

ASIA PACIFIC UNIVERSITY OF TECHNOLOGY & INNOVATION

ann innovative

COMPUTING, TECHNOLOGY, GAMES DEVELOPMENT & ENGINEERING

INNOVATIVE THINKING CAN CHANGE YOUR WORLD





UNIVERSITY RANKINGS

KINGS Asia 2023





St <u>Malaysian</u> <u>University</u> 1 of 19 in the world





APU EMERGES AS THE FIRST QS 5-STARS PLUS UNIVERSITY IN MALAYSIA

APU is the First Malaysian University to achieve an overall rating of Five Stars Plus in the latest QS Stars Rating awards that were presented at the QS Apple Conference on 1st Nov 2021. Five Stars Plus institution must achieve five stars across all categories in addition to achieving minimum highest benchmark score by QS STARS. APU is amongst 19 universities worldwide to achieve this honour.



RANKED TOP 5 FOR INTERNATIONAL STUDENTS (QS WORLD UNIVERSITY RANKING ASIA 2023)

APU is Ranked Top 5 for International Students, Top 5 for Inbound Exchange, and is amongst the Top 30 Universities for International Faculty. APU is also Ranked amongst the Top 240 Universities in Asia.



Online Learning



APU AWARDED 5-STAR RATING FOR ONLINE LEARNING

APU awarded 5-Star Rating for Online Learning in the latest QS Stars Rating System - the highest possible rating in this category. It demonstrates APU's continued focus in providing interactive, student-centred, and flexible digital learning using innovative technologies that enable its students to learn seamlessly and meaningfully - anytime, anywhere.

APU'S LIST OF FIRSTS:

1st Local Institute awarded Multimedia Super Corridor Status
1st Institute awarded the MSC Research & Development Grant
1st Institute awarded MS ISO 9002 Quality Certification
1st Institute appointed Novell Education Academic Partner
1st Institute appointed Authorised Sun Education Centre
1st Institute appointed Microsoft Training Partner
1st Institute listed in Enterprise 50 Award Programme
1st Institute appointed University Alliance Partner by SAP
1st XR Studio - Mixed & Extended Reality Infrastructure in Asia
1st 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 19 in the world."

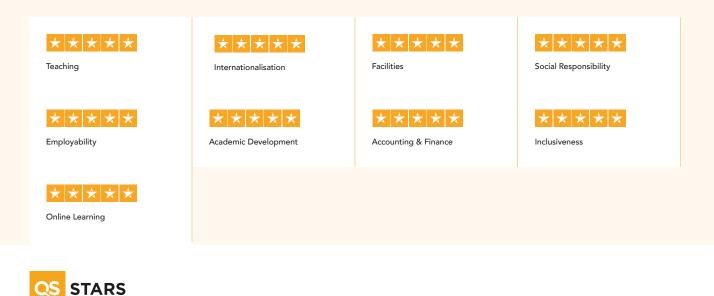
Leigh Kamolins - Head of Evaluation, QS Intelligence Unit



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.



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

you towards excellence and digital future

..........

APIIT RATED 6-STARS (OUTSTANDING) RATING



APIIT was announced as one of the Top Private Colleges in Malaysia to attain 6-STAR (OUTSTANDING Rating) under the latest Ratings by the Ministry of Higher Education (MOHE) on 18th Dec 2020. MYQUEST is a quality evaluation system assessed by MOHE to evaluate the quality of programmes offered by Malaysian private colleges.

It starts now......

DEGREE PROGRAMMES

COMPUTING, TECHNOLOGY MULTIMEDIA & GAMES DEVELOPMENT PROGRAMMES

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

ENGINEERING

- Bachelor of Engineering in Electrical & Electronic Engineering
 with Honours
- Bachelor of Engineering in Mechatronic Engineering with Honours
- Bachelor of Computer Engineering with Honours
- Bachelor of Petroleum Engineering with Honours

APU AWARDED 5-STAR (EXCELLENT) RATING



..... It starts here

APU was announced as among the Highest Rated Emerging Universities in Malaysia, being rated 5-STAR (EXCELLENT Rating) under the latest SETARA Ratings by the Ministry of Higher Education (MOHE). APU has maintained this Excellent Rating consecutively in the SETARA 2011, 2013, 2017 as well as in the latest ratings announced on 18th Dec 2020. The SETARA ratings system measures the performance of teaching and learning in universities in Malaysia.

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.

COMPUTING, TECHNOLOGY, MULTIMEDIA, GAMES DEVELOPMENT

& ENGINEERING

Experience APU's iconic campus

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





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

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

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



Malaysia's Award Winning University

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





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



* Student Barometer Wave 2019 (International Students), 'Studying with people from other cultures'. ** Latest Graduate Tracer Study by Ministry of Higher Education, Malaysia.

Employability*

Outstanding Support

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



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.



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.



Rated NO.1

in Asia and Malaysia for Multicultural Learning Experience*





A Hub of Cultural Diversity

With more than 13,000 students from over 130 countries, we ensure that you will gain memorable experiences alongside the diversifed 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.



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.



Student Life @ APU

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

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

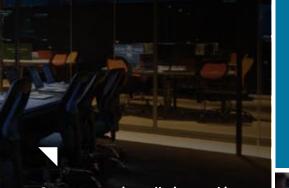
World-Class Facilities @ APU

An Integrated Community

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



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.





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.

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.

About DMU

DMU recently celebrated its 150-year anniversary in 2020. The university has approximately 27,000 full and part-time students and 3,240 members of staff. The university is organised into four faculties: Arts, Design and Humanities (ADH); Business and Law (BAL); Health and Life Sciences (HLS); and Computing, Engineering and Media (CEM). The university prides itself on the support it offers students looking to gain work experience. In 2021, DMU's careers and employability service, DMU Works, was named the Best University Careers/ Employability Service at the National Undergraduate Employability (NUE) Awards.











DMU Global Recognitions

- DMU has over 150 years of history in providing higher education to students from around the globe.
- Leicester offers students everything they could need, with the latest Student Living Index (compiled by NatWest) ranking Leicester in the UK top ten 'most affordable student cities'.
- DMU has been awarded a second term as a United Nations Academic Impact (UNAI) global hub for Sustainable Development Goals (SDGs), aimed at transforming lives around the world.
- Each year, international students from more than 130 countries choose to study at DMU.

Double your Advantage

APU-DMU Dual Degree Programme



With the approval of the University Senate, the Asia Pacific University of Technology & Innovation hereby confers upon

Juliana David

the Award of

Bachelor of Engineering in Mechatronic Engineering with First Class Honours

Awarded on this 7th day of July 2020

Vice Chancello



Juliana David Inches stands de depart of Master of Engineering (Homours

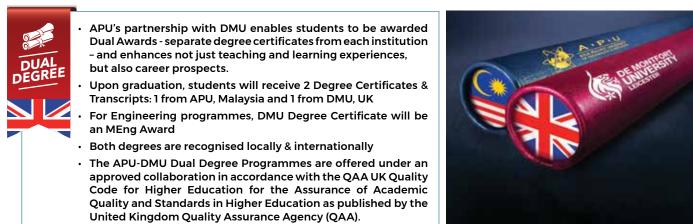
First Class

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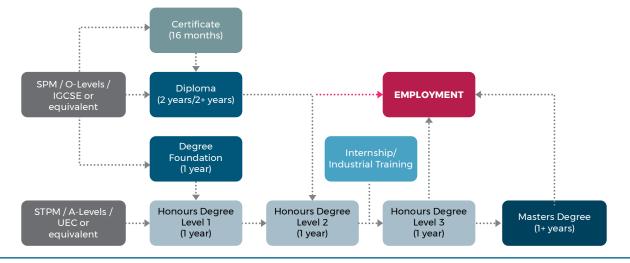




Pathways & Admission

COMPUTING, TECHNOLOGY, MULTIMEDIA & GAMES DEVELOPMENT

YOUR STUDY PROGRESSION



ADMISSION REQUIREMENTS

BACHELORS (HONS) DEGREE PROGRAMMES

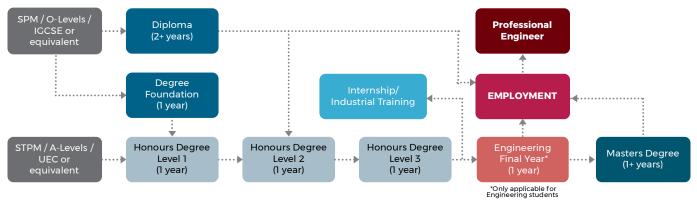
Entry Qualification	Computer Science / Software Engineering / Cyber Security / Intelligent Systems	Information Technology	Multimedia Technology / Computer Cames Development	
STPM	 2 Passes in STPM in Science stream with minimum Grade C (GPA 2.0) in Mathematics and one Science or ICT Subject OR 	• 2 Passes in STPM with minimum Grade C (GP 2.0) in	• 2 Passes in STPM with minimum Grade C (GP 2.0)	
	 2 Passes in STPM with minimum Grade C (GP 2.0) in any subject with a credit in Additional Mathematics at SPM OR 	any subject with a Credit in Mathematics at SPM.	in any subject with a Pass in Mathematics at SPM.	
	 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. Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme. 		Pass an interview or a portfolio review. Strong Mathematics would be an added advantage.	
A-LEVEL Overseas qualification that are equivalent to 12th Grade/ A-Level/ HSC are accepted.	 2 Passes in A-Level in Science stream with a Pass in Mathematics and one Science or ICT subject OR 2 Passes in A-Level with a Credit in Additional Mathematics at SPM/ O-Level/IGCSE or equivalent OR 2 Passes in A-Level with a Credit in Mathematics and Science or ICT subjects at SPM/ O-Level/IGCSE or equivalent. Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme. 	 2 Passes in A-Level and with a Credit in Mathematics at SPM/ O-Level/ IGCSE or equivalent. 	 2 Passes in A-Level and with a Pass in Mathematics at SPM/ O-Level/ IGCSE or equivalent. Pass an interview or a portfolio review. * Strong Mathematics would be an added advantage. 	
UEC	 5 Crade B Passes in UEC in any subject including Mathematics and one Science or ICT subject. 5 Grade B Passes in UEC in any subject including Additional Mathematics. 5 Grade B Passes in UEC in any subjects with Credit in Mathematics and Science or ICT Subject at SPM or equivalent. Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme. 	 5 Grade B Passes in UEC in any subjects including Mathematics. 	 5 Grade B Passes in UEC in any subjects including a Pass in Mathematics. Pass an interview or a portfolio review. * Strong Mathematics would be an added advantage. 	
 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. 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. 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. Candidates need to do a Pre-Requisite module in Further Mathematics or equivalent in the first semester of Degree Programme. 		 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. 	 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. Pass an interview or a portfolio review. 	
ICT RELATED DIPLOMAS	 Diploma with a minimum CCPA of 2.50. 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 with a minimum CGPA of 2.50. 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 with a minimum CGPA of 2.0 and a Pass in Mathematics at SPM/IGCSE/ O-Level or its equivalent. Pass an interview or a portfolio review. 	

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.

Requirements

ENGINEERING

YOUR STUDY PROGRESSION



ADMISSION REQUIREMENTS

BACHELORS (HONS) ENGINEERING DEGREE PROGRAMMES

GENERAL REQUIREMENTS				
DIRECT ENTRY TO LEVEL 1 OF THE DEGREE:				
STPM	2 Passes in STPM with a minimum Grade C (GP 2.0) in Mathematics and Physics (or Chemistry), and a Credit in Mathematics and Physics (or Chemistry) at SPM Level or its equivalent.			
A-LEVEL	 2 Passes in A-Level including Mathematics and Physics (or Chemistry), and a Credit in Mathematics and Physics (or Chemistry) at SPM/O-Level/IGCSE or its equivalent. 			
UEC • 5 Grade B's in UEC, including Mathematics and Physics (or Chemistry).				
MATRICULATION / FOUNDATION	 Passed the relevant Foundation programme (minimum CGPA of 2.0) with a Credit in Mathematics and Physics Chemistry) at SPM/O-Level/IGCSE or equivalent. 			
DIRECT ENTRY TO LEVEL 2 OF THE DEGREE:				
DIPLOMA	 Successful completion of the APU/APIIT Diploma or Successful completion of studies in another recognised institute with academic credits equivalent to Level 1 of an Honours Degree (Subject to the approval of the APU/APIIT Academic Board) 			

Any qualification that APU accepts as equivalent to the above.

ENGLISH REQUIREMENTS (only applicable to International Students)

Programmes	Requirements			
Computing, Technology, Multimedia & Games Development				
Foundation and Diploma Programmes	• IELTS : 4.0	TOEFL IBT : 30-31	• Pearson (PTE) : 36	• MUET : Band 2
Bachelor (Hons) Degree Programmes	• IELTS : 5.0	• TOEFL IBT : 42	• Pearson (PTE) : 47	• MUET : Band 3
Engineering				
Foundation Programme	• IELTS : 4.0	• TOEFL IBT : 30-31	• Pearson (PTE) : 36	• MUET : Band 2
Diploma and Bachelor (Hons) Engineering Degree Programmes	• IELTS : 5.0	• TOEFL IBT : 42	• Pearson (PTE) : 47	• MUET : Band 3

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 IEITS/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.

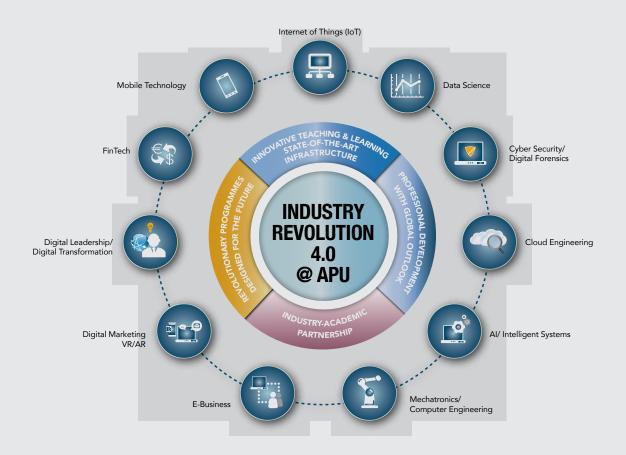
Note: The above entry requirements may differ for specific programmes based on the latest programme standards published by Malaysian Qualifications Agency (MQA)

Embracing the wave of Industry Revolution 4.0

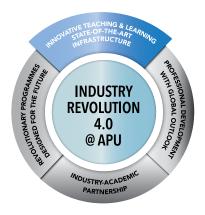
FUTURE-PROOFING THE WORKFORCE OF THE FUTURE

New waves of technological disruptions and the emergence of advanced technologies have resulted in the Fourth Industrial Revolution (Industry 4.0), where Robotics, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Cloud 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.

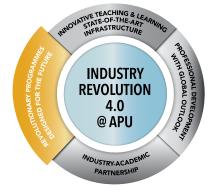


INDUSTRY REVOLUTION 4.0 @ APU



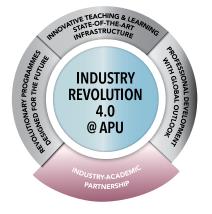
INNOVATIVE TEACHING & LEARNING STATE-OF-THE-ART INFRASTRUCTURE

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



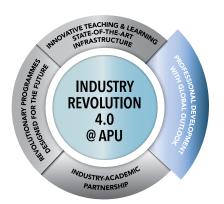
REVOLUTIONARY PROGRAMMES DESIGNED FOR THE FUTURE

New technologies mean new expertise, while this translates into a new need of talents in new areas. We address the needs of the industry, to help to build talents who can manage, operate and innovate under the new IR 4.0 environment, by carefully designing new programmes of the future. Our programmes are first-of-its-kind, such as in Cyber Security, Data Science, Internet of Things (IoT), Intelligent Systems, Digital Leadership, Digital Transformation, VR/AR, Financial Technology (FinTech), Digital Marketing, E-Business, Mechatronics, Telecommunication, 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 oncampus. Global outlook, international understanding and respect are nurtured through continuous immersion in multicultural discourse, as our campus houses a community of 12,000 students from over 130 countries.

Foundation Programme - Flexibility of Choice

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, Studies, Psychology, Actuarial 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 careerreadiness as they move on as global professionals eventually. This is achieved through 4 key areas:

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

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

SEMESTER 1	COMMON SEMESTER 1 • English for Academic Purposes	
ROUTES	BUSINESS, FINANCE & PSYCHOLOGY	
SEMESTER 2	 Introduction to Business Fundamental of Finance Global Business Trends Public Speaking in English 	
SEMESTER 3	 Academic Research Skills Economics for Business Perspectives in Technology / Further Mathematics** Co-Curricular Choose one of the following modules: Principles of Accounts Discovering Media in the Digital Age Psychology & Behavioral Science 	
You may then proceed to Level 1 of a Degree of your choice in the following pathways		

PRIMARY PATHWAYS	- Business & Management - Accounting, Finance, Banking & Actuarial Studies - Media, Communication & Psychology
SECONDARY PATHWAYS Students may also choose the following:	 Computing & Technology Multimedia & Games Development Industrial Design, Visual Effects, Animation & Digital Advertising International Relations

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

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

Multimedia & Games Development

- BSc (Hons) in Multimedia Technology
- BSc (Hons) in Multimedia Technology
- with a specialism in VR/AR
- BSc (Hons) in Computer Games Development
- Students who choose to progress to Computer Science, Software Engineering, Data Analytics, Cyber Security, Digital Forensics Pathways from the Computing & Technology route or Engineering route if the student does not have a credit in Additional Students who have completed Foundation from other routes apart from the above are required to do a Pre-Requisite module 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

Accounting, Banking, Finance & Actuarial

- BA (Hons) in Accounting and Finance
- BA (Hons) in Accounting and Finance
- with a specialism in Forensic Accounting
- Taxation
- Forex and Investments
- Internal Audit

- Bachelor of Science (Honours) in Actuarial Studies

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

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

Duration: 1 Year (3 Semesters)

Communication Skills Personal Development & Study Methods Essentials of Web Applications Mathematics				
COMPUTING & TECHNOLOGY	ENGINEERING	DESIGN		
 Introduction to Business Introduction to Computer Architecture & Networking Introduction to Visual & Interactive Programming Public Speaking in English 	 Engineering Science Engineering Mathematics Introduction to Visual & Interactive Programming Public Speaking in English 	 Imaging/Production Skills for Design Major Project 1 Design Theory and Practice 1 Public Speaking in English 		
 Academic Research Skills Further Mathematics Introduction to Multimedia Applications Co-Curricular Choose <u>one</u> of the following modules: Perspectives in Technology Discovering Media in the Digital Age Psychology & Behavioral Science 	 Academic Research Skills Mechanical Science / Engineering Chemistry Perspectives in Technology Electrical and Electronic Principles Co-Curricular 	 Academic Research Skills History of Design and Media Major Project 2 Design Theory and Practice 2 Co-Curricular 		
- Computing & Technology - Multimedia & Games Development	- Engineering	- Industrial Design, Visual Effects, Animation & Digital Advertising		
 Business & Management Accounting, Finance, Banking & Actuarial Studies Industrial Design, Visual Effects, Animation & Digital Advertising International Relations Media, Communication & Psychology 	 Computing & Technology Multimedia & Games Development Accounting, Finance, Banking & Actuarial Studies Business & Management Industrial Design, Visual Effects, Animation & Digital Advertising International Relations Media, Communication & Psychology 	 Computing & Technology Multimedia & Games Development Accounting, Finance, Banking & Actuarial Studies Business & Management International Relations Media, Communication & Psychology 		

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 Engineering in Electrical & Electronic Engineering with Honours
- Bachelor of Engineering in Mechatronic 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

- BA (Hons) in Business Management
- BA (Hons) in Business Management
- with a specialism in - E-Business
- Digital Leadership
- BA (Hons) Human Resource Management
- BA (Hons) in International Business Management
- BA (Hons) in Marketing Management
- BA (Hons) in Marketing Management with a specialism in Digital Marketing
 BA (Hons) in Tourism Management

Media and International Relations

- $\cdot\,$ Bachelor of Arts (Honours) in Media and Communication Studies
- BA (Hons) 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
- васпеют от Arts (Honours) In Animation
 Bachelor of Arts (Honours) in Digital Advertising
- Animation
 Digital Advertising

and Intelligent Systems programmes will be required to undertake Foundation Mathematics at SPM / O-Level / IGCSE or equivalent.

in Further Mathematics or equivalent in the first semester of the Degree Programme,

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:

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

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Computing, Technology& Games Development



WIDE VARIETY OF SPECIALISED PROGRAMMES

INDUSTRY-READY GLOBAL GRADUATES STRONG LINK WITH INDUSTRY PARTNERS



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

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

Professional Certification Partners



aws certified Solutions Architect Associate

aws certified Developer Associate

aws certified Cloud Practitioner

- BSc (Hons) in Information Technology
- BSc (Hons) in Information Technology with a specialism in Mobile Technology
- BSc (Hons) in Information Technology with a specialism in Cloud Engineering
- BSc (Hons) in Information Technology with a specialism in Information System Security
- BSc (Hons) 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

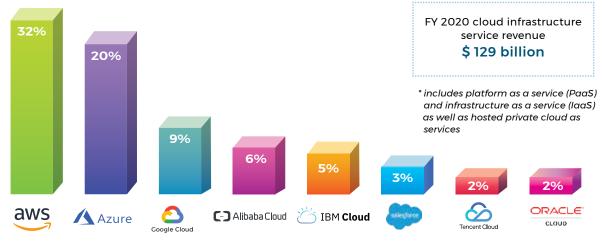
The rapid rise of computing is creating a growing number of high-quality jobs at organizations around the world, and the technical skills that students develop through this program will position them well for their careers today and in the future.

Career Options:

- Cloud Architect
- Systems Engineer
- Systems Analyst
- DevOps Engineer
- Reliability Engineer
- Build Engineer
- Software Developer
 System Architect
- 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*



Source: Synergy Research Group

CISCO CERTIFIED CCNA



BSc (Hons) 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.

Professional Recognition of APU Degree Programmes

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.



Degree Programmes

COMPUTING, TECHNOLOGY, MULTIMEDIA & GAMES DEVELOPMENT STUDY PATHWAYS

COMMON SEMESTER 1/LEVEL 1

SPECIALISED LEVEL 1*

SPECIALISED LEVEL 1*

SPECIALISED 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

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

	BSc (Hons) in	Computer	Science (C	yber Security)
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- BSc (Hons) in Multimedia Technology
- BSc (Hons) in Multimedia Technology with a
- specialism in VR/AR
- BSc (Hons) in Computer Games Development

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

BSc (Hons) in **INFORMATION TECHNOLOGY**

(B2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

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

MODULE OUTLINE

LEVEL1

Common Modules

- Digital Thinking and Innovation · Intercultural Awareness and Cultural Diversity
- · System Analysis & Design
- Programming with Python
- · Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Module

Fundamentals of Web Design and Development

I EVEL 2 **Common Modules**

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

Specialised Modules

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

Philosophy and Current Issues

Workplace Professional Communication Skills

- Data Centre Infrastructure
- **INTERNSHIP** (16 weeks)
- **MQA Compulsory Subjects***
- · Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students)
- (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

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

(R2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

Career options: IT Security Analyst / IT Security Consultant / IT Security Infrastructure Designer / IT Security Solutions Designer / IT Security Engineer / Chief Technology Officer (CTO) / Information Security Engineer / Information Security Analyst / Technical Support Manager / Network Security Engineer

MODULE OUTLINE

LEVEL 1

Common Modules

- Digital Thinking and Innovation
- · Intercultural Awareness and Cultural Diversity
- System Analysis & Design
- Programming with Python
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- · Introduction to Networking
- Introduction to Databases
- · Introduction to C Programming

Specialised Module

Introduction to Security and Forensic Technologies

MQA Compulsory Subjects*

- · Appreciation of Ethics and Civilisation
- (M'sianStudents)
- Malay Communication Language (Int'l Students)

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

LEVEL 2

Common Modules

Creativity & Innovation

Specialised Modules

Technology

Network Security

Web Applications

System Development Methods

· Research Methods for Computing and

System & Network Administration

Ethical Hacking & Incident Response

Mobile & Wireless Technology

Human-Computer Interaction

· Probability & Statistical Modeling **INTERNSHIP** (16 weeks)

Programming for Data Analysis

- · Philosophy and Current Issues Workplace Professional Communication Skills

LEVEL 3 **Common Modules**

- Innovation Management & New Product Development
- Project Management
- **Specialised Modules**
- Computer Systems Management
- Designing & Developing Applications on Cloud
- Wireless and Mobile Security
- Database Security .
- Cloud Infrastructure and Services Applications .
- Penetration Testing
- Investigations in Information Systems Security
- Information Systems Security Project
- · Employee & Employment Trends
- · Co-Curriculum

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







Advanced Database Systems Cloud Infrastructure & Services

LEVEL 3

Common Modules

Specialised Modules

Development Project Management

Computer Systems Management Entrepreneurship

Mobile & Web Multimedia

Investigations in Information Technology

Innovation Management & New Product

Information Technology Project

Elective Modules (Choose 2)

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

Object Oriented Development with Java

- Computer Systems Security

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

(B2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

Career options: Chief Technology Officer (CTO) / Server Developer / Cloud Solution Consultant / 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

MODULE OUTLINE

LEVEL1

- **Common Modules**
- Digital Thinking and Innovation Intercultural Awareness and Cultural Diversity
- · System Analysis & Design
- Programming with Python
- · Mathematical Concepts for Computing · Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming

Specialised Module

(M'sianStudents)

Fundamentals of Web Design and Development

MQA Compulsory Subjects*

Appreciation of Ethics and Civilisation

IEVEL 2 **Common Modules**

- Probability and Statistical Modeling
- Programming for Data Analysis
- Creativity & Innovation
- · Research Methods for Computing and Technology

Specialised Modules

- Introduction to Virtualization
- Switching and Routing Essentials
- Mobile & Wireless Technology
- Web Applications
- · Systems & Network Administration
- · Data Centre Infrastructure
- Human Computer Interaction
- Network Security

INTERNSHIP (16 weeks)

- Philosophy and Current Issues
 - Workplace Professional Communication Skills
- (*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.

Malay Communication Language (Int'l Students)

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

(R2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

Career options: Mobile Application Developer / M-Commerce Consultant / Mobile Programmer / Telecommunications Solutions Consultant / Chief Technology Officer (CTO) / Mobile Application Specialist / Technical Support Manager / Mobile Solutions Consultant / Mobile Application Designer

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

MODULE OUTLINE

LEVEL 1

Common Modules

- Digital Thinking and Innovation
- Intercultural Awareness and Cultural Diversity
- System Analysis & Design
- Programming with Python
- · Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- · Introduction to C Programming

Specialised Module

(M'sianStudents)

Introduction to Mobile Technologies

MQA Compulsory Subjects* Appreciation of Ethics and Civilisation

Malay Communication Language (Int'l Students)

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

LEVEL 2 Common Modules

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

Specialised Modules

- iOS Mobile App Development
- Mobile & Wireless Technology
- Computer Games Design, High Concept and Preproduction
- Mobile App Engineering
- Human-Computer Interaction
- Web Applications
- INTERNSHIP (16 weeks)
- · Philosophy and Current Issues
- Workplace Professional Communication Skills

· Employee & Employment Trends

· Co-Curriculum

- Project Management
- **Specialised Modules**
- Computer Systems Management
- Advance Mobile Computing with Android
- Mobile and Web Multimedia
- Cloud Infrastructure and Services
- Multi-Platform Mobile Apps Development

Innovation Management & New Product

Entrepreneurship

LEVEL 3

Common Modules

Development

- Mobile Commerce
- Investigation in Mobile Technology Mobile Technology Project

COMPUTING, TECHNOLOGY, MULTIMEDIA / 33 / & GAMES DEVELOPMENT

LEVEL 3

- **Common Modules**
- Innovation Management & New Product Development
- Project Management

Specialised Modules

- Investigations in Cloud Engineering
- Edge Computing Concepts and Applications
- Computer Systems Management
- Designing and Developing Applications on cloud

Internet of Things: Concepts and Applications

Entrepreneurship

· Co-Curriculum

Cloud Engineering Project

· Employee & Employment Trends

 Enterprise Networking and Automation · Cloud Infrastructure and Services

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

(B2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

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 / IoT Innovation Manager / IoT Software Developer

MODULE OUTLINE

LEVEL1

- **Common Modules**
- Digital Thinking and Innovation Intercultural Awareness and Cultural Diversity
- · System Analysis & Design
- Programming with Python
- · Mathematical Concepts for Computing · Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases
- Introduction to C Programming
- **Specialised Module**

MQA Compulsory Subjects* · Appreciation of Ethics and Civilisation

Introduction to IoT

(M'sianStudents)

I EVEL 2 **Common Modules**

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

Specialised Modules

- Mobile & Wireless Technology
- Web Applications
- Probability & Statistical Modelling System Programming & Computer Control
- Network Security
- LoWPAN & Ad-hoc Networking
- Enterprise Internet of Things
- INTERNSHIP (16 weeks)

- · Philosophy and Current Issues
 - Workplace Professional Communication Skills
- Malay Communication Language (Int'l Students)

LEVEL 3

- **Common Modules** Innovation Management & New Product
- Development Project Management

Specialised Modules

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

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

BSc (Hons) in **INFORMATION TECHNOLOGY** WITH A SPECIALISM IN DIGITAL TRANSFORMATION

(R2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

Career options: Business IT Analyst / Business Strategies / Chief Innovation Officer (CIO) / Digital Designer / Business Transformation Analyst / Enterprise Digital Transformation Specialist / HR Digital Transformation Lead / Strategic IT Consultant / Digital Finance Transformation Leader



LEVEL 1

Common Modules

- Intercultural Awareness and Cultural Diversity
- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- · Programming with Python
- System Analysis & Design
- Introduction to Databases
- · Introduction to Networking

Specialised Module

- Fundamentals of Web Design and
- Development · Introduction To C Programming

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation
- (M'sianStudents)
- Malay Communication Language (Int'l Students)

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

LEVEL 2

Common Modules

Technology

Web Applications

Specialised Modules

 Digital Marketing Strategy INTERNSHIP (16 weeks)

· Philosophy and Current Issues

Creativity & Innovation

Human-Computer Interaction

Programming for Data Analysis

System Development Methods

 Object Oriented Development with Java Probability & Statistical Modeling

System and Network Administration

Research Methods for Computing and

· Leading Digital Business Transformation

Workplace Professional Communication Skills

Integrated Business Processes with SAP ERP

LEVEL 3 **Common Modules**

- Investigations in Digital Transformation
- Project Management
- Computer Systems Management
- Cloud Infrastructure and Services
- Project in Digital Transformation
- Innovation Management and New Product
- Development
- Advanced Database System Entrepreneurship
- **Specialised Modules**
- Digital Finance
- Digital Strategy and Analytics
- Digital Execution

· Employee & Employment Trends

Co-Curriculum

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







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

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

(R2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

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 / Business Intelligence Manager / CRM Business Analyst

MODULE OUTLINE

LEVEL1

- **Common Modules**
- · Intercultural Awareness and Cultural Diversity · Digital Thinking and Innovation
- · Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- · Programming with Python
- System Analysis & Design
- Introduction to Databases
- Introduction to Networking
- Introduction To C Programming

Specialised Module

· Fundamentals of Web Design and Development

LEVEL 2 **Common Modules**

- Programming for Data Analysis
- Object Oriented Development with Java
- System Development Methods
- Creativity & Innovation
- Research Methods for Computing and Technology
- Human-Computer Interaction
- Web Applications
- System and Network Administration
- · Data Mining and Predictive Modelling
- Probability and Statistical Modelling

Specialised Modules

Financial Management

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students)

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

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

(R2/482/6/0189)(08/25)(A6210)

Duration: 3 years full-time

Career options: IT Business Systems Developer / E-Commerce Consultant / Chief Technology Officer (CTO) / Management Information System (MIS) Manager / Clobal Business Solution Specialist / IT Quality Assurance (QA) Analyst / SAP Business Analyst / Business Intelligence Manager / CRM Business Analyst

MODULE OUTLINE

LEVEL 1

Common Modules

- Intercultural Awareness and Cultural Diversity
- Digital Thinking and Innovation
- Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- Programming with Python
- System Analysis & Design
- Introduction to Databases
- · Introduction to Networking
- · Introduction to C Programming

Specialised Module

Introduction to Information System

MQA Compulsory Subjects*

- · Appreciation of Ethics and Civilisation
- (M'sianStudents)
- Malay Communication Language (Int'l Students)

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

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

Common Modules

- Innovation Management & New Product Development
- Project Management
- Internet of Things: Concepts & Applications
- Project In Information Systems
- Computer Systems Management
- Entrepreneurship
- · Investigations in Information Systems
- **Specialised Modules**
- Developing E-Commerce Applications with XML
- Information System Development Trends
- **Building Customer Relationships**
- Designing & Developing Applications on Cloud
- · Employee & Employment Trends
- · Co-Curriculum

- · Employee & Employment Trends
- · Co-Curriculum

LEVEL 3





Development Project Management Project In FinTech Management Computer Systems Management Entrepreneurship Investigations in FinTech Management Cloud Infrastructure and Services **Specialised Modules** Blockchain Development

Innovation Management & New Product

- Robo Advisor

LEVEL 3

Common Modules

FinTech Governance, Risk Management and Compliance

COMPUTING, TECHNOLOGY, MULTIMEDIA / 35 / & GAMES DEVELOPMENT

FINTE

LEVEL 2

Common Modules

Creativity & Innovation

Technology

· E-Commerce **INTERNSHIP** (16 weeks)

Web Applications

· Enterprise Systems

Specialised Modules

Programming for Data Analysis

System Development Methods

Human-Computer Interaction

Object Oriented Development with Java

Research Methods for Computing and

Integrated Business Processes with SAP

Workplace Professional Communication Skills

Probability & Statistical Modelling

Management Information System

· Philosophy and Current Issues

- Workplace Professional Communication Skills (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)
- · Philosophy and Current Issues
- FinTech Management INTERNSHIP (16 weeks)

BSc (Hons) in SOFTWARE ENGINEERING

(R2/481/6/0714)(04/26)(MQA/FA0366)

Duration: 3 years full-time

Career options: Software Engineer / Systems Analyst / Software Consultant / Programmer / Chief Technology Officer (CTO) / Software Quality Assurance (QA) Specialist / R&D Specialist / Software Architect / Systems Integration Engineer / Senior Technical Lead / Solutions Architect / Senior System Designer

MODULE OUTLINE

LEVEL 1

Common Modules Digital Thinking and Innovation

- Intercultural Awareness and Cultural Diversity
- · System Analysis & Design
- Programming with Python
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Module

· Introduction to Object Oriented Programming

Elective Modules (Choose 1)

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

LEVEL 2 Common Modules

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

Specialised Modules

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

Elective Modules (Choose 1)

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

Workplace Professional Communication Skills

· Philosophy and Current Issues

- INTERNSHIP (16 weeks)
- MQA Compulsory Subjects*
- Appreciation of Ethics and Civilisation (M'sianStudents)
- · Malay Communication Language (Int'l Students)
- (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

BSc (Hons) in COMPUTER SCIENCE

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

Duration: 3 years full-time

Career options: Computer Engineer / Systems Engineer / Software Developer / Programmer / / Technical Architect / Application Engineer / Mainframe Developer / Software Architect / Software Quality Assurance / Data Warehouse Manager / Applications Development Manager / Applications Architect

MODULE OUTLINE

LEVEL 1

Common Modules

- Digital Thinking and Innovation
- Intercultural Awareness and Cultural Diversity
- System Analysis & Design
- Programming with Python
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Introduction to Networking
- Introduction to Databases

Specialised Module

(M'sianStudents)

- Introduction to Artificial Intelligence
- Introduction to C Programming

MQA Compulsory Subjects*

· Appreciation of Ethics and Civilisation

LEVEL 2 Common Modules

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

Specialised Modules

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

Elective Modules (Choose 2)

- Mobile & Wireless Technology OR System
 Programming & Computer Control
- Imaging & Special Effects OR Network Security
- Workplace Professional Communication Skills
- · Employee & Employment Trends
- Co-Curriculum
- Malay Communication Language (Int'l Students)
 Philosophy and Current Issues

/ 36 / COMPUTING, TECHNOLOGY, MULTIMEDIA & GAMES DEVELOPMENT

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



LEVEL 3

- **Common Modules**
- Innovation Management & New Product
 Development
- Project Management

Specialised Modules

- Advanced Programming Language Concepts
- Algorithmics
- Design Patterns
- Software Quality Engineering
- Designing & Developing Applications on Cloud
- Investigations in Software Engineering
 Software Engineering Project
- **Elective Modules (Choose 2)**
- Distributed Computer Systems OR Enterprise Programming for Distributed Applications OR Blockchain Development
- Advanced Database Systems **OR** HCI & Usability **OR** Optimisation and Deep Learning
- · Employee & Employment Trends
- Co-Curriculum



INTERNSHIP (16 weeks)

Project Management

Specialised Modules

Real-Time Systems

Emergent Technology

· Computer Science Project

Investigations in Computer Science

Advanced Wireless Technology

Distributed Computer Systems

Blockchain Development

Wireless & Mobile Security

Optimisation and Deep Learning

Image Processing, Computer Vision & Pattern

Designing & Developing Applications on Cloud

Algorithmics

HCL& Usability

Elective Modules

(Choose 2)

(Choose 1)

Recognition

.

LEVEL 3

Common Modules Innovation Management & New Product Development

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

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

Duration: 3 years full-time

Career options: Software Tool Developer / Data Analyst / Data Scientist / Data Wrangler/Munger/Miner / Business Process Engineer / Data Innovation Manager / Business Intelligence Developer / IT Risk Analyst / Advance Analytics Professional / Data Engineer / Business Intelligence Analyst / Machine Learning Scientist

MODULE OUTLINE

LEVEL1

Common Modules

- Digital Thinking and Innovation Intercultural Awareness and Cultural Diversity
- · System Analysis & Design
- Programming with Python
- · Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- Introduction to Networking Introduction to Databases

Specialised Modules

(M'sianStudents)

- Introduction to Artificial Intelligence
- Introduction to C Programming

MQA Compulsory Subjects*

Appreciation of Ethics and Civilisation

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

Specialised Modules

- Business Intelligence Systems
- · Data Mining and Predictive Modelling
- · Probability & Statistical Modelling

INTERNSHIP (16 weeks)

- · Philosophy and Current Issues
 - Workplace Professional Communication Skills
- Malay Communication Language (Int'l Students) (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)
- Note: The specialism will appear only in the academic transcript.

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

(R/481/6/0506)(06/24)(MOA/EA4622)

Duration: 3 years full-time

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 / Secure Applications Engineer / Information Security Analyst



MODULE OUTLINE

LEVEL 1

Common Modules

- Digital Thinking and Innovation
- Intercultural Awareness and Cultural Diversity
- Mathematical Concepts for Computing
- · Operating Systems & Computer Architecture
- Programming with Python
- System Analysis & Design
- Introduction to Networking
- Introduction to Databases
- · Introduction to C Programming

Specialised Module

Introduction to Security and Forensic Technologies

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation
- (M'sianStudents)
- · Malay Communication Language (Int'l Students)
- (*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

LEVEL 2

Common Modules

Data Structures

Creativity & Innovation

Specialised Modules

Computing Theory

Programming for Data Analysis

 System Development Methods Object Oriented Development with Java

System & Network Administration

Ethical Hacking & Incident Response

Advanced Forensic Methods

· Philosophy and Current Issues

· Practical CTF Strategies **INTERNSHIP** (16 weeks)

Research Methods For Computing & Technology

Computer Systems & Low Level Techniques

Workplace Professional Communication Skills

LEVEL 3

- **Common Modules** Project Management
- Innovation Management & New Product Development
- Emergent Technology
- **Specialised Modules**
- Algorithmics
- Advanced Cyber Security
- Penetration Testing
- Mobile Forensics
- Deep Learning for Intrusion Detection
- Legal & Professional Practice in Cyber World
- Investigations in Digital Forensics Project in Digital Forensics
- Employee & Employment Trends
- Co-Curriculum

- IEVEL 2 **Common Modules**
 - - Technology
 - Computing Theory
 - Data Structures
 - Concurrent Programming
 - Data Management
- · Employee & Employment Trends
- · Co-Curriculum

LEVEL 3

Common Modules

Project Management

Specialised Modules

Real-Time Systems

Emergent Technology

Data Analytics Project

Database Security

Development

Algorithmics

Innovation Management & New Product

Behavioral Science and Marketing Analytics

Text Analytics and Sentiment Analysis

Optimisation and Deep Learning

Investigations in Data Analytics

BSc (Hons) in COMPUTER SCIENCE (CYBER SECURITY)

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

Duration: 3 years full-time

Career options: Cyber Security Engineer/ Architect Cyber Security Consultant / Cyber Security Incident Response Analyst / Intrusion Detection Analyst / Cyber Threat Intelligence Advisor / Ethical Hacker / Penetration Tester / Secure Applications Engineer / Information Security Technical Specialist

MODULE OUTLINE

LEVEL 1

- Common Modules

 Digital Thinking and Innovation
- Intercultural Awareness and Cultural Diversity
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- Programming with Python
- System Analysis & Design
- Introduction to Networking
- Introduction to Databases

Specialised Modules

 Introduction to Security and Forensic Technologies

Elective Modules (Choose 1)

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

MQA Compulsory Subjects* • Appreciation of Ethics and Civilisation

(M'sianStudents)

LEVEL 2 Common Modules

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

Specialised Modules

- System & Network Administration
- Computing Theory
- Computer Systems & Low Level Techniques
- Implementation of Secure Systems
- Switching and Routing Essentials

Elective Modules (Choose 1)

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

INTERNSHIP (16 weeks)

- Philosophy and Current Issues
- Workplace Professional Communication Skills
- Malay Communication Language (Int'l Students)

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

Bachelor of COMPUTER SCIENCE (HONS) (INTELLIGENT SYSTEMS)

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

Duration: 3 years full-time

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

MODULE OUTLINE

LEVEL 1

Common Modules

- \cdot Digital Thinking and Innovation
- Intercultural Awareness and Cultural Diversity
- System Analysis & Design
- Programming with Python
- Mathematical Concepts for Computing
- Operating Systems & Computer Architecture
- $\cdot\,$ Introduction to Networking
- Introduction to Databases

Specialised Module

Introduction to Artificial Intelligence

Elective Modules (Choose 1)

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

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students)

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

/ 38 / COMPUTING, TECHNOLOGY, MULTIMEDIA

& GAMES DEVELOPMENT

Common Modules

LEVEL 3

- Innovation Management & New Product Development
- Enterprise Programming for Distributed Applications
- Project Management
- Specialised Modules
- Further Artificial Intelligence
- Image Processing, Computer Vision & Pattern Recognition
- Emergent Technology
- · Knowledge Discovery and Big Data Analytics
- Investigations in Intelligent Systems
- Intelligent Systems Project

Elective Modules (Choose 2)

- Algorithmics OR Text Analytics & Sentiment
 Analysis
- Ubiquitous Computing OR Critical Issues in Managing IS in Organisations
- Employee & Employment Trends
- · Co-Curriculum

LEVEL 3 Common Modules • Project Management

Innovation Management & New Product Development

Specialised Modules

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

Elective Modules (Choose 2)

- Cloud Infrastructure & Services OR Internet of Things: Concepts & Applications
- Wireless & Mobile Security OR Database
 Security
- Employee & Employment Trends
- · Co-Curriculum



tion Philosophy and Current Issues

LEVEL 2

Common Modules

Creativity & Innovation

Specialised Modules

Technology

AI Methods

Data Structures

Object Oriented Development with Java

· Research Methods for Computing and

System Programming & Computer Control

System Development Methods

Probability & Statistical Modeling

· Human-Computer Interaction

Elective Modules (Choose 1)

Mobile App Engineering

Enterprise Internet of Things

INTERNSHIP (16 weeks)

· Imaging & Special Effects

Programming for Data Analysis

Workplace Professional Communication Skills

BSc (Hons) in **COMPUTER GAMES DEVELOPMENT**

(B2/213/6/0245)(08/25)(A6216)

Duration: 3 years full-time

Career options: Games Programmer / Games Developer / Games Quality Assurance Tester / Technical Director / Team Manager / Mobile Came Developer / Game Designer / Level Editor / Games Producer / Gameplay Programmer / Games Community Manager

MODULE OUTLINE

LEVEL1

- **Common Modules**
- System Analysis & Design Programming with Python
- · Mathematical Concepts for Computing

Specialised Module

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

Elective Modules (Choose 2)

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

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students)
- (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

BSc (Hons) in **MULTIMEDIA TECHNOLOGY**

(R2/213/6/0346)(04/26)(MOA/EA0364)

Duration: 3 years full-time

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

MODULE OUTLINE

LEVEL 1

Common Modules

- System Analysis & Design
- Programming with Python

· Mathematical Concepts for Computing

- **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

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students) (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

IEVEL 2 **Common Modules**

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

Specialised Modules

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

INTERNSHIP (16 weeks)

- · Philosophy and Current Issues
- Workplace Professional Communication Skills

LEVEL 2

Common Modules

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

Specialised Modules

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

Elective Modules (Choose 1) Web Applications

Human Computer Interaction

INTERNSHIP (16 weeks)

- · Philosophy and Current Issues
- Workplace Professional Communication Skills

· Employee & Employment Trends

Co-Curriculum

Common Modules Innovation Management & New Product

LEVEL 3

Development Project Management

Specialised Modules

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

Elective Modules (Choose 1)

- Mobile and Web Multimedia
- VRAR Design Project

COMPUTING, TECHNOLOGY, MULTIMEDIA / 39 / & GAMES DEVELOPMENT



Innovation Management & New Product

Advanced 3D Character Modelling and Animation

Multimedia Techniques For Animation, Games &

Programming Techniques for Animation &

Computer Games Development Project

Mobile Multimedia and Gaming **OR** MMOG

Investigations in Computer Games

LEVEL 3

Common Modules

Project Management

Specialised Modules

3D Computer Graphics

Audio For Computer Games

Elective Modules (Choose 1)

· Employee & Employment Trends

Services & Communities

Development

Film Effects

Computer Games

Development

· Co-Curriculum

HCI and Usability

Multimedia @VR/AR

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

MINISTRY**X R**

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.

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

(R2/213/6/0346)(04/26)(MQA/FA0364)

Duration: 3 years full-time

Career options: User Interface Developer (VR) / VR Scenario Developer / VR Video Engineer / Multimedia Designer (Video Editing) / Creative Multimedia Programmer / Extended Reality(XR) Content Developer / VR/AR Applications Engineer / VR/AR Web Developer / Unity Developers (VR/AR/MR) / Meta Engineer

MODULE OUTLINE

LEVEL1

Common Modules

- · System Analysis & Design
- Programming with Python · Mathematical Concepts for Computing

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

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation
- (M'sianStudents)
- Malay Communication Language (Int'l Students)

· Programming for Data Analysis

LEVEL 2

- **Common Modules** Creativity & Innovation
- · Research Methods for Computing and Technology

Specialised Modules

- Multimedia Applications
- Interactive Content Development
- Basic 3D Computer Character Modelling
- Digital Audio and Video
- · VRAR Design Principles
- Advanced Virtual Reality Technology
- Intellectual Property, Ethics & Legal Issues
- · Simulation, Visualisation and Virtual Reality
- **Elective Modules (Choose 1)**

Web Applications

- · Human Computer Interaction
- INTERNSHIP (16 weeks)
- Philosophy and Current Issues
- Workplace Professional Communication Skills

Employee & Employment Trends

Co-Curriculum

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

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



LEVEL 3 **Common Modules** Innovation Management & New Product Development

Project Management

Specialised Modules

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

Elective Modules (Choose 1)

- Mobile and Web Multimedia
- Multimedia Techniques For Animation, Games & Film Effects

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

/ 40 / COMPUTING, TECHNOLOGY, MULTIMEDIA & GAMES DEVELOPMENT



STUDIO

Engineering @APU



THE AIMS OF THE APU ENGINEERING PROGRAMMES ARE TO OFFER:

- A broad education in the fundamentals of engineering principles and professional practices that form a strong flexible base which enables graduates to fill a variety of responsible engineering positions
- Specialised development in one area of concentration that will enable graduates to successfully perform at entry-level engineering positions. Some graduates will prefer and be capable of continuing their education in a graduate school
- A stimulating and accessible course of study necessary to understand the impact of engineering solutions in a global and social context, analysis and contemporary engineering issues which the students can develop and apply in their near future
- An opportunity for students with different abilities and different educational experiences to benefit intellectually and
 vocationally from their education in engineering courses
- Graduates who are able to demonstrate intelligence, ingenuity, inventiveness and independence in all areas of endeavour
- An intellectually demanding and stimulating programme of study and develop a life-long commitment to learning that develops graduates who are imaginative and innovative and who show initiative and creativity in their work

APU Engineering Degrees are accredited by the Board of Engineers Malaysia (BEM).

PROGRAMME EDUCATIONAL OBJECTIVES

PEO	ELECTRICAL AND ELECTRONIC ENGINEERING (EEE)	MECHATRONIC ENGINEERING (ME)	COMPUTER ENGINEERING (CE)	PETROLEUM ENGINEERING (PE)
PEO1	Be a practicing engineer contributing to the development of Electrical or Electronic Engineering while demonstrating professionalism.	Be a practicing engineer contributing to the development of Mechatronic Engineering while demonstrating professionalism.	Be a practicing engineer contributing to the development of Computer or Electronic Engineering while demonstrating professionalism.	Be a practicing engineer contributing to the development of Petroleum Engineering while demonstrating professionalism.
PEO2	Pursue engineering innovation via career advancement opportunities and/or advanced studies in Electrical or Electronic Engineering.	Pursue engineering innovation via career advancement opportunities and/ or advanced studies in Mechatronic Engineering.	Pursue engineering innovation via career advancement opportunities and/or advanced studies in Computer or Electronic Engineering.	Pursue engineering innovation via career advancement opportunities and/or advanced studies in Petroleum Engineering.

PROGRAMME LEARNING OUTCOMES

The students, upon completion of their study, should attain the following outcomes:

- PLO1 Ability to gain and apply principles of Mathematics, Science and Engineering to the solutions of complex engineering problems.
- PLO2 Ability to undertake complex engineering problem analysis and apply engineering principles to solve them.
- PLO3 Ability to design innovative solutions for complex engineering problems.
- PLO4 Ability to investigate complex engineering problems using research techniques.
- PLO5 Ability to select and use suitable tools and techniques for complex engineering problems.
- PLO6 Ability to engage in professional engineering practice for safety, health, social, cultural and legal responsibilities in developing solutions for complex engineering problems.
- PLO7 Ability to comprehend and demonstrate good practices of engineering in sustainable development and environmental considerations for the solutions of complex engineering problems.
- PLO8 Ability to execute the responsibilities of an Engineer professionally and ethically.
- PLO9 Ability to function effectively as a team leader or a member in a team within multi-disciplinary settings.
- PLO10 Ability to communicate effectively and professionally on complex engineering activities.
- PLO11 Ability to demonstrate entrepreneurship skills, engineering project management and economic decision making in multidisciplinary environments.
- PLO12 Ability to recognise the need for, and be able to engage in independent and life-long learning towards continuous professional development.

Collaborative Industrial Partners



The School of Engineering at APU is very active in pursuing collaborative partnership with industries with an aim to expose students to professional engineering practices as early as possible in their studies and to provide students opportunities to solve real-world engineering problems as a form of grooming for engineering careers upon graduation. The School of Engineering has been collaborating with industries on two fronts, i.e. to work with professional and industrial institutions, and with multinational corporations and small & medium enterprises (SMEs).

On collaboration with professional institutions, the School of Engineering collaborate closely with the Institution of Engineers Malaysia (IEM). Since then, IEM has been very supportive on all activities organised by the IEM-APU Student Section (IASS) via funding and provision of expertise on technical talks, seminars and workshops. All engineering students are also highly encouraged to participate in IEM activities as Student Member of the institute. The strong ties with IEM has provided students an early appreciation of the roles of engineers and the challenges ahead. For 4 consecutive years, our Final Year students were awarded the IEM Gold Medal Award in which their excellence and outstanding performance were highly recognised by IEM and the members of the industry.

The School of Engineering has also established a MOU with Malaysia Automation Technology Association (MATA) with an aim to expose students to automation technologies via internships, workshops, technical talks and opportunities to work on final-year projects at member companies of MATA. The partnership with MATA has been going from strength-to-strength since 2014, with the successful launch of Automation Technology Day both in 2015 and 2016. The event has provided students great opportunities to seek employment and internship with some of the MATA member companies such as Schneider Electric, Siemens, Festo, Omron, among others. In addition, students also benefitted from the technical talks on Industrial 4.0, Internet of Things (IoT) and workshops on PLC & Pneumatics etc.

The School of Engineering also champions industrial collaboration with companies, be it multinational corporations or SMEs. The companies typically provide final-year project (FYP) titles for qualified 4th Year students to work on. A number of projects have been initiated and completed successfully with companies such as Top Glove, ABB, Daikin R&D, Mawea Industries, ERL Maintenance Support, Signal Transmission, among others. In addition, many such projects resulted from the proactive efforts of the lecturers in establishing Memorandum of Agreements (MOAs) with companies. All these have resulted in a win-win situation whereby companies benefit from the outcome of the research and development efforts while students are able to solve real-work complex engineering problems by leveraging on resources and expertises.



Our Engineering students won the APICTA Malaysia award, which is also known as the 'Oscars of ICT'.

Our Final Year Engineering students have attained the IEM Gold Medal for 6 consecutive years.

ENGINEERING DEGREES ACCREDITED UNDER THE WASHINGTON ACCORD

WORLDWIDE RECOGNITION

UNDER THE

WASHINGTON ACCORD

The School of Engineering at APU is one of our fastest growing schools and is gaining popularity among school leavers. This is because all the five engineering programmes offered by the School are current in terms of technology and are market driven, and thus have great employment opportunities.

The vision of the School is to be a leading provider of Engineering and Technology based education with innovative approaches to enhancing lifelong career opportunities. This is emphasised by our mission to provide engineering education based on a theoretical, experimental, and ethical foundation and enhanced by opportunities for participation in research, internships and interdisciplinary study.

For all degrees within the School, APU links with industry helps provide internship training placements for students. Internships are compulsory for all students as per the requirement of the Board of Engineers Malaysia.

APU Engineering Degrees are fully accredited by the Board of Engineers Malaysia (BEM) which is a signatory to the Washington Accord.

- Bachelor of Engineering in Electrical & Electronic Engineering with Honours
- Bachelor of Engineering in Mechatronic Engineering with Honours
- Bachelor of Computer Engineering with Honours
- Bachelor of Petroleum Engineering with Honours

ENGINEERING DEGREES ACCREDITED UNDER THE WASHINGTON ACCORD

APU Engineering Degrees are fully accredited by the Board of Engineers Malaysia (BEM) which is a signatory to the Washington Accord.

APU Engineering Degrees are Accredited Professionally by the Board of Engineers Malaysia (BEM) and are therefore recognised internationally under the Washington Accord. Recognition under the Washington Accord allows for APU engineering programmes to be recognised by countries such as Australia, Canada, China, Chinese Taipei, Costa Rica, Hong Kong China, India, Indonesia, Ireland, Japan, Korea, Malaysia, Mexico, New Zealand, Pakistan, Peru, Russia, Singapore, Sri Lanka, South Africa, Turkey, the United Kingdom and the United States who are all signatories of the accord.

This allows APU graduates to be recognised in these countries for career opportunities towards achieving Professional/Chartered Engineer status or for further education progression. Furthermore, many countries which are not yet signatories to the Washington Accord also use this as a benchmark in recognising Engineering Degrees.



This accreditation ensures that APU Engineering Graduates will have the following benefits in countries who are signatories of the Washington Accord:

- Opportunities to register as a Graduate Engineer with Board of Engineers Malaysia (BEM) or the relevant professional bodies in other countries who are signatories under the Washington Accord.
- Pathways to becoming a Professional or Chartered Engineer.
- Assurance that graduates are considered as having met international academic standards for engineering practice.

With this achievement, recognition under the Washington Accord enables APU Engineering graduates to work in any country in the world who are also a signatory to the Accord, without the need to re-qualify. The recognition is of utmost importance to the engineering education in Malaysia as graduates from accredited engineering degree programmes from Washington Accord signatory countries are considered as meeting the academic standard for practices in engineering at the international level.

Please refer to http://www.eac.org.my/web/list_accredited.html

The above benefits are applicable in the following countries, which are signatory to the Washington Accord: "Signatories have full rights of participation in the Accord; qualifications accredited or recognised by other signatories are recognised by each signatory as being substantially equivalent to accredited or recognised qualifications within its own jurisdiction" https://www.ieagreements.org/accords/washington/signatories/

Australia Ireland Russia Association for Engineering Engineers Australia (1989) Engineers Ireland (1989) Education of Russia (2012) Canada Japan Engineers Canada (1989) Singapore **Engineering Education (2005)** Institution of Engineers Singapore China (2006)Technology (2016) Accreditation Board for Engineering South Africa Education of Korea (2007) Engineering Council of South Africa Chinese Taipei (1999)Institute of Engineering Education Malaysia Taiwan (2007) Board of Engineers Malaysia (2009) Sri Lanka Institution of Engineers Sri Lanka Mexico **Costa Rica** Colegio Federado de Ingenieros y de Consejo de Acreditación de la Arquitectos de Costa Rica (CFIA) (2020) Enseñanza de la Ingeniería (CACEI) • Turkey - MUDEK (2011) (2016)Hong Kong China United Kingdom The Hong Kong Institution of Engineers New Zealand Engineering Council UK (1989) (1995) Institution of Professional Engineers **United States** NZ (1989) Accreditation Board for Engineering India National Board of Accreditation (2014) Pakistan and Technology (1989) (Applies only to programmes accredited Pakistan Engineering Council (2017) by NBA offered by education providers Peru accepted by NBA institutions.) Instituto de Calidad Y Acreditacion de Programas de Computacion, Indonesia -Ingeneria Y Technologia (ICACIT) (2018) Engineering Education (IABEE) (2019) "Organisations holding provisional status have been identified as having qualification accreditation or recognition procedures

"Organisations holding provisional status have been identified as having qualification accreditation or recognition procedures that are potentially suitable for the purposes of the Accord; those organisations are further developing those procedures with the goal of achieving signatory status in due course; qualifications accredited or recognised by organisations holding provisional status are not recognised by the signatories"

https://www.ieagreements.org/accords/washington/signatories/

- **Bangladesh** Represented by The Institution of Engineers Bangladesh (IEB)
- **Chile** Represented by Agencia Acreditadora Colegio De Ingenieros De Chile S A (ACREDITA CI)
- Myanmar Represented by Myanmar Engineering Council (MEngC)
- Philippines Represented by Philippine Technological Council (PTC)
- Thailand Represented by Council of Engineers Thailand (COET)
 Saudi Arabia Represented by Education and Training Evaluation
 - Saudi Arabia Represented by Education and Training Evaluation Commission (ETEC)

Engineering Programmes

DEGREE PROGRAMMES:

Bachelor of Engineering in Electrical & Electronic Engineering with Honours

An Electrical or Electronic Engineer maybe responsible for research, design, development, manufacturing and management of complex hardware and software systems and reliable, cost effective devices, many involving the use of new information and computer intensive technologies. These include:

- Integrated electronic systems
- Renewable energy systems
- Generation, transmission and distribution of electrical power
- Instrumentation in electrical and electronic systems
- Manufacturing
- Microelectronics
- Photoelectronics

Bachelor of Engineering in Mechatronic Engineering with Honours

Mechatronic Engineering is concerned with the creation, design and building of intelligent machines. This new breed of engineer has to master skills in mechanical, electronic and computer engineering and work in a hybrid manner, meeting an ever-increasing need in industry where complexity of projects is rising and resources are limited. The main areas of activity are:

- Fundamental design and build ways of embedding intelligence and interfacing to the real world
- Image Processing and collision avoidance
- Industrial system such as CIM system, CAD/CAM system
- Process control plant condition monitoring and control . Design and develop a Mechatronics system
- Advance robotics and intelligent Machines

Bachelor of Computer Engineering with Honours

Computer engineering has emerged as a driving force addressing numerous global demands like smart grids, cognitive buildings, energy management and the likes. Operating platforms for more and more applications have been migrating to the cloud in recent days. Bridging the gap between hardware and software, are Computer Engineers, advancing computer technology towards transforming more and more of these cyber dreams into realities. Some of the areas covered in this major are:

- Digital Logic Design
- Computer Networks
- Embedded and Desktop Operating Systems
- Microcontroller Selection and Programming
- Signal Processing

Bachelor of Petroleum Engineering with Honours

Petroleum engineers travel to where petroleum reservoirs are known to exist. They define and develop the reservoirs, and produce oil and gas with maximum profitable recovery. Petroleum engineering allows one to specialise in several different oil & gas specialties, each with its own unique challenges and rewards. The careers and job activity areas are as a:

- Drilling engineer, working with geologists and contractors in designing and supervising drilling operations.
- Production engineer, developing processes and equipment to optimise oil and gas production.
- Reservoir engineer and help determine ideal recovery processes, estimate the number of wells that can be economically drilled, and simulate future performance using sophisticated computer models.
- Manager, an entrepreneur, economist, or environmental/ safety specialist.

Bachelor of Engineering in **ELECTRICAL & ELECTRONIC ENGINEERING**

with Honours

(R3/522/6/0060)(02/29)(MQA/FA4013)

Duration: 4 years full-time

Career options: Electrical Engineer / Power Engineer / Design Engineer / Product Engineer / Electronics Engineer / QA/QC Engineeer / Sales Engineer / R&D Engineer / Power Plant Engineer / Optical Engineer / Transmission Engineer

MODULE OUTLINE

YEAR 1

Common Modules

- Analysis of Circuits
- Instrumentation & Measurement
- · Fundamentals of Entrepreneurship
- · Engineering Mathematics 1
- · Engineering Mathematics 2
- · Introduction to C Programming
- · Programming with Python
- · Engineering Materials
- Engineering Design

YEAR 2

Common Modules

- Analogue Electronics
- Digital Electronics
- · Engineering Mathematics 3
- · Electromagnetic Field Theory
- · Engineering Software & Applications
- · Signals and Linear Systems
- Innovation Process

Specialised Modules

· Electrical Machines 1

- · Electrical Machines 2
- · Electrical Power Utilization

YEAR 3

- **Common Modules**
- Control Engineering
- **Communication Engineering Principles**
- · Engineering Mathematics 4 Microprocessor Systems & Embedded Software
- Digital Signal Processing
- Engineering Project Management
- Venture Building

Specialised Modules

- · Generation, Transmission & Distribution of Electrical Power Power Electronics & Drives
- Elective Modules (Choose 1)
- · Machine Vision Intelligence
- · Analogue Integrated Circuits & Systems
- INTERNSHIP (16 weeks)

MQA Compulsory Subjects*

- · Appreciation of Ethics and Civilisation
- (M'sianStudents) Malay Communication Language (Int'l Students)
- Philosophy and Current Issues

YEAR 4

Common Modules

- Project Phase 1 (Investigation)
- Project Phase 2 (Implementation)
- Group Design Project
- Engineer in Society

Specialised Modules

- Switchgears & Protection
- Power System Analysis
- High Voltage Engineering

Elective Modules (Choose 1)

- Renewable Energy Product Creation Technology
- Workplace Professional Communication Skills
 - Employee & Employment Trends
- Co-Curriculum

YEAR 4

Common Modules

Group Design Project

Engineer in Society

Specialised Modules

CAD/CAM

Project Phase 1 (Investigation)

Project Phase 2 (Implementation)

· Thermodynamics & Heat Transfer

Robot Navigation & Mapping with ROS

· Internet of Things: Concepts & Applications

· Workplace Professional Communication Skills

ENGINEERING / 47 /

· Employee & Employment Trends

· Co-Curriculum

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

Product Creation Technology

Elective Modules (Choose 1)

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

Bachelor of Engineering in MECHATRONIC ENGINEERING

with Honours

(R3/523/6/0191)(02/29)(MOA/FA4084)

Duration: 4 years full-time

Career options: Automation Engineer / Mechatronic Engineer / QA/QC Engineer / Sales Engineer / Support Engineer / R&D Engineer / Manufacturing Engineer / IoT Engineer / Robotics Engineer / Plant Engineer / Design Engineer

YEAR 3

Common Modules

Venture Building

Machine Design

Fluid Mechanics

Specialised Modules

Industrial Automation

Machine Vision & Intelligence

Elective Modules (Choose 1)

MQA Compulsory Subjects*

· Philosophy and Current Issues

Appreciation of Ethics and Civilisation

Malay Communication Language (Int'l Students)

Digital Signal Processing

INTERNSHIP (16 weeks)

(M'sianStudents)

Power Electronics & Drives

Control Engineering

Engineering Mathematics 4

Communication Engineering Principles

· Engineering Project Management

Microprocessor Systems & Embedded Software

MODULE OUTLINE

YEAR1

Common Modules

- · Analysis of Circuits
- · Instrumentation & Measurement · Fundamentals of Entrepreneurship
- · Engineering Mathematics 1
- · Engineering Mathematics 2
- Introduction to C Programming
- Programming with Python
- Engineering Materials
- Engineering Design
- · Engineering Statics & Dynamics

YEAR 2

Common Modules

- Analogue Electronics
- Digital Electronics
- Introduction to Electrical Systems
- Engineering Mathematics 3
- · Electromagnetic Field Theory
- · Engineering Software & Applications
- Signals and Linear Systems Innovation Process

Specialised Modules

- Strength of Material
- Robotics Technology Sensors & Actuators

Bachelor of **COMPUTER ENGINEERING**

with Honours

(R3/523/6/0190)(02/29)(MQA/FA5127)

Duration: 4 years full-time

Career options: Computer Systems Engineer / Computer System Analysts / Computer Network Architect / Computer Hardware Engineer / IT Engineer / Application Engineer / Support Engineer / Electronics Engineer

YEAR 3

VLSI Design

Common Modules

Control Engineering

Engineering Mathematics 4

Engineering Project Management

Modern Communication Systems

MQA Compulsory Subjects*

· Philosophy and Current Issues

Appreciation of Ethics and Civilisation

Malay Communication Language (Int'l Students)

· Analogue Integrated Circuits & Systems

· Machine Vision & Intelligence

Digital Signal Processing

Venture Building

Specialised Modules

INTERNSHIP (16 weeks)

(M'sianStudents)

Communication Engineering Principles

Microprocessor Systems and Embedded Software

MODULE OUTLINE

YEAR 1

Common Modules

- · Analysis of Circuits
- Fundamentals of Entrepreneurship
- Instrumentation & Measurement
- · Engineering Design
- Engineering Mathematics 1
- Engineering Mathematics 2
- Introduction to C Programming
- Programming with Python
 Engineering Materials

Specialised Modules

· Introduction to Networking

YEAR 2

- **Common Modules**
- Analogue Electronics
- Digital Electronics
- Introduction to Electrical Systems
- Engineering Mathematics 3
- · Electromagnetic Field Theory
- · Engineering Software & Applications
- · Signals & Linear Systems
- Innovation Process
- **Specialised Modules**

Human Computer Interaction

- Object Oriented Development with Java
- · Fundamentals of Integrated Circuits Design

Bachelor of **PETROLEUM ENGINEERING**

with Honours

(N/544/6/0004)(10/27)(MOA/EA6546)

Duration: 4 years full-time

Career options: Production Engineer / Commissioning Engineer / Reservoir Engineer / Well Completion Engineer / Drilling Engineer / Process Engineer / Oil & Gas Design Engineer / Plant Engineer / Petroleum Geologist

MODULE OUTLINE

YEAR1

- **Common Modules**
- · Fundamentals of Entrepreneurship
- · Engineering Mathematics 1 · Engineering Mathematics 2
- Introduction to C Programming
- · Programming with Python
- · Engineering Materials
- Engineering Design
- Engineering Statics & Dynamics

Specialised Modules

- Fundamental of Petroleum Engineering
- · Petroleum Geology
- YEAR 2

Common Modules

- Engineering Software and Applications
- · Engineering Mathematics 3
- Innovation Process

Specialised Modules

- · Petroleum Geochemistry
- · Element of Reservoir Rock & Fluid Properties
- Fluid Mechanics
- · Safety in Oil & Gas Engineering
- Formation Evaluation & Well Logging
- · Reservoir Engineering 1
- · Thermodynamics & Heat Transfer

/48 / ENGINEERING

YEAR 3

- **Common Modules**
- Engineering Mathematics 4
- Engineering Project Management
- Venture Building

Specialised Modules

- Reservoir Simulation
- Drilling Engineering
- · Reservoir Engineering 2
- · Well Design & Completion Production Engineering
- Enhanced Oil Recovery
- Well Testing
- Gas Engineering
- INTERNSHIP (16 weeks)

MQA Compulsory Subjects*

- Appreciation of Ethics and Civilisation (M'sianStudents)
- Malay Communication Language (Int'l Students)
- Philosophy and Current Issues (*All students are required to successfully complete these modules as stipulated by the Malaysian Qualification Agency)

YEAR 4

Common Modules

- Project Phase 1 (Investigation)
- Project Phase 2 (Implementation) Group Design Project
- Engineer in Society

Specialised Modules

- Computer Systems Security
- Knowledge Discovery & Big Data Analytics
- **Elective Modules (Choose 2)**

Cloud Infrastructure & Services

- Internet of Things: Concepts & Applications
- Renewable Energy
- Emergent Technology
- · Workplace Professional Communication Skills
- Employee & Employment Trends
- · Co-Curriculum

YEAR 4

Common Modules

Engineer in Society

Specialised Modules

Petroleum Economics

Drilling Hydraulics

Co-Curriculum

Project Phase 1 (Investigation)

Field Development Project 1

Field Development Project 2

Elective Modules (Choose 2)

· Advanced Well Test Analysis

Advance Well Completion

Advanced Drilling Engineering

Workplace Professional Communication Skills

Employee & Employment Trends

Project Phase 2 (Implementation)

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

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:

Computing, Technology, Multimedia & Games Development

- · 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

Engineering

- Regenerative Power
- Renewable/Green Energy
- Sustainable Development
- . Rapid Prototyping
- **Material Science**
- Modeling of Quantum Dot Systems •
- $\cdot\,$ Silicon-based Microdosimeter Applications
- Humanoid Robot development .
- Active RFID System in Multi-Hop Wireless Sensor Network
- Automatic Object Retrieval Systems Based on
- Speech Dictation Technology
- Robotics Haptic and Tactile Sensor development
- **Robotics Vision development**
- **Biomedical Robotics**
- · Seismic Imaging
- Reservoir Engineering
- Noise Filtration
- Sub-Sea Cable Trenching
- Signal Processing
- Nanoelectronics
- Microelectronics

INNOVATIVE INDUSTRY-BASED RESEARCH CENTRES @ APU

Asia Pacific Centre of Analytics (APCA)

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

Centre for Research and Development of IoT (CREDIT)

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

APU IEEE Student Branch

APUIEEE 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.

APU Motorsports Club

The Club focuses on performance and eco-friendly competitions. The academic staff and students work on constructing efficient cars based on materials study, structural engineering, engine optimum performance and control mechanisms for local races such as EIMA, GT 128, IPMA and Formula Y.

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, forwardlooking 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 5C core and Radio Access Network Infrastructure. The developed 5C 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 5C lab in association with the other research centers of APU will facilitate research in 5C network security, Network Data Collection and Analysis for Smarter 5C/6CNetwork and Highspeed Sensor Networks for Autonomous Industry.













INNOVATIVE INDUSTRY-BASED RESEARCH CENTRES @ APU

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.





State-of-art* Engineering Equipment













It's all going on @APU Students from over 130 countries *





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.

CYBERSECURITY EXCELLENCE AWARDS

- Gold Winner (Best CyberSecurity Education Provider in Asia) 2022
- 2021 Gold Winner (Best CyberSecurity Education Provider in Asia)
- 2020 Gold Winner (Best CyberSecurity Education Provider in Asia)
- 2019 Gold Winner (Best CyberSecurity Education Provider)

INSTITUTE OF ENGINEERS MALAYSIA (IEM) AWARD

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

SOCIETY OF PETROLEUM ENGINEERS (SPE) INTERNATIONAL

- 2022 Society of Petroleum (SPE) Presidential Award for Outstanding Student Chapter
- 2021 - Student Chapter Excellence Award

INTERNATIONAL INVENTION, INNOVATION & TECHNOLOGY

- **EXHIBITION (ITEX)** 1 Gold Award for the Invention, Innovation and Technology 2022
- category 2019 1 Gold Award for the Invention, Innovation and Technology category
- 2018 1 Bronze Award for the Invention, Innovation and Technology category
- 2018 1 Silver Award for the Invention, Innovation and Technology category
- 2018 1 Silver Award for the Invention, Innovation and Technology category
- 2017 1 Silver Award for the Invention, Innovation and Technology category
- 2016 1 Gold Award for the Invention, Innovation and Technology category
- 2016 1 Silver Award for the Invention, Innovation and Technology category
- 2016 Best Green Invention Award 2015
- 1 Gold Award for the Invention, Innovation and Technology category 2015 1 Bronze Award for the Invention, Innovation and Technology
- category 2014
- 1 Gold Award for the Invention, Innovation and Technology category 2014
- 1 Bronze Award for the Invention, Innovation and Technology category 2013
- 2 Silver Medals for the Invention, Innovation and Technology category
- 2013 2 Gold medals for the innovator category

RESEARCH & INNOVATION POSTER COMPETITION (RIPC)

- Gold Winner in the Category: Master Science, Technology, 2022 Engineering, and Mathematics
- Gold Award in the Category C1: Degree Final Year Project 2021 Science, Technology, Engineering and Mathematics

RHB GET YOUR HACK ON: DATA EDITION

2022 - Winner of AWS Special Award

INTERNATIONAL INNOVATION ARSVOT MALAYSIA (IAM)

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

INTERNATIONAL UNIVERSITY CARNIVAL ON E-LEARNING (IUCEL) COMPETITION

- 2022 2 Silver Awards for the Invention, Innovation and Design on e-Learning (IIDEL) category
- 2022 1 Bronze Awards for the Invention, Innovation and Design on e-Learning (IIDEL) category
- 2021 Gold
- 2021 Silver
- 2021 Silver
- 2019 Gold
- 2019 Gold
- 2019 Silver 2018
- Gold 2018 Gold
- 2018 Silver

HILTI GLOBAL IT CHALLENGE

- 2021 - Champion
- 2020 - Champion
- 2020 - 1st Runner Up

ASIA INTERNATIONAL INNOVATION EXHIBITION (AIINEX)

2021 - 2 Gold Awards + 2 Special Awards

FUSION UX-HACKATHON

- 1st Place & Gold Award 2021
- 2021 Silver Award
- 2021 Bronze Award

XYLEM REACH STUDENT HACKATHON

- 1st Prize Winner 2021

THE IMECHE PLC DESIGN COMPETITION

- 2022 1st Runner Up
- 2021 Champion (Degree Level)
- 2021 1st Runner Up (Degree Level) 2021 1st Runner Up (Diploma Level)

TUNKU ABDUL RAHMAN UNIVERSITY COLLEGE (TAR UC) CAPTURE-THE-FLAG COMPETITION

- 2021 - Champion
- 2021 - 2nd Runner Up

THE AWS HACKATHON BUILD ON MALAYSIA

- 2021 - Champion
- 2021 1st Runner Up
- 2nd Runner Up 2021 2020
- Champion - Best Innovation Award 2020

THE VIRTUAL INNOVATION COMPETITION (VIC) AWARD

2021 - 2 Gold Medal in the Category: Tertiary - Science & Technology 2021 Best Video Special Award in the Category: Tertiary - Science & Technology

MAKING HISTORY - AWARDS AND ACHIEVEMENTS

BATTLE OF HACKERS (BOH)	GLOBAL CLIMATE HACK COMPETITION
2021 - Champion	2021 - 3rd Place
2021 - Top 6	2021 - People's Choice Award
2021 - Top 7 2021 - Top 8	INTERNATIONAL INVENTION, INNOVATION & DESIGN EXPO (INoDEx)
	2021 - 4 Silver Awards
UPSI'S CONNECT 2021 – DESIGN 2 CONNECT E-POSTER COMPETITION	
2021 - 1st Prize	VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION (V-MIJEX)
2021 - 2nd Prize 2021 - 3rd Prize	2021 - Silver Award
	THE INTERNATIONAL RESEARCH AND SYMPOSIUM AND EXPOSITION (RISE)
JAMES DYSON AWARD MALAYSIA	2021 - Silver Award
2021 - National Champion	
2020 - National Champion	WOMEN SCIENTIST OF THE YEAR BY HUMCEN AWARDS
THE GREAT GREEN SUSTAINABILITY CHALLENGE 2021	2021 - 2nd Runner Award
2021 - 1st Place & 2nd Place	F-SECURE MDEC CYBERSECURITY COMPETITION
	2021 - 2nd Runner Up
PENANG INTERNATIONAL INVENTION, INNOVATION AND DESIGN (PIID)	2021 - Top 6
2021 - Gold	
2021 - Silver	ATOS GLOBAL IT CHALLENGE
MIFF FURNITURE DESIGN COMPETITION	2020 - Champion 2016 - 1st Runner Up
2021 - Winner	
2021 - Best Mentor Award	INTERNATIONAL ICT INNOVATIVE SERVICES AWARDS
	2020 - Best Innovation Award
WORLD ENGINEERING, SCIENCE & TECHNOLOGY CONGRESS	2019 - Best Innovation Prize
(ESTCON2020) 2021 - Winner of 'Best Paper Award' in the International Conference	ASIA PACIFIC ICT AWARDS (APICTA) MALAYSIA
on Production, Energy & Reliability (ICPER) category	(MULTIMEDIA DEVELOPMENT CORPORATION)
	2020 - Top Award for 'Best of Tertiary Student Project'
SUSTAINABLE DEVELOPMENT GOALS (SDG) FILMFEST	2019 - Top Award for 'Best of Tertiary Student Project'
2021 - Winner of 'Best Overall Film'	2016 - Top Award for 'Best of Tertiary Student Project'
2021 - Winner of 'Dramatization or Re-Enactment Award'	2013 - Top Award for 'Best of Tertiary Student Project'
2021 - Winner of 'Best Production Value Award'	 2012 - Top Award for 'Best of Tertiary Student Project' 2011 - Winner of 'Special Jury Award' by the Prime Minister
DIVERSITY AND INCLUSION YOUTH CONFERENCE (DYIC) COVID-19	2011 - Top Award for 'Best of Tertiary Student Project'
BUSINESS STARTUP CHALLENGE	2011 - Top Award for 'Best of Tertiary Student Project'
2021 - Grand Prize	2011 - Top Award for 'Best of Tertiary Student Project'
	2010 - Top Award for 'Best of Tertiary Student Project'
MERDEKA AWARD PRESENTATION CEREMONY 2021 - Grantee of the Merdeka Award Grant for International	2008 - Top Award for 'Best of e-Inclusion & e-Community' 2005 - Top Award for 'Best of Applications & Infrastructure Tools'
Attachment	2004 - Top Award for 'Best of Education's a mastracture roots
	2004 - Top Award for 'Best of Applications & Infrastructure Tools'
THE 3RD INTERNATIONAL ACADEMIC AND RESEARCH EXCELLENCE	2004 - Merit Award for 'Best of Research & Development'
AWARDS (IARE)	2003 - Merit Award for 'Best of Research & Development'
2021 - The Best Academician of the Year Award (Male) (Overseas)	2002 - Merit Award for 'Best of Smart Learning Applications' 2001 - Merit Award for 'Best of Smart Learning Applications'
PEKAN RAYA STATISTIKA DATA ANALYSIS COMPETITION	2000 - Merit Award for 'Best of Smart Learning Applications'
2021 - Best Algorithm Award	2000 - Top Award for 'Best of Student Projects'
	1999 - Merit Award for 'Best of Student Projects'
28TH NATIONAL MATHEMATICAL SCIENCE SYMPOSIUM	
2021 - PERSAMA Award for Best PhD Thesis and Best Academic Article	F-SECURE INTERVARSITY CYBERSECURITY CHALLENGE
Alticle	2020 - Champion
THE 4TH INTERNATIONAL CONFERENCE ON MULTI-DISCIPLINARY	2018 - Champion and 2nd Place
RESEARCH STUDIES AND EDUCATION (ICMDRSE) 2021	2017 - Champion
2021 - Winner of 'Best Paper Presentation Award'	2016 - Champion
	MALAYSIAN ACTUARIAL STUDENTS ASSOCIATION (MASA) HACKATHON
WORLDSKILLS MALAYSIA UNIVERSITY CHALLENGE (WSMUC) 2021 - Medallion Of Excellence in the Category: Mechanical	2020 - Champion
Engineering CAD (Computer-aided Design)	2020 - 1st Runner Up
	2020 - 2nd Runner Up
AIM DATA SCIENCE FACULTY EXCELLENCE AWARD	
2021 - Outstanding Graduate Student Teaching Award	ACCA POWER OF ETHICS COMPETITION
DATA VISUALIZATION COMPETITION, DATA CHALLENGE - TELL A	 2020 - Champion of 'Most Creative Promotional Video' 2020 - 1st Runner Up of 'Best In-Campus Promotional Campaign'
STORY WITH DATA	,
2021 - Viewer's Choice Award	MALAYSIA RESEARCH ASSESSMENT (MYRA®) RATINGS 2020
WOMEN ICON IN ACCOUNTING THE THEFT	2020 - Special Award (Best Achievement)
WOMEN ICON, IN ASSOCIATION WITH TIMES WOMEN 2021 - Outstanding Academician Award highlighted with No.1	ERNST & YOUNG (EY) ASIA-PACIFIC CYBER HACKATHON CHALLENGE
Women Excellence Award	2019 - Champion
2021 - Emerging Women Award highlighted with No.1 Women	
Excellence Award	NATIONAL MATHEMATICS COMPETITION
	2019 - Champion and Consolation Prize
UIJIR ACADEMIC RESEARCH FOUNDATION INDIA 2021 - Young Researcher Award	2018 - Champion

2021 - Young Researcher Award

INTERNATIONAL RESEARCH FELLOWSHIP AWARD BY MAE FAH LUANG UNIVERSITY (MFU), THAILAND 2021 - International Research Fellowship Award

Top University Award Champion ("APT, Malware & Cyber powered by FireEye" track) Champion ("Engineering & Cyber - powered by IET" track)

 2018
 Champion ("Engineering & Cyber – powered by IET" track)

 2018
 2018

 2018
 201 Runner Up (Cyber Security Challenge 2018 - National Finals)

For more awards listing, please visit APU website.

KPMG CYBER SECURITY CHALLENGE

2018 -2018 -







APIIT EDUCATION GROUP

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

(A Member of the APIIT Education Group)

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

DU030(W) | DK121(W)

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

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