hons) in Software Engineering</li> <li>• Bachelor of Science (Honours) in Computer Science (Cyber Security)</li> <li>• Bachelor of Science (Honours) in Computer Science</li> <li>• Bachelor of Computer Science (Hons) (Artificial Intelligence)</li> <li>• Bachelor of Science (Honours) in Computer Science with a specialism in:                             <ul style="list-style-type: none"> <li>- Data Analytics</li> <li>- Digital Forensics</li> </ul> </li> </ul> | <p><b>Alternative Pathways:</b></p> <ul style="list-style-type: none"> <li>• Business, Management, Marketing &amp; Tourism</li> <li>• Accounting, Finance, Banking &amp; Actuarial Studies</li> <li>• Industrial Design, Visual Effects, Animation &amp; Digital Advertising</li> <li>• International Relations</li> <li>• Media, Communication &amp; Psychology*</li> </ul> <p><small>*Leading from APU Foundation to Psychology programme; please note that a Credit Pass in Mathematics and Science OR Physics OR Chemistry OR Biology and a Pass in English at SPM / O-Level / IGCSE is required</small></p> |
|---|--|--|

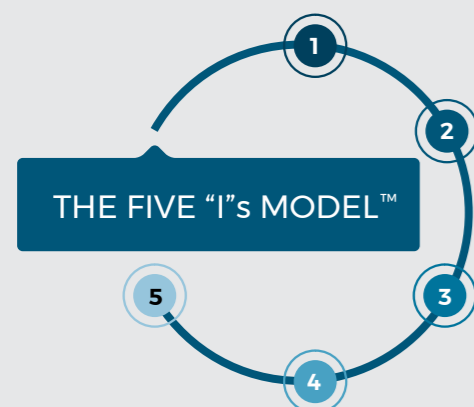


# Computing, Technology & Game Development



## THE AIMS OF THE APU COMPUTING, TECHNOLOGY, MULTIMEDIA & GAME 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



# Diploma Programmes

Our Diploma Programmes are designed to prepare those with SPM, O-Levels, IGCSE 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:

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

## PATHWAYS AFTER DIPLOMA TO COMPUTING, TECHNOLOGY, MULTIMEDIA & GAMES DEVELOPMENT 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.

### Diploma in Information & Communication Technology

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

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security\* - Cloud Engineering
  - Financial Technology (FinTech) - Digital Transformation
  - Business Information Systems - Internet of Things (IoT)\*
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science (Cyber Security)
- Bachelor of Science (Honours) in Computer Science\*
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics - Digital Forensics
- Bachelor of Computer Science (Hons) (Artificial Intelligence)

### 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:

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security\* - Cloud Engineering
  - Financial Technology (FinTech) - Digital Transformation
  - Business Information Systems - Internet of Things (IoT)\*
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science (Cyber Security)
- Bachelor of Science (Honours) in Computer Science
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics - Digital Forensics
- Bachelor of Computer Science (Hons) (Artificial Intelligence)

\* Bridging module(s) needed before progress into Year 2.

### Diploma in Business Information Technology

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

- Bachelor of Science (Honours) in Business Management
- Bachelor of Science (Honours) in Business Management with a specialism in:
  - E-Business
  - Digital Leadership
- Bachelor of Arts (Honours) in International Business Management
- Bachelor of Arts (Honours) in Marketing Management
- Bachelor of Arts (Honours) in Marketing Management with a specialism in Digital Marketing
- BA (Hons) Human Resource Management
- Bachelor of Arts (Honours) in Tourism Management\*
- Bachelor of Arts (Honours) in Tourism Management with a specialism in Hospitality\*

\* Bridging module(s) needed before progress into Year 2.

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.

### 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:

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security\* - Cloud Engineering
  - Financial Technology (FinTech) - Digital Transformation
  - Business Information Systems - Internet of Things (IoT)\*
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science (Cyber Security)
- Bachelor of Science (Honours) in Computer Science
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics - Digital Forensics
- Bachelor of Computer Science (Hons) (Artificial Intelligence)

### 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:

- Bachelor of Science (Honours) in Computer Games Development
- Bachelor in Interactive Media and Immersive Technology (Honours)
- Bachelor in Interactive Media and Immersive Technology (Honours) with a specialism in VR/AR
- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security\* - Cloud Engineering
  - Financial Technology (FinTech) - Digital Transformation
  - Business Information Systems - Internet of Things (IoT)\*
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science (Cyber Security)\*
- Bachelor of Science (Honours) in Computer Science\*
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics\* - Digital Forensics\*
- Bachelor of Computer Science (Hons) (Artificial Intelligence)\*

Upon successful completion of this program with CGPA of 2.75 or higher you will be eligible to advance to Level 1 with transferred credits. Students with 2.5 CGPA must pass rigorous assessment.

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Cloud Engineering
  - Digital Transformation
  - Financial Technology (FinTech)
  - Business Information Systems
  - Information System Security
  - Sustainable Computing

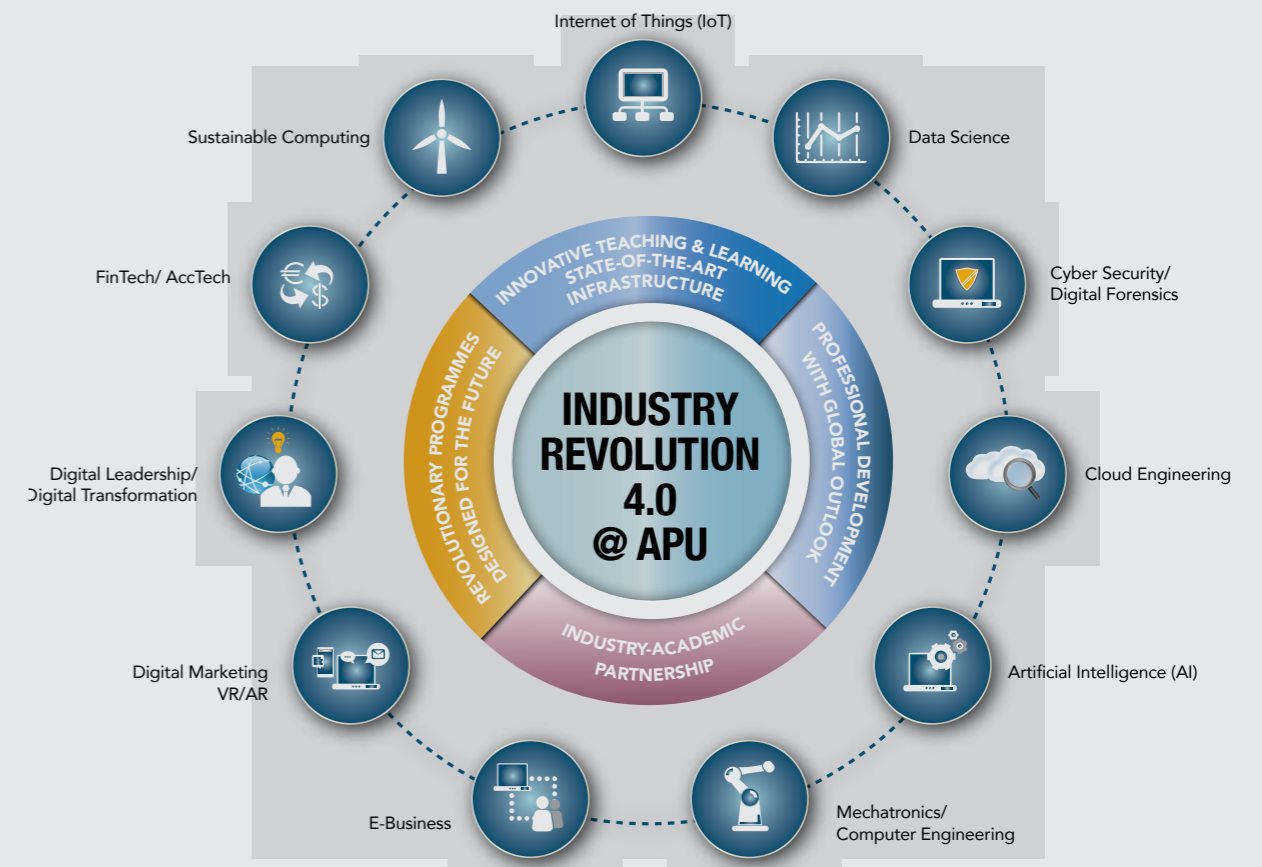
Please take note that students who wish to progress to BSc (Hons) in Information Technology or its specialism, require a Credit Pass in Mathematics at SPM or a Credit Pass in Mathematics at Diploma in Business Information Technology. Candidates with only a pass in Mathematics need to take and pass the reinforcement Mathematics.

# 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 (IR4.0), where Robotics, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Cloud Engineering, Internet of Things (IoT), 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.

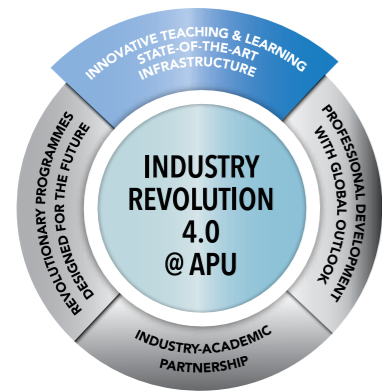
At APU, we developed our own IR 4.0 strategy to prepare our students to join the workforce of the future. We nurture the world's future innovators and uphold our Vision as a University of Technology and Innovation.



For the full listing of our Diploma Programmes, please refer to the Pre-University programme brochure.

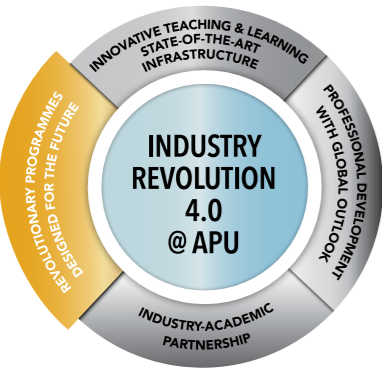


## INDUSTRY REVOLUTION 4.0 @ APU



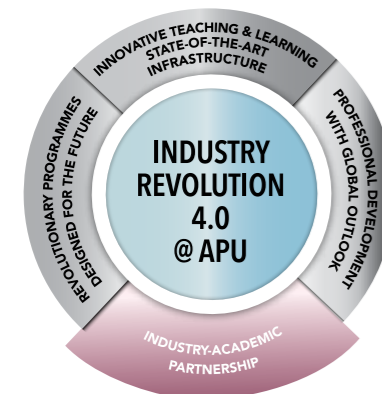
### INNOVATIVE TEACHING & LEARNING STATE-OF-THE-ART INFRASTRUCTURE

In the era of IR4.0, 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.



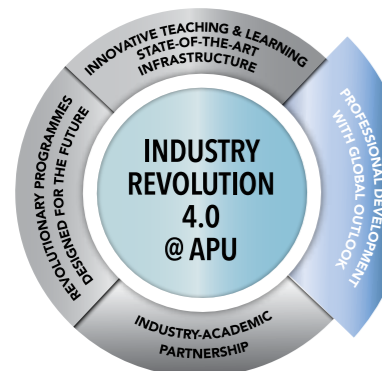
### REVOLUTIONARY PROGRAMMES DESIGNED FOR THE FUTURE

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 IR4.0 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), Artificial Intelligence (AI), Digital Leadership, Digital Transformation, Sustainable Computing, VR/AR, Financial Technology (FinTech), Accounting Technology (AccTech), Digital Marketing, E-Business, Mechatronics, Computer Engineering, Cloud Engineering 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.



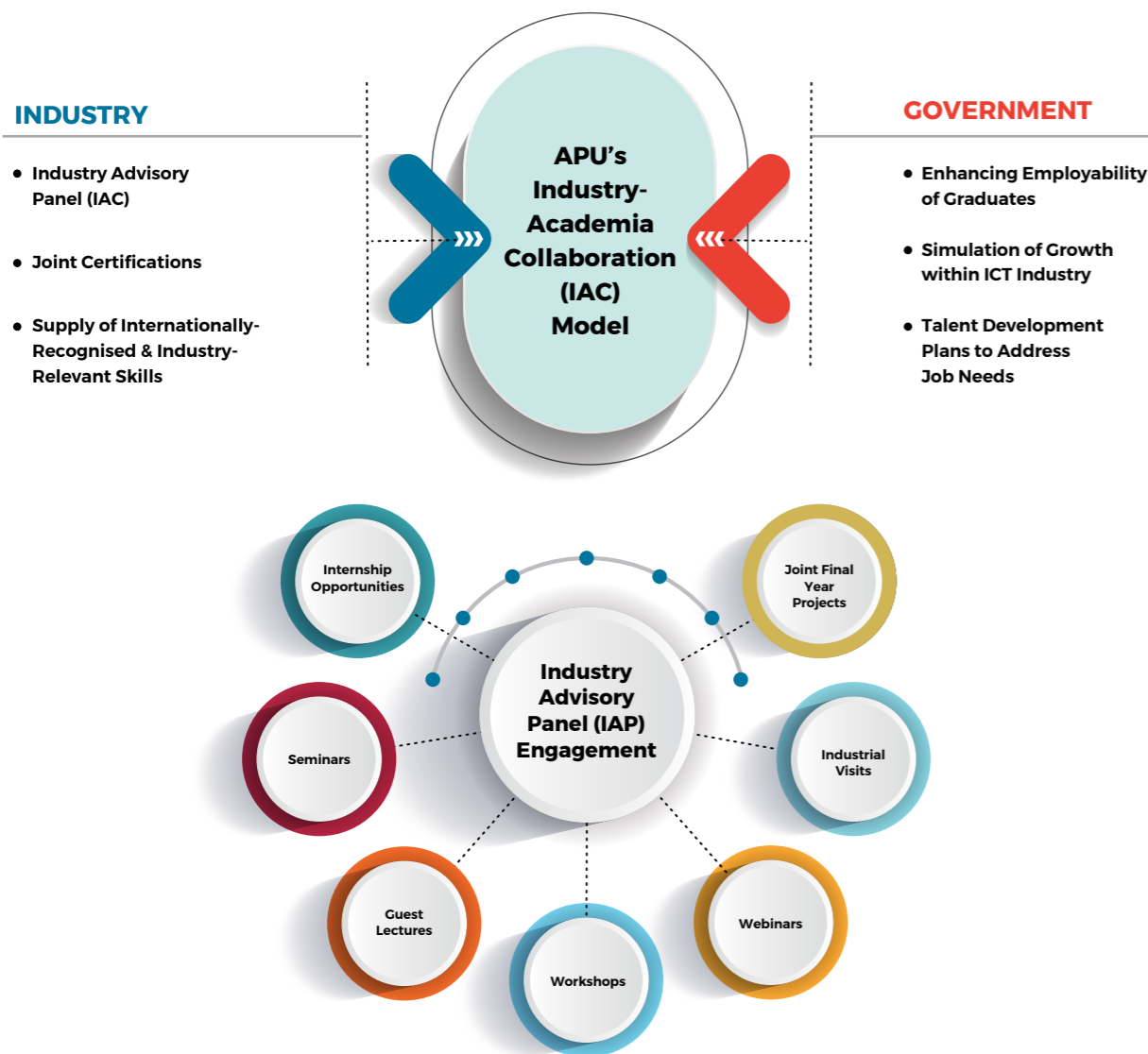
### PROFESSIONAL DEVELOPMENT WITH GLOBAL OUTLOOK

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 13,000 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



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.



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.



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 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.



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.



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 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.



APU and SAS have signed a 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.



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.

## COLLABORATIVE INDUSTRIAL PARTNERS



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.



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



Metronomik is a video game company founded and has been one of the APU Industrial Advisory Panel (IAP) members in providing industrial input and feedback on our Computer Games Development (CGD) programme. Besides, various activities such as the industrial visits, talks and seminars have been co-organised with Metronomik since 2018.



Xhinobi is a game development studio established in Kuala Lumpur since 2018. Besides gamification for enterprises, they also provide solutions in video game development and VR & AR projects. APU and Xhinobi have been in collaboration by providing industrial experience opportunities such as internship and industrial talks for our students in the area of computer games development.



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



# Professional Certification Partners



- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in Cloud Engineering
- Bachelor of Science (Honours) in Information Technology with a specialism in Information System Security
- Bachelor of Science (Honours) in Information Technology with a specialism in Internet of Things

Amazon Web Services (AWS) is the world's most broadly adopted cloud platform offering several fully featured services from data centers globally. As an Amazon Web Services (AWS) Academy member institution, Asia Pacific University of Technology & Innovation offers the AWS Academy cloud computing curriculum through its multi-disciplinary IT degree options that prepares students to pursue careers in the fast-growing cloud computing space and industry-recognized AWS Certifications. The AWS Academy curriculum is developed and maintained by AWS subject matter experts, ensuring that it reflects current services and up-to-date best practices. Courses are taught by AWS Academy-accredited educators who are trained by AWS to help students become proficient in AWS technology.

## PROFESSIONAL CERTIFICATION PARTNERS

### AWS ACADEMY MEMBER INSTITUTION

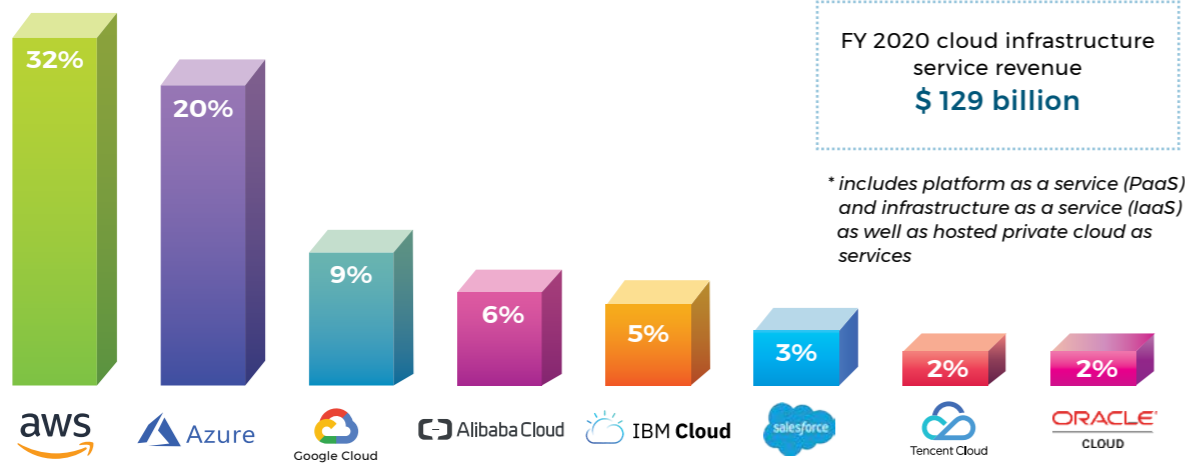
The rapid rise of computing is creating a growing number of high-quality jobs at organizations around the world, and the technical skills that students develop through this program will position them well for their careers today and in the future.

#### Career Options:

- Cloud Architect
- Systems Engineer
- Systems Analyst
- DevOps Engineer
- Reliability Engineer
- Build Engineer
- Software Developer
- System Architect
- Software Development Manager
- IT Manager
- Data Innovation Manager
- Machine Learning Scientist
- Business Process Engineer
- Data Wrangler / Munger / Miner
- Business Intelligence Manager
- Analytics & Reporting Manager
- Decision Analytics Manager

### Amazon Leads \$130-Billion Cloud Market

Worldwide market share of leading cloud infrastructure service provider in Q4 2020\*



### CISCO CERTIFIED CCNA



- Bachelor of Science (Honours) in Information Technology with a specialism in Cloud Engineering

CISCO is the worldwide leader in IT and networking. Achieving CISCO CCNA certification is the first step in preparing for a career in IT technologies. To earn CCNA certification, you pass one exam that covers a broad range of fundamentals for IT careers, based on the latest networking technologies, software development skills, and job roles.

The undergraduate APU students who enlist under this programme, will get an opportunity to get the CISCO CCNA certification which follows CCNA v7 prospectus. There are 4 modules under this programme that were designed following CCNA syllabus. This giving benefits to students as they have access to various resources and simulation software through the learning platform to facilitate their learning. As a CISCO Academy partner, APU had a dedicated CISCO lab with all CISCO devices. This facility is provided to ensure our students are exposed to the real physical configuration of network devices such as routers and switches in their lab sessions at level 2 and level 3 of their undergraduate program. With the best facility and skilled certified instructors, the students should be fully ready to sit for their CCNA certification exam during their final semester of undergraduate study.



# Degree Programmes

## COMPUTING, TECHNOLOGY, MULTIMEDIA & GAME DEVELOPMENT STUDY PATHWAYS

### COMMON SEMESTER 1 / LEVEL 1

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 Programming with Python, and introductory programming. Modules such as Mathematics for Technology provide the basic academic skills that students require.

General understanding of the work environment and aspects of personal and organizational development are provided by Digital Thinking and Innovation, Professional and Enterprise Development, and Introduction to Management.

### PROGRAMMES

- Bachelor of Science (Honours) in Information Technology
- Bachelor of Science (Honours) in Information Technology with a specialism in:
  - Information System Security
  - Cloud Engineering
  - Internet of Things (IoT)
  - Digital Transformation
  - Financial Technology (FinTech)
  - Business Information Systems
  - Sustainable Computing
- Bachelor of Science (Hons) in Software Engineering
- Bachelor of Science (Honours) in Computer Science
- Bachelor of Science (Honours) in Computer Science with a specialism in:
  - Data Analytics
  - Digital Forensics
- Bachelor of Computer Science (Hons) (Artificial Intelligence)

### SPECIALISED LEVEL 1\*

- Bachelor of Science (Honours) in Computer Science (Cyber Security)

### SPECIALISED LEVEL 1\*

- Bachelor in Interactive Media and Immersive Technology (Honours)
- Bachelor in Interactive Media and Immersive Technology (Honours) with a specialism in VR/AR

### SPECIALISED LEVEL 1\*

- Bachelor of Science (Honours) 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.



## Bachelor of Science (Honours) in INFORMATION TECHNOLOGY



(R3/0611/6/0038)(08/30)(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

Certification by:



Member Institution



#### 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

##### Specialised Module

- Fundamentals of Web Design and Development

#### LEVEL 2

##### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

##### Specialised Modules

- Systems and Network Administration
- Integrated Business Processes with SAP ERP Systems
- Data Center Infrastructure

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

##### Specialised Modules

- Mobile and Web Multimedia
- Internet of Things: Concepts and Applications
- OR Distributed Computer Systems
- OR Blockchain Development
- Emergent Technology
- Designing and Developing Applications On the Cloud
- OR Knowledge Discovery and Big Data Analytics
- Investigations in Information Technology
- Information Technology Project



## Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN INFORMATION SYSTEM SECURITY



(R3/0611/6/0038)(08/30)(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

Certification by:



Member Institution



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

### 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 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.

### Module outline

#### LEVEL 1

##### Common Modules

- Introduction to Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

##### Specialised Module

- Fundamentals of Web Design and Development

#### LEVEL 2

##### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

##### Specialised Modules

- Network Security
- Systems and Network Administration
- Ethical Hacking and Incident Response

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

##### Specialised Modules

- Computer Systems Security
- Penetration Testing
- Database Security
- Wireless and Mobile Security
- Investigations in Information System Security
- Information Systems Security Project

#### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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



# Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN CLOUD ENGINEERING



(R3/0611/6/0038)(08/30)(A6210)

## At a glance

### Duration:

3 years full-time

### This programme is specifically designed to provide students with:

- 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 cloud computing technologies, networking technologies and topologies, as well as the skills and expertise required for cloud-focused engineering roles.
- The skills and knowledge required to develop and assess network architectures and networked computing applications.

### Career options

- Chief Technology Officer (CTO)
- Server Developer
- Cloud Solution Consultant
- Technical Support Manager
- IT Cloud Test Engineer
- Cloud Platform Developer
- Data Center Operator
- Cloud Architect
- Cloud Software Engineer
- Cloud Network Engineer
- Cloud Product Manager
- Cloud Consultant
- Network Designer

Certification by:



Member Institution



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 web design and development. 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 organization's 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. They will have programming skills needed in systems administration, network technologies, network design, and network security. 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 learn how to design and manage cloud-based systems in enterprises using programming skills, management, and planning strategies. Students will have a deeper understanding of enterprise network components, settings, and methodologies, as well as a better understanding of edge computing concepts and 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.

## Module outline

### LEVEL 1

#### Common Modules

- Introduction to Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

#### Specialised Module

- Fundamentals of Web Design and Development

### LEVEL 2

#### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

#### Specialised Modules

- Network Security
- Switching and Routing Essentials
- Data Center Infrastructure

### INTERNSHIP (16 weeks)

### LEVEL 3

#### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

#### Specialised Modules

- Edge Computing: Concepts and Applications
- Enterprise Networking and Automation
- Designing and Developing Applications On The Cloud
- Cloud Architecture
- Investigations in Cloud Engineering
- Cloud Engineering Project

#### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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



# Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN INTERNET OF THINGS



(R3/0611/6/0038)(08/30)(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

Certification by:



Member Institution



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

## 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.

## Module outline

### LEVEL 1

#### Common Modules

- Introduction to Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

#### Specialised Module

- Introduction to Internet of Things

### LEVEL 2

#### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

#### Specialised Modules

- Network Security
- IoT Connectivity
- Developing IoT Applications

### INTERNSHIP (16 weeks)

### LEVEL 3

#### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

#### Specialised Modules

- Distributed Computer Systems
- Edge Computing: Concepts and Applications
- Emergent Technology
- Human Computer Interaction and Usability
- Investigations in Internet of Things
- Internet of Things Project

#### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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



# Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN DIGITAL TRANSFORMATION



(R3/0611/6/0038)(08/30)(A6210)

## At a glance

### Duration:

3 years full-time

### This programme is specifically designed to provide students with:

- A broad range of digital technologies and platforms for digital business transformation and nurture digital leaders or entrepreneurs for the future economic.
- Necessary knowledge and contents on the most in-demand skills in digital leadership, namely digital transformation, marketing, analytics, finance and execution.

### Career options

- Business IT Analyst
- Digital Engineer
- Digital Lead
- Entrepreneur
- Innovation Architect
- Business Strategies
- Digital Transformation Officer
- Digital Strategist
- Chief Innovation Officer (CIO)
- Digital Designer
- Business Transformation Analyst
- Customer Experience Transformation Lead
- Enterprise Digital Transformation Specialist
- HR Digital Transformation Lead
- Strategic IT Consultant
- Digital Finance Transformation Leader



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



# Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN FINANCIAL TECHNOLOGY (FinTech)



(R3/0611/6/0038)(08/30)(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

- FinTech Systems Analyst
- IT and FinTech Consultant
- FinTech 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.

### 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 digital technologies. 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 solid grounding in the general technical aspects of digital technologies and platforms for digital business transformation. They will gain better understanding, and skills on how digital technologies and business models are radically changing competitive dynamics across industries.

### 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

Level 3 focuses on the broad theoretical foundation for understanding contemporary phenomena, provides methods and techniques for analysing the implications of digitalisation, and supports students in developing practical skills to deal with change in complex environments.

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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

#### Specialised Module

- Fundamentals of Web Design and Development

### LEVEL 2

#### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

#### Specialised Modules

- Network Security
- Leading Digital Business Transformation
- Digital Marketing

### INTERNSHIP (16 weeks)

### LEVEL 3

#### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

#### Specialised Modules

- Digital Finance
- Digital Strategy and Analytics
- Emergent Technology
- Digital Execution
- Investigations in Digital Transformation
- Digital Transformation 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 the basic knowledge of business information technologies. 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 financial technologies. They will gain solid understanding of the support of business information technologies 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 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

#### Specialised Module

- Fundamentals of Web Design and Development

### LEVEL 2

#### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

#### Specialised Modules

- Network Security
- Financial Management
- Financial Technology

### INTERNSHIP (16 weeks)

### LEVEL 3

#### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

#### Specialised Modules

- Distributed Computer Systems
- Blockchain Development
- Emergent Technology
- Fintech Risk Management and Regulations
- Investigations in Financial Technology
- Financial Technology Project



## Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN BUSINESS INFORMATION SYSTEMS



(R3/0611/6/0038)(08/30)(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 organisation'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.

### 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 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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

#### LEVEL 1

##### Common Modules

- Introduction to Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

##### Specialised Module

- Introduction to Information Systems

#### LEVEL 2

##### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

##### Specialised Modules

- Integrated Business Processes with SAP ERP
- Enterprise Systems
- Management Information Systems

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

##### Specialised Modules

- Developing E-Commerce Applications with XML
- Internet of Things: Concepts & Applications
- Emergent Technology
- Information Systems Development Trends
- Investigations in Business Information Systems
- Business Information Systems Project



## Bachelor of Science (Honours) in INFORMATION TECHNOLOGY WITH A SPECIALISM IN SUSTAINABLE COMPUTING



(R3/0611/6/0038)(08/30)(A6210)

### At a glance

#### Duration:

3 years full-time

#### This programme is specifically designed to provide students with:

- An understanding of the environmental impact of technology and promote eco-friendly practices
- The ability to design energy-efficient software and hardware, integrate renewable sources, and manage data responsibly
- An emphasis on ethical considerations, collaborations across disciplines, and advocacy for environmentally friendly technology
- Practical projects and real-world applications that will enable students to apply sustainable computing practices and measure their positive impact

#### Career options

- Green IT Consultant
- Sustainability Analyst
- Corporate Sustainability Manager
- Data Centre Sustainability Specialist
- IT Sustainability Officer
- ICT Environmental Manager
- Project Manager (Sustainability Project)
- Sustainable ERP Officer



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, networks, and databases. The specialized module will provide students with basic knowledge of web design and development. 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 sustainable computing principles, focusing on the environmental, social, and economic aspects of computing technology. This will further delve into advanced concepts of sustainable computing, exploring topics such as green computing, sustainable technology policies, and implementing sustainable practices in an enterprise resource planning environment.

#### 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 with the field of sustainable computing and to refine their personal and professional development. Students will focus on emerging trends in sustainable computing by exploring topics like renewable energy, digital strategies, and leadership roles in fostering sustainable business practices in organizations. 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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

#### LEVEL 1

##### Common Modules

- Introduction to Databases
- Introduction to Networking
- System Software and Computing Concepts
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis and Design
- Integrated Computer Systems
- Mathematical Concepts for Computing
- Introduction to Security and Forensic Technologies
- Fundamental of Entrepreneurship

##### Specialised Module

- Fundamentals of Web Design and Development

#### LEVEL 2

##### Common Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Innovation Process
- Mobile and Wireless Technology
- Concurrent Programming
- Human Computer Interaction
- Web Applications
- Research Methods for Computing and Technology

##### Specialised Modules

- Integrated Business Processes with SAP ERP
- Green Computing
- Sustainable Technology and Policy

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Advanced Database
- Critical Issues in Managing Information Systems in Organisations
- Cloud Infrastructure and Services
- Venture Building

##### Specialised Modules

- Digital Strategy and Analytics
- Renewable Energy
- Emergent Technology
- Sustainable Leadership
- Investigations in Sustainable Computing
- Sustainable Computing Project





## Bachelor of Science (Hons) in SOFTWARE ENGINEERING

(R2/0612/6/0013)(04/26)(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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Networking
- Systems Software and Computing Concepts
- Introduction to Databases
- Python Programming
- Systems Analysis and Design
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Modules

- Digital Thinking and Innovation
- Introduction to Object-Oriented Programming
- Mathematical Concepts for Computing

##### Elective Modules (Choose 1)

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

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology

##### Specialised Modules

- Programming for Data Analysis
- System Development Methods
- Object Oriented Development with Java
- Requirements Engineering
- Enterprise Systems
- Data Structures
- Software Testing
- Software Architecture
- Design Methods

##### Elective Modules (Choose 1)

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

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Venture Building
- Development and Operations

##### Specialised Modules

- Investigations in Software Engineering
- Project Management
- Design Patterns
- Software Quality Engineering
- User Experience
- Project in Software Engineering
- Designing and Developing Applications on Cloud

##### Elective Modules (Choose 2)

- Distributed Computer Systems **OR** Enterprise Programming for Distributed Applications **OR** Blockchain Development
- Advanced Database Systems **OR** Optimisation and Deep Learning



## Bachelor of Science (Honours) in COMPUTER SCIENCE

(R2/0613/6/0055)(06/29)(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 organisation 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Networking
- Systems Software and Computing Concepts
- Introduction to Databases
- Python Programming
- Systems Analysis and Design
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Modules

- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- Introduction to Artificial Intelligence
- Introduction to C Programming

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology

##### Specialised Modules

- Systems and Network Administration
- System Development Methods
- Object Oriented Development with Java
- Web Applications
- Concurrent Programming
- Computer Systems Low Level Technique
- Data Structures

##### Elective Modules (Choose 3)

- Programming for Data Analysis **OR** Interactive Content Development
- Enterprise Systems **OR** Integrated Business Processes with SAP ERP Systems
- Mobile and Wireless Technology **OR** Mobile App Engineering **OR** Imaging and Special Effects

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Venture Building

##### Specialised Modules

- Investigations in Computer Science
- Algorithmics
- User Experience
- Advanced Database Systems
- Project in Computer Science

##### Elective Modules (Choose 4)

- Computer Systems Security **OR** Distributed Computer Systems
- Image Processing, Computer Vision and Pattern Recognition **OR** Blockchain Development
- Designing and Developing Applications on the Cloud **OR** Database Security
- Wireless ad Mobile Security **OR** Optimisation and Deep Learning





## Bachelor of Science (Honours) in **COMPUTER SCIENCE WITH A SPECIALISM IN DATA ANALYTICS**

(R2/0613/6/0055)(06/29)(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

#### 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

- Introduction to Networking
- Systems Software and Computing Concepts
- Introduction to Databases
- Python Programming
- Systems Analysis and Design
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Module

- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- Introduction to Artificial Intelligence
- Introduction to C Programming

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology

##### Specialised Modules

- Systems and Network Administration
- System Development Methods
- Object Oriented Development with Java
- Web Applications
- Concurrent Programming
- Computer Systems Low Level Technique
- Data Structures
- Probability and Statistical Modelling
- Data Management
- Data Mining and Predictive Modelling

#### INTERSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Venture Building

##### Specialised Modules

- Investigations in Data Analytics
- Algorithmics
- User Experience
- Advanced Database Systems
- Text Analytics and Sentiment Analysis
- Behavioural Science and Marketing Analytics
- Database Security
- Optimization and Deep Learning
- Project in Data Analytics

##### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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



## Bachelor of Science (Honours) in **COMPUTER SCIENCE WITH A SPECIALISM IN DIGITAL FORENSICS**

(R2/0613/6/0055)(06/29)(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 Networking
- Systems Software and Computing Concepts
- Introduction to Databases
- Python Programming
- Systems Analysis and Design
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Module

- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- Introduction to Artificial Intelligence
- Introduction to Security and Forensic Technology

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology

##### Specialised Modules

- Systems and Network Administration
- System Development Methods
- Object Oriented Development with Java
- Web Applications
- Concurrent Programming
- Computer Systems Low Level Technique
- Data Structures
- Advanced Forensics Methods
- Practical CTF Strategies
- Ethical Hacking & Incident Response

#### INTERSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Venture Building

##### Specialised Modules

- Investigations in Digital Forensics
- Algorithmics
- User Experience
- Advanced Database Systems
- Penetration Testing
- Deep Learning for Intrusion Detection
- Advanced Cyber Security
- Legal & Professional Practice in the Cyber World
- Project in Digital Forensics

##### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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.



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



## Bachelor of Science (Honours) in **COMPUTER SCIENCE (CYBER SECURITY)**

(R/0613/6/0029)(08/29)(MQA/FA12440)



### 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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 Software and Computing Concepts
- Introduction to Networking
- Introduction to Databases
- Python Programming
- Digital Thinking and Innovation
- Systems Analysis & Design
- Mathematical Concepts for Computing
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Modules

- Introduction to Security and Forensic Technologies

##### Elective Modules (Choose 1)

- Introduction to Artificial Intelligence
- Introduction to Object-Oriented Programming
- Intercultural Awareness and Cultural Diversity

#### LEVEL 2

##### Common Modules

- System Development Methods
- Object Oriented Development with Java
- System & Network Administration
- Innovation Process
- Research Methods For Computing & Technology
- Computing Theory
- Web Application
- Human Computer Interaction
- Data Structure

##### Specialised Modules

- Practical CTF Strategies
- Switching and Routing Essential

##### Elective Modules (Choose 1)

- Ethical Hacking and Incident Response
- Implementation of Secure Systems

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Algorithmics
- Deep Learning for Intrusion Detection
- Venture Building
- Advanced Software Security
- Advanced Database Systems

##### Specialised Modules

- Investigations in Cyber Security
- Vulnerability Assessment and Penetration Testing
- Advanced Cyber Security
- Project in Cyber Security

##### Elective Modules (Choose 1)

- Cloud Infrastructure & Services
- Internet of Things: Concepts & Applications



#### 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) **(ARTIFICIAL INTELLIGENCE)**

(R/0613/6/0041)(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.

### Module outline

#### LEVEL 1

##### Common Modules

- Introduction to Networking
- Systems Software and Computing Concepts
- Introduction to Databases
- Python Programming
- Systems Analysis and Design
- Integrated Computer Systems
- Fundamental of Entrepreneurship

##### Specialised Modules

- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- Introduction to Artificial Intelligence
- Introduction to Object Oriented Programming

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology

##### Specialised Modules

- Systems and Network Administration
- System Development Methods
- Object Oriented Development with Java
- Web Applications
- Concurrent Programming
- Computer Systems Low Level Technique
- Data Structures
- Programming for Data Analysis
- AI Methods
- Imaging and Special Effects

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Project Management
- Venture Building

##### Specialised Modules

- Investigations in Artificial Intelligence
- Algorithmics
- User Experience
- Advanced Database Systems
- Text Analytics and Sentiment Analysis
- Image Processing, Computer Vision and Pattern Recognition
- Further Artificial Intelligence
- Optimization and Deep Learning
- Project in Artificial Intelligence

#### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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



## Bachelor in **INTERACTIVE MEDIA AND IMMERSIVE TECHNOLOGY (HONOURS)**

(R2/021/6/0044)(04/26)(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
- Interface Designer
- Multimedia Producer
- Video Specialist



### 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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
- Programming with Python
- Mathematical Concepts for Computing
- Fundamental of Entrepreneurship

#### Specialised Modules

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

#### Elective Modules (Choose 2)

- Intercultural Awareness and Cultural Diversity **OR** Digital Thinking and Innovation
- Introduction to Object-Oriented Programming **OR** Introduction to Visual Programming

### LEVEL 2

#### Common Modules

- Programming for Data Analysis
- Innovation Process
- 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

- Venture Building
- 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
- VRAR Design Project



# Multimedia & VR/AR

**XR**  
STUDIO

**ASIA'S 1<sup>ST</sup> XR (META) STUDIO INFUSED WITH A BUILT-IN MIXED AND EXTENDED REALITY INFRASTRUCTURE**

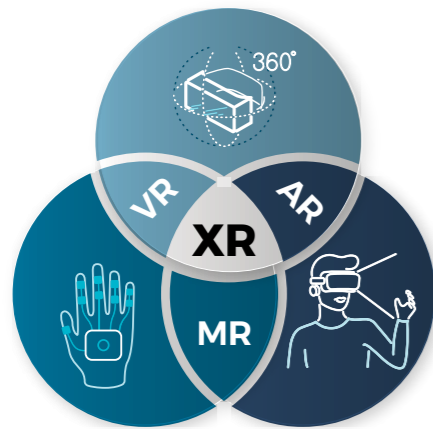


This programme by APU is designed to cater a vast spectrum of technologies: VR, AR, Mixed Reality (MR) and Extended Reality (XR). In 2020, APU established Malaysia's first XR (Meta) Studio among universities, in collaboration with our industry partner, Ministry XR. The APU XR Studio is a first-of-its-kind facility that comprises technologies capable of developing Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) applications. Developed in partnership with Ministry XR Malaysia, the studio is equipped with a Volumetric Video Capture Station, EDEX Station and Mixed Reality Smart Glasses in the form of Microsoft HoloLens, Oculus Quest and HTC Vive.



The equipment and the functionalities of the XR (Meta) Studio uplifts APU as a pioneer, game changer and trailblazer in education, research and project development within the AI domain.

## VR, AR, MR & XR - Endless Possibilities for a Creative Future



"Extended Reality" (XR) describes a full spectrum of enhanced digital and physical experiences: augmented reality (AR), virtual reality (VR), and mixed reality (MR). It refers to all real-and-virtual combined environments and human-machine interactions generated by computer technology and wearables.

XR is gaining tremendous demand and due to the global Covid-19 pandemic, growth is expected to be exponential. XR technology is building its momentum across industries such as gaming, movie & entertainment, healthcare, retail and tourism, etc.

"The global augmented reality (AR), virtual reality (VR), and mixed reality (MR) market is forecast to reach 30.7 billion U.S. dollars in 2021, rising to close to 300 billion U.S. dollars by 2024." - **Statista**

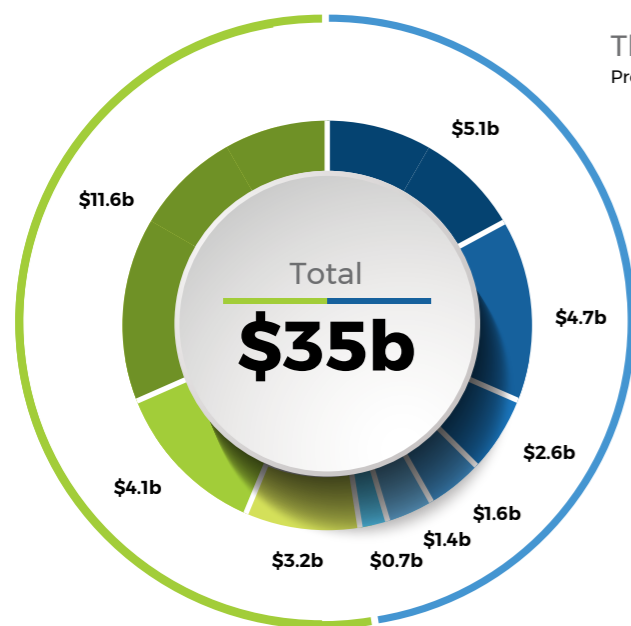
"The Asia Pacific region is estimated to record the **Highest Growth Rate** for the Extended Reality (XR) Market within 2019 - 2024." - **Mordor Intelligence**

"The Extended Reality (XR) Market is expected to Grow with Explosive CAGR(Compound Annual Growth Rate) of 48.3% between 2020 and 2030." - **P&S Intelligence**

"Leading global corporations, including Facebook, Google, Microsoft, Sony and Samsung, are already spending hundreds of millions of dollars on the development of both AR and VR. And the AR market alone is estimated to grow to \$61.39 billion by 2023." - **Forbes**

"VR and AR technology will benefit all industries by creating more efficient processes, enhancing training, and offering more ways for people to collaborate and work together." - **Pricewaterhouse Coopers, PwC**

## VR & AR - Rapid Development in Various Industries



The Diverse Potential of VR & AR Applications  
Predicted market size of VR/AR software for different use cases in 2025\*

### Enterprise and Public Sector \$16.1b

- Healthcare
- Engineering
- Real Estate
- Retail
- Military
- Education

### Consumer \$18.9b

- Videogames
- Live Events
- Video Entertainment

Source:  
<https://www.goldmansachs.com/insights/pages/technology-driving-innovation-folder/virtual-and-augmented-reality/report.pdf>



### 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
- Extended Reality(XR) Content Developer
- VR/AR Applications Engineer
- VR/AR Web Developer
- Unity Developers (VR/AR/MR)
- Meta Engineer
- Meta Consultant
- Meta Designer



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

## Bachelor in INTERACTIVE MEDIA AND IMMERSIVE TECHNOLOGY (HONOURS) WITH A SPECIALISM IN VR/AR

(R2/021/6/0044)(04/26)(MQA/FA0364)

### At a glance

#### 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\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- 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
- Programming with Python
- Mathematical Concepts for Computing
- Fundamental of Entrepreneurship

##### Specialised Module

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

##### Elective Modules (Choose 2)

- Intercultural Awareness and Cultural Diversity
- OR** Digital Thinking and Innovation
- Introduction to Object-oriented Programming **OR** Introduction to Visual Programming

#### LEVEL 2

##### Common Modules

- Programming for Data Analysis
- Innovation Process
- 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

- Venture Building
- 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
- Multimedia Techniques For Animation, Games & Film Effects





# Game Development

Game Development is the processes, techniques, theories and practices related to the creation of predominantly digital games but can also extend to non-digital games as well as game-based applications. It is a process that involves a combination of multi-disciplinary sets of knowledge and skills ranging from programming to psychology; and from artistic flair to business acumen. The game development process may involve just a single individual or a team of people working for a large development studio.

Game Development is a fusion of three major disciplines, namely Game Technology, Game Art and Game Design. The industry can also be expanded to a broad umbrella of serious games, educational games and table-top games.

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 at APIIT. He became a programmer in an advertising agency, then moved on to lecturing at 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 was 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.

## LEARN ABOUT THE WORLD OF VIDEO GAMES



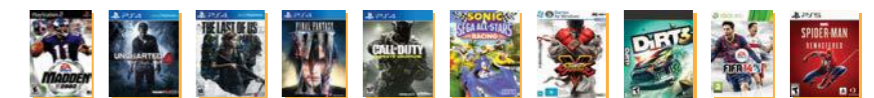
BY THE END OF 2029 THE GLOBAL VIDEO GAMES INDUSTRY IS ESTIMATED TO REACH **USD665,000,000,000**  
IN 2023 THE MARKET WAS AROUND USD195BILLION



IN COMPARISON, THE ENTIRE MUSIC INDUSTRY IN 2023 WAS ONLY WORTH **USD28,600,000,000**

**DID YOU KNOW?**

**THAT MALAYSIA HAS BEEN INVOLVED IN VIDEO GAMES SINCE THE 90S?**



These are just some of the internationally acclaimed games that Malaysia has been involved in.

**DID YOU KNOW?**

MALAYSIA IS HOME TO OVER

**85** GAMEDEV STUDIOS.

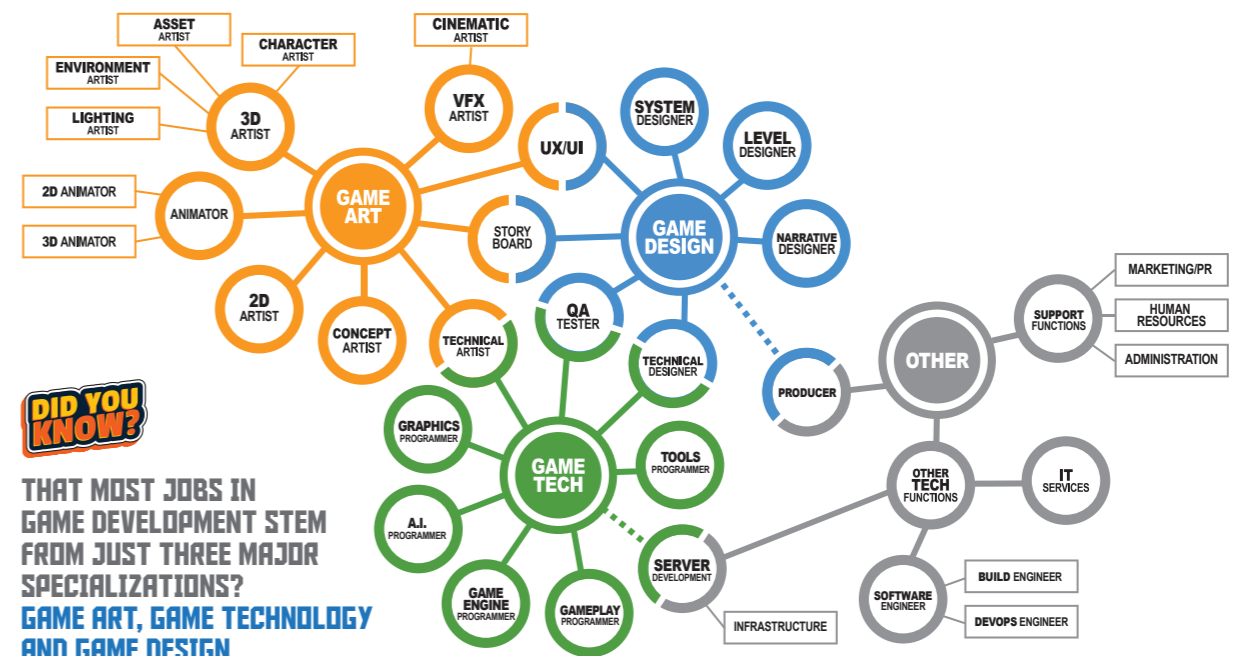


PLAYSTATION STUDIOS MALAYSIA  
VIRTUOS STUDIOS MALAYSIA  
NX3 GAMES (MALAYSIA)  
PASSION REPUBLIC GAMES  
LEMONSKY GAMES  
AMMOBOX STUDIOS  
PERSONA THEORY  
WHYKNOT STUDIO  
WEYRD WORKS  
KURECHII GAMES  
KAIGAN GAMES  
HIDDEN CHEST  
METRONOMIK  
FORUST  
ETC

**THAT OUT OF THOSE, 9 ARE INTERNATIONAL STUDIOS.**

Here are some notable International Games Studios in Malaysia

- **Codemasters Studios** is one of UK's largest independent games developer. They established a Kuala Lumpur Studio in 2006. In 2021, they became proud members of the EA SPORTS™ family.
- **Streamline Studios** is an independent US/Dutch outsourcing and game development studio that established a KL presence in 2010. Their art outsourcing projects include Final Fantasy XV and Street Fighter V to name a few.
- **Bandai Namco** is a Japanese multi-national video game developer and publisher which established their Malaysian Studio in 2016. Bandai Namco is famous for games such as Tekken, Soulcalibur and Dark Souls.
- **Larian Studios** is an independent video game developer and publisher founded in Belgium. It is the studio behind award-winning RPGs in the Divinity universe as well as Baldur's Gate 3, the best-selling game on both Steam and COG.com on the day of its early access launch. Larian opened its Malaysian office in 2021.
- **Double Eleven** is a British video game developer and publisher. In 2021, Double Eleven opened their first studio outside UK right here in Kuala Lumpur. The studio worked on games such as Rust, Minecraft Dungeons and good simulator.





## Bachelor of Science (Honours) in **COMPUTER GAMES DEVELOPMENT**

(R3/0211/6/0042)(08/30)(A6216)



### At a glance

#### Duration:

3 years full-time

#### This programme is specifically designed to provide students with:

- A strong foundation in game development principles, incorporating technical, creative and artistic perspectives.
- A tailored pathway in either Game Art or Game Programming to align with students' interests, career aspirations and the needs of the video games industry.
- Hands-on group projects simulating professional studio environments to enhance teamwork, project management skills and understanding of game development workflows.
- Exposure to current tools, technologies, and practices to ensure the students are well-prepared to meet the needs of this rapidly growing multi-billion-dollar industry.

#### Career options

##### Game Technology

- Game Programmer
- Tools Programmer
- Gameplay Engineer
- Graphics Programmer
- Game Engine Programmer
- Technical Designer

##### Game Art

- Game Artist
- Asset Artist
- Game FX Artist
- Gameplay Animator
- Character Artist
- Environment Artist
- Technical Artist

##### Game Design and Production

- QA Game Tester
- Game Level Designer
- Game Project Manager



### Module outline

#### LEVEL 1

Students will be exposed to the fundamental knowledge, practices, terminologies and workflows of the game development industry ranging from game art, game design and game technology (programming). In this first year, students will also acquire the basic technical skills in video games depending on their chosen area of specialisation. They will also develop personal and organisational skills, as well as nurture creativity and innovation.

#### LEVEL 2

In-depth technical skills, understanding of pipelines and workflows will be introduced here. Students will also be trained to work in groups simulating a studio project environment with the task of producing a workable video game concept and product. Nurturing their creativity and innovation as well as independent learning is emphasised 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 game development and to refine their personal and professional development. Students will move further into advanced techniques in their chosen area of specialisation. A final year project requires them to investigate and develop their portfolio, and they will be given an opportunity to demonstrate their ability to combine technical knowledge, teamwork, critical thinking and analytical skills to produce a game development prototype. They will also be given an opportunity to take electives that will expand their skillsets to technical arts, technical design or even game design.

#### MQA Compulsory Subjects\*

- Appreciation of Ethics and Civilisation (M'sian Students)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues
- Workplace Professional Skills
- Integrity and Anti-corruption
- Co-Curriculum

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

#### LEVEL 1

##### Common Modules

- Fundamentals of Entrepreneurship
- Principles of Game Art
- Principles of Game Design
- Principles of Game Technology
- Game Development Fundamentals
- Game Development Team Project 1

##### Specialised Module

###### Game Art Track

- Texturing Essentials
- Introduction to 3D Modelling
- Art Fundamentals

###### Game Technology Track

- Introduction to C++ Programming
- Mathematics for Games
- Data Structures and Algorithms

#### LEVEL 2

##### Common Modules

- Innovation Process
- Research Methods for Computing and Technology
- Game Business and Publishing
- Game Development Team Project 2
- Game Development Team Project 3

##### Specialised Modules

###### Game Art Track

- Visual Ideation and Concept Art for Games
- 3D Modelling for Games
- 3D Workflow and Design
- Advanced 3D Modelling for Games
- Introduction to Gameplay Animation

###### Game Technology Track

- Applied Mechanics and Progressive Game Engines
- Advanced C++
- Requirements Engineering
- Game Optimization and Performance
- Performant Rendering with C++

#### INTERNSHIP (16 weeks)

#### LEVEL 3

##### Common Modules

- Venture Building
- Project Management
- Investigations Module
- Game Development Final Year Project

##### Specialised Modules

###### Game Art Track

- Advanced Gameplay Animation
- World Building

###### Game Technology Track

- Advanced Game Engine Application
- Graphics and Shader Programming

#### Elective Modules (Choose 2)

- Character Development and Storytelling for Games
- Game World Creation
- Game Level Design
- UX/UI for Games
- Artificial Intelligence for Games
- Mobile Game Development



# Leading Your Way To Innovation

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

OUTCOME BASED CURRICULUM

VALUE ADDED SKILLS TRAINING

STUDENT INDUSTRIAL ACTIVITIES

PROFESSIONAL DEVELOPMENT

## 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.



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  
Technical Manager - Standard Chartered Global Business Services

"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  
Solution 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)

**BSc (Hons) in Information Technology specialism in Forensic Computing, Class of 2016**  
**Agile Coach - 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 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**  
**MSc in Technology Management (2018)**  
**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

# Malaysia's First Integrated Cybersecurity Talent Zone



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 initiative<sup>4</sup>. 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.



## Centre for Innovation and Entrepreneurship (CIE)

The Centre provides resources for staff and student to innovation and entrepreneurship in a form of a sandbox; supports curricular and co-curricular programming, including workshops, networking events, speakers, talks and internship and start-up programs. Students have access to laboratory space, and other resources to meet their entrepreneurial needs.



## Integrated Sustainability & Urban Creativity Centre (ISUC)

ISUC is committed to the mission of cultivating "sustainable shaping and innovating" leading us to be needed by the new era. The overall goal of the research centre is to establish an international, innovative, forward-looking and research-oriented world-class of think tank comprising of students and academic staff researchers with great sense of mission of the era, international perspective and native characteristics.



## APU 5G Research Lab

The APU-5G research lab was established to serve as a platform for members from academia, business and industry to collaborate on 5G research to create market ready, innovative 5G technology solutions, applications and business ventures. The APU-5G research lab facilitates research at circuit, system and network level in 5G technologies and also is focused to the pathway for 6G technology to develop a powerful, faster, greener, sustainable network which will be smarter with infusion of AI, ML and Reinforcement learning.

The research lab aims at exploring the cutting edge technologies such as SDN, NFV, mm/THz Wave Band, Radio Access, Massive MIMO, D2D Communication, Ultra Densification, IoT, Big Data, Mobile Computing and fusion of AI and ML for development of 5G core and Radio Access Network Infrastructure. The developed 5G Network Infrastructure will be a platform to develop and test a range of use cases of primary, secondary and tertiary industries and business that are built on communication infrastructure. The 5G lab in association with the other research centers of APU will facilitate research in 5G network security, Network Data Collection and Analysis for Smarter 5G/6G Network and Highspeed Sensor Networks for Autonomous Industry.



## STUDENT ACADEMIC AND LEARNING SUPPORT

### Final Year Projects (FYP)

FYPBaNK - An online facility to support students' development of their final year project to meeting industry standards, to enhance employability and to assist student in ensuring projects are fit for purpose at the final year of study.

It is a facility web-based integrated system that facilitates the project management responsibilities carried out by the APU FYP students, supervisors, second markers, FYP administrators and project managers.

The companies who have and are contributing to FYPBaNK are INFOPRO SDN BHD, Bank Negara Museum and Art Gallery, DLoop Emperia Sdn Bhd, Everly Group, GCA, Hilti, LOW Health Care Services, MAD Incubator, MIMOS Wireless Innovation Lab, Neruti Technology Sdn Bhd, REDtone, Signal Transmission (M) Sdn Bhd and Top Glove Sdn Bhd. Students are allowed to work on an industrial FYP proposals selected from the FYPBaNK. Our FYP students have successfully completed the industrial projects selected from the FYPBaNK. The end-product of each industrial project is being used by the real users.

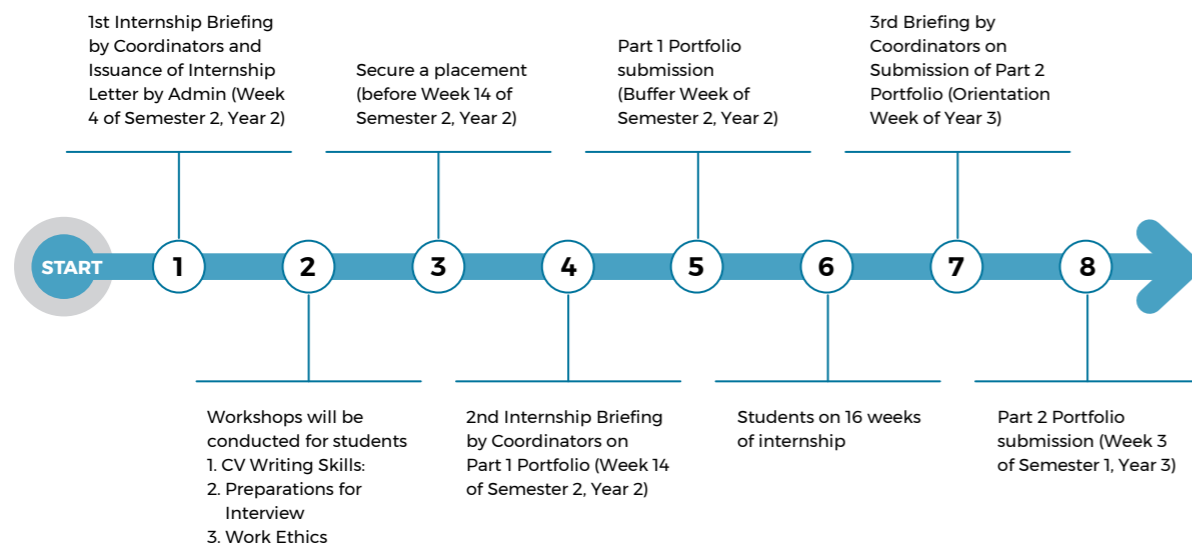
### Internships & Industrial Training

Prior to starting the final year of study APU students will do internship or industrial training placements for 16 weeks. This is to enable students to gain industrial or professional learning experiences to develop transferable skills for employability so as to enhance their future value to employers. Familiarity with all common processes is essential and exposure at a practical level to a wide variety of processes is required at a level appropriate to young professional. Whilst it is clearly desirable for students to get a feel for the skills involved, the central aim is to achieve appreciation. Industrial training is a key component of learning in an integrated academic curriculum.

Taking this exposure as an important element in the curriculum APU ensures the smooth process of facilitation by starting the process a semester by guiding and nurturing the students via workshops and classes dedicated to;

- 1 - Development of a CV
- 2 - Attending Interviews
- 3 - Working professionally and ethically at a organization

APU also has dedicated Internship Officers per school and a company pool bank in which student can choose from in terms of writing in or direct placements.



## MAKING HISTORY - AWARDS AND ACHIEVEMENTS



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

### TALENTBANK'S EMPLOYERS' CHOICE AWARD

2024 - Employers' Choice of University

### CYBERSECURITY EXCELLENCE AWARDS

#### - BEST CYBERSECURITY EDUCATION PROVIDER IN ASIA

2024 - Gold Winner  
2023 - Gold Winner  
2022 - Gold Winner  
2021 - Gold Winner  
2020 - Gold Winner  
2019 - Gold Winner

### VARSITY HACKATHON

2024 - Champions

### WICKED6 GLOBAL WOMEN'S CYBER LEAGUE GAME 2024 CAPTURE THE FLAG (CTF)

2024 - 1st Place in the Hack the Box Hacking Battlegrounds (HTB) Challenge  
2024 - 2nd Place in the MetaCTF  
2024 - 1st Place in the Women's Society of Cyberjutsu (CTF)  
2024 - 2nd Place in the HaikuCTF

### ETHTAIPEI HACKATHON

2024 - 1st Place for using dual investment on Dyson Finance  
2024 - 1st Place for deploying smart contracts on ThunderCore  
2024 - 2nd Place in the Best Overall Project on Zircuit

### MALAYSIA TECHNOLOGY EXPO'S (MTE) ASIAN YOUTH INNOVATION AWARDS (AYIA)

2024 - Gold Medal (ICT category)

### DIGITAL CAMPUS 2.0 CAMPAIGN BY PAYNET

2024 - The Champion & The Best Pitch

### INTERNATIONAL HUMAN-ENVIRONMENT CARE FILM FESTIVAL (HECFF)

2023 - Best Cultural Diversity Film Award

### MDEC PREMIER DIGITAL TECH INSTITUTION AWARDS

2023 - Outstanding Faculty Award (University Category)  
2023 - Outstanding Faculty Member Awards (3rd Place)  
2022 - PDTI Outstanding Faculty  
2022 - Best Faculty Member

### PRIVATE EDUCATION EXCELLENCE AWARDS

2023 - Best in Student Achievements (Institution Category)  
2023 - Best in Diversity & Inclusion (Institution Category)  
2023 - National Outstanding Innovator Award (University category)  
2023 - National Outstanding Young Educator Merit Award

### HILTI IT COMPETITION

2023 - Champion  
2022 - 2nd Runner Up  
2021 - Champion  
2020 - Champion  
2020 - 1st Runner Up

### HACKTITUDE MALAYSIA

2023 - Champion

### ASIA PACIFIC ICT AWARDS (APICTA) MALAYSIA

2023 - National Winner of Industrial (Manufacturing) and Students (Tertiary) category (MSC Malaysia APICTA)  
2022 - Winner of 'Student-Tertiary Technology'  
2020 - Winner of 'Best of Tertiary Student Project'  
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'

### INTERNATIONAL UNIVERSITY CARNIVAL ON E-LEARNING (IUCEL) COMPETITION

2023 - 3 Gold Awards  
2022 - 2 Silver Awards 1 Bronze Award  
2021 - Gold  
2021 - 2 Silver Awards  
2019 - 2 Gold Awards  
2019 - Silver  
2018 - 2 Gold Awards  
2018 - Silver

### INTERNATIONAL INVENTION, INNOVATION & TECHNOLOGY EXHIBITION (ITEX)

2023 - 1 Gold Award  
2023 - 6 Silver Awards  
2022 - 1 Gold Award  
2019 - 1 Gold Award  
2018 - 1 Bronze Award  
2018 - 1 Silver Award  
2018 - 1 Silver Award  
2017 - 1 Silver Award  
2016 - 1 Gold Award  
2016 - 1 Silver Award  
2015 - 1 Gold Award  
2015 - 1 Bronze Award  
2014 - 1 Gold Award  
2014 - 1 Bronze Award  
2013 - 2 Silver Medals  
2016 - Best Green Invention Award  
2013 - 2 Gold medals for the innovator category

### 5TH CARNIVAL OF RESEARCH AND INNOVATION (CRI)

2023 - 2 Gold, 2 Silver and 2 Bronze Medals



**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.

### NATIONAL SYMPOSIUM ON HUMAN COMPUTER INTERACTION - FUSION

2023 - 1 Gold award, 2nd Placing Awards, and 2 Silver Awards  
2022 - 1 Gold award, 3 Silver awards, 5 Bronze awards, 3 Special Jury Awards for best poster and best video, and 2 Lucky Winners

### IMPACTHACK BY STANDARD CHARTERED

2023 - Champion

### UNIVERSITI MALAYA (UM) HACKATHON

2023 - 2 Champions

### MYSTARTUP HACKATHON X DIGITAL NASIONAL BERHAD (DNB)

2023 - Problem Statement 3 Winner

### INSTITUTE OF ENGINEERS MALAYSIA (IEM) AWARD

2023 - Gold Award  
2022 - Gold Award  
2020 - Gold Award  
2019 - Gold Award  
2018 - Gold Award  
2017 - Gold Award  
2016 - Gold Award  
2015 - Gold Award  
2014 - Gold Award

### WATER VANGUARDS CHALLENGE 2023

2023 - Champion

### WICKED 6 CYBER GAMES, 2023 WOMEN'S GLOBAL CYBER

2023 - 1st Place in Women's Society of Cyberjutsu (WSC) CTF  
2023 - 2nd Place in the Haiku CTF and Security Innovation CTF  
2023 - 7th Place in the SANS Bootup CTF

### 30-HOUR NO-CODE HACKATHON

2023 - First Place Winner

### MICROSOFT'S CODE; WITHOUT BARRIERS HACKATHON

2023 - Winners

### APU-AWS DEEPRACER COMPETITION

2023 - 1st Place  
2023 - 2nd Place  
2023 - 3rd Place

### ADOBE CERTIFIED PROFESSIONAL (ACP) CHAMPIONSHIP MALAYSIA

2023 - National Champion  
2022 - Top 5

### WORLD OF ROBOTICS CHAMPIONSHIP (WRC)

2023 - Champion

### PETRONAS INTER-UNIVERSITY CAPTURE THE FLAG (CTF) CHALLENGE 2023

2023 - First Place & Second Runner Up

### DATA MINING CUP

2023 - Best Project of the Year: Returns Reduction in E-commerce  
2022 - 1st Place & 3rd Place

### ASIA PACIFIC, JAPAN, AND CHINA (APJC) CISCO NETRIDERS COMPETITION

2023 - 1st Place

### PERODUA SEDAN DESIGN CHALLENGE

2023 - Champion

### ITANK COMPETITION

2023 - Best Solution in the Environment category case study

### ETHEREUM BLOCKCHAIN HACKATHON AT ETH SEOUL 2023

2023 - Best Governance App Winner

### INTERVARSITY CORPORATE STRATEGY CHALLENGE (ICSC)

2023 - 1st Runner-Up

### INTERNATIONAL INNOVATION ARSVOT MALAYSIA (IAM)

2022 - Gold Award  
2022 - Bronze Award  
2021 - Silver  
2021 - Silver

### UTAR-FICT INAUGURAL INTERVARSITY CAPTURE THE FLAG (CTF) COMPETITION

2023 - 1st Place & 2nd Runner Up

### SIBER SIAGA'S CAPTURE THE FLAGS (CTFS): CODE COMBAT

2023 - 2nd Place  
2023 - 3rd Place  
2023 - 6th Place  
2023 - 9th Place  
2022 - 2nd Place  
2022 - 2nd Place  
2022 - 3rd Place  
2022 - 6th Place

### INTERVARSITY CORPORATE STRATEGY CHALLENGE (ICSC)

2023 - 1st Runner-Up

### TAIPEI DESIGN AWARD

2023 - Silver Prize Winner (Industrial Design Category)

### IEM STUDENT RESEARCH E-POSTER COMPETITION

2023 - Second Prize Winner (Individual Category)

### INTERNATIONAL INNOVATION, TECHNOLOGY & RESEARCH EXHIBITION AND CONFERENCE (ITREXC)

2023 - 2nd Place  
2023 - 3rd Place

### ASEAN-REPUBLIC OF KOREA (ROK) YOUTH METAVERSE IDEA CONTEST

2023 - 3rd Place Winner

### ODYSSEY HACKFEST: ONLINE CATEGORY

2022 - Champion

### INTEL & CREST INDUSTRY-UNIVERSITY CHALLENGE

2022 - Grand Prize

For more awards listing, please visit APU website.

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



**A . P . I . I . T**  
ASIA PACIFIC INSTITUTE  
OF INFORMATION TECHNOLOGY

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## APIIT EDUCATION GROUP

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