UMMU®
MULTIMEDIA UNIVERSITY

Life Made Easier™ | **TM** Group

INFORMATION TECHNOLOGY AND COMPUTER SCIENCE

Global.
Entrepreneurial.
Trendsetter.

#GOFORIT

Where Your Future Begins

www.mmu.edu.my

"Education is the most powerful weapon used to change the world. Our greatest responsibility as educators is to teach our students to think both intensely and critically. By equipping our students with the right tools, knowledge and skills, they can go out into the world and shape their future.

As a Premier Digital Tech University and being a trendsetter of the private higher learning provider in Malaysia, we are steadfast in preparing our graduates for leadership roles in their respective disciplines and professions."

—
PROFESSOR DATUK TS. DR. AHMAD RAFI
MOHAMED ESHAQ
CEO/President, Multimedia University

INFORMATION TECHNOLOGY AND COMPUTER SCIENCE AT MMU

If you have your heart set on a career in Information Technology and Computer Science, MMU is the university for you. Listed in the **Top 350 QS World University Rankings** in Computer Science and Information Systems, 2018, MMU offers award-winning, practical and industry-ready degrees that will allow you to make a real and lasting impact as an ICT specialist.

Expertise and knowledge are what we seek to empower our students with. We are committed to offer programmes that will enhance your depth and perception as well as employability in the field of ICT.

Both our Faculty of Computing & Informatics and Faculty of Information Science & Technology incorporate industry-led curriculum so you will gain not only technical knowledge and skills, but also relevant soft and management skills. Many of your lecturers are professionals and specialists in their fields who will be able to impart real-life experience and solutions to your learning. We also have strong collaborations with global industry leaders who are ready to share their knowledge of cutting-edge innovative technologies to keep you up-to-the-minute with current and future industry needs.

PROMOTING INNOVATION AND ENTREPRENEURSHIP

MMU was the **first private university approved** by the Malaysian government. We adhere to the strictest requirements for a high quality degree; going beyond academic excellence to offer the best, complete and balanced university experience for our students.

A study by Gartner and MSC Malaysia found that MMU is among the **top five universities** preferred by major ICT players for graduate employment - a testament to the quality of our academicians, curriculum, student development programmes and our solid reputation with the industries.

One of the university's primary objectives is to be able to **inspire and innovate others**. We understand that the future lies in technology, and we are adamant to help shape people who will help make a better tomorrow.

"I've always been interested in seeing the world and meeting international peers; in challenging myself as a student, to grow and eventually, take my place in a global society."

—
TAN KIM HUI
Microsoft Services Executive at Petronas Group ICT.

AN
AWARD-WINNING
UNIVERSITY WITH A
GLOBAL OUTLOOK

- Be part of a globally ranked university that is listed in the **QS World University Rankings** and continues to strive with solid breakthrough to be at the 175th spot in **QS Asia University Rankings 2019**.

- Study alongside 1,500 **international students** from more than 70 countries.

- Experience the best and latest technologies from our collaborations with **major ICT players** such as ZTE, Nokia, Intel, Microsoft, Cisco and Motorola.

- Get exposure to some of the **best practices of the world's best universities** such as MIT, Stanford, Carnegie Mellon, Harvard, USC and Tokyo University.

Top 200 in QS Asia University Rankings 2019

Top 3 - Most Entrepreneurial Private University
MOHE Entrepreneurial Award (MEA) 2016

Awarded Self-Accreditation Status, 2017
Malaysian Qualifications Agency (MQA) 2017

97% Employability within 6 months of graduation
Ministry of Higher Education (MoHE) Tracer Study & MOE Kemaskini Status Pekerjaan 2015

MMU's IT Graduates are the most preferred by Malaysian Firms
Frost & Sullivan Asia Pacific (MDEC's Malaysian Digital Talent Study 2017 Final Findings)

Premier Digital Tech University Status, 2017
Ministry of Higher Education (MoHE) and Malaysia Digital Economy Corporation (MDEC)

AN
ENTREPRENEURIAL
UNIVERSITY WITH INDUSTRY-READY PROGRAMMES

A Well-rounded Education

Be empowered with the fundamentals of your field of study
that also incorporate entrepreneurial skills and expertise which
are relevant to your respective industries and job markets.

Industry in Campus

Be connected and gain benefit from our
state-of-the-art labs established by our industry
collaboration with ZTE, Microsoft, Intel and many more.

Ready for Industry

Be enthused with Start-up Schemes from the
Entrepreneur Development Centre (EDC) to encourage
innovation and entrepreneurship ventures.

MMU Alumni

"MMU's international atmosphere
helped me to value diversity in the
workplace. It was one of the most
important benefits of studying in
MMU. Most of my friends are in
multi-national companies and
they got it within months of their
graduation. My HR colleagues
also recognise MMU graduates
for their perseverance."

—
EMIR PRATHAMA PUTRA
IT Project Manager, Credit Suisse Group

A UNIVERSITY THAT IS AN
INDUSTRY TRENDSETTER

- We offer programmes which are tailored to industry's needs.

- Nearly 50% of our programmes are developed for fast growing industries.

- We produce graduates who are setting new standards in Malaysia's industries. Among our successful alumni are Mohd Nizam Abd Razak, the Creator of BoBoiBoy, who has boosted the animation industry in Malaysia and Tan Aik Keong, Director of Agmo Studio, a multi-award winning mobile app development company.

A **VIBRANT** AND **CONDUCIVE** CAMPUS LIFE.

- Convenient and comfortable accommodation – on-campus and off-campus.
- Intelligent and high-tech labs.
- Digital libraries.
- Set studio and post-production suite.
- Over 100 clubs and societies.
- Extensive infrastructure – campus-wide Wi-Fi, health clinics, mosques, 24-hour security, food & beverage outlets and more.
- Comprehensive Sports Centre – track & field, indoor sports arena, gym as well as an olympic-sized swimming pool.

Scan this code
to view more on
our facilities.

TOP
MALAYSIAN PRIVATE UNIVERSITY*

In this constantly evolving digital world, Information and Communication Technology is more important than ever. As ICT continues to transform the way people communicate, learn, work and play, the career prospects for IT graduates are both diverse and rewarding. Whether it's Artificial Intelligence, Data Science, Security Technology or Software Engineering, a degree from MMU will definitely hold you in good stead for the future.

Our mission is to cultivate talents who are idea innovators, solution providers, and catalysts of change in computing and informatics.

* Top 3 in QS Asia University Rankings 2019 among private universities in Malaysia.

WHY ICT AT MMU

Strong collaborations with multi-national companies such as Cisco Networking Academy, Microsoft IT Academy, Oracle Academy, Linux Professional Institute and EC-Council
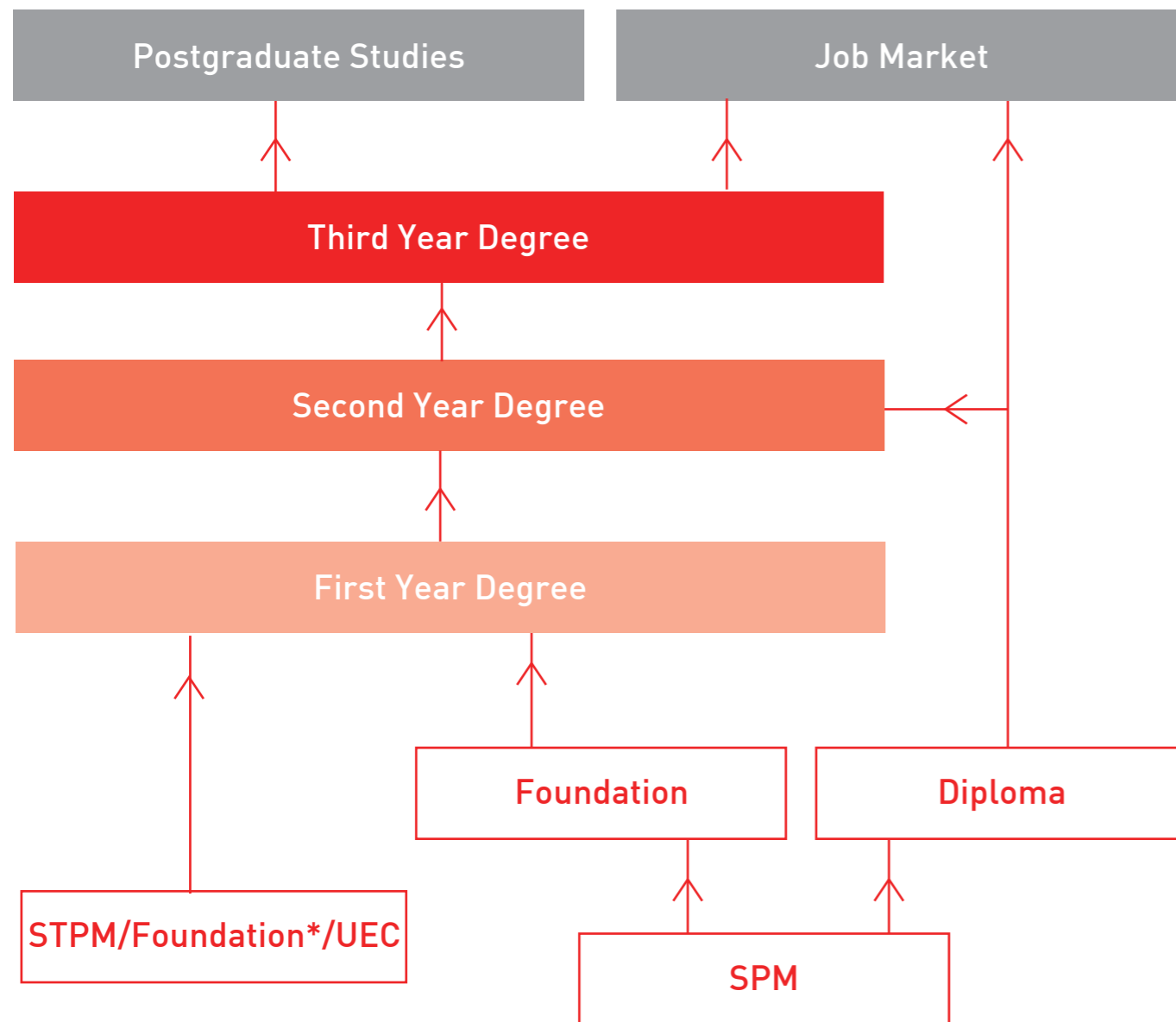
One of the **best teaching labs** in private universities, equipped with world-class research and teaching facilities such as SMART and Innov8 labs

Academically and professionally certified lecturers (CCNA, CCNP, MCP, MCTS, MTA and OCP)

ICT Knowledge Creation for fast growing industries

Forefront Curriculum Design and **Industry Placement Opportunities** to bridge academic studies with practical experience

STUDY ROUTE

There isn't just one route to discover and develop your true potential. At MMU, we cater to nearly every possibility.

```
┌──────────────────────┐      ┌──────────────────────┐
│ Postgraduate Studies │      │      Job Market      │
└──────────┬───────────┘      └──────────┬───────────┘
           ↑                             ↑          ↑
┌──────────────────────────────────────────┐       │
│           Third Year Degree              │        │
└──────────────────┬───────────────────────┘       │
                   ↑                                │
┌──────────────────────────────────────────┐       │
│          Second Year Degree              │◄───────┤
└──────────────────┬───────────────────────┘        │
                   ↑                                │
┌──────────────────────────────────────────┐        │
│           First Year Degree              │         │
└────────┬─────────────────────┬───────────┘         │
         ↑                     ↑                      │
                    ┌──────────────────┐   ┌──────────────────┐
                    │    Foundation    │   │     Diploma      │
                    └────────┬─────────┘   └────────┬─────────┘
                             ↑                      ↑
┌──────────────────────┐   ┌──────────────────────────┐
│ STPM/Foundation*/UEC │   │           SPM            │
└──────────────────────┘   └──────────────────────────┘
```

* *Foundation from a recognised institution*

FACULTY OF COMPUTING AND INFORMATICS

Cyberjaya Campus

Located within Cyberjaya and built on an 80-hectare plot of land, MMU Cyberjaya is equipped with various intelligent features such as multimedia learning facilities, intelligent building systems, a digital library, and an integrated campus management system designed to nurture innovative ICT graduates.

Scan this code to view our faculty video.

Foundation in Information Technology

(R/010/3/0088) 12/17 (A8670)

In an ever-changing, technologically-dependent world, our one-year Foundation in Information Technology programme aims to produce students who are well-equipped with computer skills as well as mathematical and problem solving skills. The Foundation in Information Technology programme is delivered through engaging lectures and laboratory work which serve to build knowledge and help develop practical skills.

After completion of the foundation programme you can opt for a degree programme from either Faculty of Computing and Informatics (FCI) or Faculty of Information Science and Technology (FIST).

PROGRAMME STRUCTURE

Trimester 1	Trimester 2	Trimester 3
• Introduction to Business Management • Introduction to Computing Technologies • Communicative English • Mathematics I • Problem Solving and Program Design	• Critical Thinking • Introduction to Digital Systems • Essential English • Multimedia Fundamentals • Mathematics II • Principles of Physics	• Academic English • Mathematics III • Mini IT Project

Bachelor of Computer Science (Hons.)

(R/481/6/0531) 02/20 (A5830)

This three-year programme equips students with fundamental computing knowledge and the latest technology. In year 1, all students learn common subjects before specialising in one of the following areas – Software Engineering, Game Development or Data Science - in the second year. Each designed specialisation prepares students with specific skills. Students will also complete a final year project and undergo industrial training to acquire practical industry experience.

Career Prospects: Researcher, Programmer, Software Development, Project Manager, System Analyst, Database Administrator, IS/SE Consultant, Game Producer, Game Artist & Visualiser, Data Analyst, Data Scientist, Data Engineer.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Calculus • Programming Fundamentals • Discrete Structures & Probability • Professional Development • Computational Methods • Object Oriented Programming & Data Structures • Computer Architecture & Organisations • Database Fundamentals • Research Methodology in Computer Science • U2 • U4	• Software Engineering Fundamentals • Operating Systems • Computer Networks • Object Oriented Analysis & Design • Algorithm Design & Analysis • Elective 1 • Industrial Training • U3 **Specialisation: Software Engineering** • Software Requirements Engineering • Software Design **Specialisation: Game Development** • Computer Graphics Fundamentals • Game Design Fundamentals **Specialisation: Data Science** • Introduction to Data Science • Statistical Data Analysis	• Final Year Project • Elective 2 • Elective 3 • U1 • U1 • Workplace Communication **Specialisation: Software Engineering** • Software Reliability & Quality Assurance • Software Verification & Validation • Specialisation Elective 1 • Specialisation Elective 2 **Specialisation: Game Development** • Game Algorithms • 3D Game Programming • Specialisation Elective 1 • Specialisation Elective 2 **Specialisation: Data Science** • Data Mining • Data Visualisation • Specialisation Elective 1 • Specialisation Elective 2

Note: The above programme structure serves as a guide. Courses may differ according to intakes.

Bachelor of Computer Science (Hons.)

(R2/481/6/0531) 02/20 (A5830)

Specialisations:
- **Software Engineering:** Focuses on designing and developing software systems with innovative methodologies and sophisticated tools. Students are exposed to various techniques of analysing user requirements and specifications, as well as the design, implementation and verification of software system.
- **Game Development:** Integrates fundamental concepts of software engineering with both technical and creative aspects of game design and development. Students are exposed to various types of game production - from 2D to 3D, and from virtual to augmented reality game projects.
- **Data Science:** Focuses on designing and developing solutions to draw useful insights from the availability of large volumes of data, known as Big Data. Students will receive fundamental training in computer science theories and learn techniques on the processing of Big Data for analytics that can be impactful to business.

Specialisation Elective Modules

TWO (2) subjects should be taken from the following based on specialisation:

Software Engineering	Game Development	Data Science
• Theory of Computation	• Game Production	• Data Management
• Programming Language Translation	• Game Physics	• Visual Information Processing
• Introduction to Formal Methods		• Social Media Computing
• Software Evolution & Maintenance		

Elective Modules

THREE (3) subjects should be taken from the following:

- Systems Analysis & Design
- Concepts of Programming Languages
- Programming Language Translation
- Theory of Computation
- Artificial Intelligence
- Parallel Processing
- Web Application Development
- Computer Security
- Introduction to Formal Methods

- Software Evolution & Maintenance
- Game Physics
- Game Design Fundamentals
- Introduction to Data Science
- Visual Information Processing
- Data Management
- Data Mining
- Social Media Computing

University Subjects

U1 – TITAS (Local) or Pengajian Malaysia III (International)
U1 – Hubungan Etnik (Local) or BM Komunikasi II (International)
U2 – Bahasa Kebangsaan or Foreign Language Beginners
U3 – Business and Entrepreneurship in Malaysia
U4 – Co-Curriculum

Bachelor of Information Technology (Hons) (Information Systems)

(R/481/6/0388) 06/19 (A5216)

In this information-driven 21st century, computerised information systems play key roles to the success of organisations. Hence, there is an increasing demand for information systems graduates that are capable to design, develop and implement effective digital solutions to meet the needs for information and decision support of organisations.

This three-year programme prepares students with a strong foundation in applications development of information systems as well as current and emerging technologies related to information systems. The knowledge and skills are essential not only in using information systems effectively, but also to contribute significantly in planning, designing, implementing and maintaining information systems solutions for critical business problems. Graduates of this programme will take the leading roles in shaping our information-driven future.

Career Prospects: Application Developer, Database Administrator, Business Analyst, IT Consultant, Information Systems Manager.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematics for Information Systems I	• Software Engineering Fundamentals	• System Administration
• Mathematics for Information Systems II	• Operating Systems	• Enterprise Application Integration
• Programming Fundamentals	• Computer Networks	• Enterprise Information Systems
• Professional Development	• Object Oriented Analysis & Design	• Computer Security
• Management	• IT Project Management	• Final Year Project
• Object Oriented Programming and Data Structures	• Information Systems Planning and Development	• Elective 1
• Computer Architecture and Organization	• Web Application Development	• Elective 2
• Database Fundamentals	• Advanced Database	• Elective 3
• Workplace Communication	• Industrial Training	• U1
• U2	• U3	• U1
• U4		

Elective Modules

THREE (3) subjects should be taken from the following:

- Human Computer Interaction
- Software Reliability and Quality Assurance
- IT Auditing
- Mobile Applications Development
- Business Analytics
- Trends in Information Systems
- Software Requirements Engineering

University Subjects

U2 – Bahasa Kebangsaan or Foreign Language Beginners	U3 – Business and Entrepreneurship in Malaysia	U1 – TITAS (Local) or BM Komunikasi II (Intl)
U4 – Co-Curriculum		U1 – Hubungan Etnik (Local) or Pengajian Malaysia III (INTL)

FACULTY OF INFORMATION SCIENCE AND TECHNOLOGY

Melaka Campus

Since 1997, the Faculty has been a trendsetter in ICT education and research, with a rigorous academic approach designed to produce innovative graduates who are well equipped to enact positive changes in society.

Scan this code
to view our
faculty video.

Foundation in Information Technology

(R2/481/3/0140) 02/22 (A7858)

In an ever-changing, technologically-dependent world, our one-year Foundation in Information Technology programme aims to produce students who are well-equipped with computer skills as well as mathematical and problem solving skills. The Foundation in Information Technology programme is delivered through engaging lectures and laboratory work which serve to build knowledge and help develop practical skills.

After completion of the foundation programme you can opt for a degree programme from either Faculty of Computing and Informatics (FCI) or Faculty of Information, Science and Technology (FIST).

PROGRAMME STRUCTURE

Trimester 1	Trimester 2	Trimester 3
• Communicative English • Critical Thinking • Algebra • Trigonometry • Computer Applications • Introduction to Computer Architecture and Operating System	• Fundamentals of Business Management • Calculus • Introduction to Multimedia Technology • Physics • Essential English	• Academic English • Introduction to Probability and Statistics • Problem Solving and Programming • Mini Project

Note: The above programme structure serves as a guide. Courses may differ according to intakes.

Foundation in Life Science

(R/010/3/0293) 04/20 (A6686)

The Foundation in Life Science programme is a one-year pre-university programme delivered through engaging lectures, designed to guide students to actively seek knowledge. In this programme, lectures are supplemented with laboratory work to help students develop their practical skills, working confidence and ability to work effectively in a group. Collectively, these subjects provide a holistic, inspiring and balanced educational experience which equip students with a solid foundation for higher levels of learning and nurture their potential for future academic excellence at the tertiary level.

After completion of the Foundation in Life Science programme you can opt for Bachelor of Science (Hons.) (Bioinformatics) degree programme.

PROGRAMME STRUCTURE

Trimester 1	Trimester 2	Trimester 3
• Communicative English	• Essential English	• Academic English
• Algebra	• General Chemistry	• Calculus
• Trigonometry	• Fundamentals of Business Management	• Organic Chemistry
• Cell and Function	• Cellular Reproduction and Genetics	
• Computer Applications	• Problem Solving and Programming	
• Critical Thinking	• Introduction to Probability and Statistics	

Bachelor of Information Technology (Hons.) (Data Communications and Networking)

(R/481/6/0440) 08/19 (A5313)

Data Communications and Networking graduates are expected to possess the knowledge and skills necessary to design, build, maintain and manage network and communication systems in any organisation. Therefore, this three-year programme will educate them on the core components of communication, such as Internet Computing, TCP/IP Programming, High-Speed Networks, Client Server Computing and Real-Time Systems.

Our Data Communications and Networking graduates would be able to branch into any area of communications and apply the knowledge they have acquired in network technology and telecommunications.

Career Prospects: System Programmer, Network Engineer, Network Administrator.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematical Techniques	• Data Structures and Algorithms	• Project
• Computer Programming	• Object Oriented Programming	• TCP/IP Programming
• Database Systems	• System Analysis and Design	• Network Security and Management
• Operating Systems	• Computer Networks	• Cloud Computing
• Discrete Mathematics and Probability	• System Administration and Maintenance	• Integrative Programming and Technologies
• Computer Architecture and Organisation	• Technopreneur Venture	• High Speed Networks
• Data Communications and Networking	• Human Computer Interaction	• Mobile and Wireless Communications
• Ethics and Professional Conducts	• Information Assurance and Security	• Real-Time System
	• Web Techniques and Application	
	• System Integration and Architecture	
	• Routing and Switching	
	• Industrial Training	

Elective Subjects (Choose any Four subjects)

• Project Management for Business Analysts
• Organisational Behaviour
• Internet Marketing
• Applied Cryptography
• Information Theory
• Artificial Intelligence Fundamentals
• Expert Systems
• Introduction to Bioinformatics
• Knowledge Intelligence

University Subjects

U2 - Subject code starts with MPU32XX (for local student who got exemption in SPM Bahasa Melayu & for International Students)
   - MPU3210 Bahasa Kebangsaan A (for local student without credit in SPM Bahasa Melayu)

U3 - Subject code starts with MPU33XX

U4 - Subject code starts with MPU34XX

U1 - Hubungan Etnik and Tamadun Islam dan Tamadun Asia (Local)
   - Bahasa Komunikasi 2 and Pengajian Malaysia 3 (International)

Bachelor of Information Technology (Hons.) Business Intelligence and Analytics

(R2/481/6/0079) 11/21 (A7498)

Today, large quantity of information is produced from various sources rapidly everyday. This poses a challenge to corporations because without the accurate information, effective decisions cannot be made. Businesses are interested in the big data as they provide new acumen in different areas for instance customers, sales and marketing.

This three-year programme equips students with business intelligence and analytical skills to offer insights and improved decision making to corporations in achieving business agility. The objective is to produce graduates who are knowledgeable in the components of information technology and data analytics, capable to plan, design, visualise, analyse and interpret business statistical data.

Career Prospects: SAP Specialist, Data Scientist, Computer Scientist, Knowledge Engineer, Business Intelligence Consultant, IT Business Analyst and Web Analyst.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematical Techniques • Computer Programming • Database Systems • Operating Systems • Discrete Mathematics and Probability • Computer Architecture and Organisation • Data Communications and Networking • Ethics and Professional Conducts	• Data Structures and Algorithms • Object-Oriented Programming • System Analysis and Design • Financial Accounting for Managers • Data Mining and Machine Learning • Technopreneur Venture • Human Computer Interaction • Organisational Behaviour • Software Engineering Fundamentals • Information Systems Development • Business Statistical Analysis • Industrial Training	• Project (Phase 1) • Information Systems Audit • Business Intelligence • Technology Transfer • Knowledge Intelligence • Enterprise Resource Planning • Project (Phase 2) • Internet Marketing • Project Management for Business Analysts

Elective Modules
• Introduction to Microecnomics • Critical Thinking in Organisation • Fundamentals of Marketing • Fundamentals of Finance • Introduction to Macroeconomics • Mobile and Wireless Communications • Artificial Intelligence Fundamentals • Computer Security • Introduction to Bioinformatics • Computer Network

University Subjects	

U2 - Subject code starts with MPU32XX (for local student who got exemption in SPM Bahasa Melayu & for International Students)
    - MPU3210 Bahasa Kebangsaan A (for local student without credit in SPM Bahasa Melayu)
 	
U3 - Subject code starts with MPU33XX
 	
U4 - Subject code starts with MPU34XX
	U1 - Hubungan Etnik dan Tamadun Islam dan Tamadun Asia (Local)
	    - Bahasa Komunikasi 2 and Pengajian Malaysia 3 (International)

Bachelor of Information Technology (Hons.) (Artificial Intelligence)

(R/340/6/0226) 08/18 (A4187)

As computer systems increase their complexity and sophistication, the demand for intelligent advanced applications also increases in proportion. It is now common practice to incorporate intelligent capabilities in the design of any computer application, from web-based intelligent search engines to standalone intelligent applications.

The objective of this three-year degree programme is to equip students with the necessary knowledge and skills required to be successful in building the much-needed intelligent computer systems.

Career Prospects: Data Scientist, Intelligent Software Developer, AI Consultant, Knowledge Engineer, Software Engineer, and Web Analyst.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematical Techniques • Computer Programming • Database Systems • Operating Systems • Discrete Mathematics and Probability • Computer Architecture and Organisation • Data Communications and Networking • Ethics and Professional Conducts	• Data Structures and Algorithms • Object Oriented Programming • System Analysis and Design • Technopreneur Venture • Human Computer Interaction • Machine Learning • Software Engineering Fundamentals • Computational Science • Pattern Recognition • Industrial Training • Programming Language Concept • Artificial Intelligence Fundamentals	• Project • Computational Intelligence • Agent Technology • Expert Systems • Computer Vision • Natural Language Processing • Algorithm Design and Analysis • Semantic Web Technology

Elective Subjects (Choose any 4 subjects)
• Project Management for Business Analysts • Computer Networks • Organisational Behaviour • Cloud Computing • Internet Marketing • Introduction to Bioinformatics • Applied Cryptography • Knowledge Intelligence • Information Theory • Computer Networks

University Subjects	

U2 - Subject code starts with MPU32XX (for local student who got exemption in SPM Bahasa Melayu & for International Students)
    - MPU3210 Bahasa Kebangsaan A (for local student without credit in SPM Bahasa Melayu)
 	
U3 - Subject code starts with MPU33XX
 	
U4 - Subject code starts with MPU34XX
	U1 - Hubungan Etnik dan Tamadun Islam dan Tamadun Asia (Local)
	    - Bahasa Komunikasi 2 and Pengajian Malaysia 3 (International)

Bachelor of Information Technology (Hons.) (Security Technology)

(R/481/6/0439) 08/19 (A5470)

The Security Technology programme is designed to develop knowledge and skills in the security management and technologies necessary for employment in areas such as government and corporate security, strategic facilities security, private sector and retail security, financial institutions and major security organisations.

The course emphasises the functions and management of security technology in the protection of assets and is supported by appropriate studies in cyber law and ethics. Graduates of this course will be equipped for a career in the security industry.

Career Prospects : Security Auditor, Security Penetration Tester, Computer Forensic Investigator, Software Engineer, Systems Analyst, and Programmer.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematical Techniques • Computer Programming • Database Systems • Operating Systems • Discrete Mathematics and Probability • Computer Architecture and Organisation • Data Communications and Networking • Ethics and Professional Conducts	• Data Structures and Algorithms • Object Oriented Programming • System Analysis and Design • Computer Networks • System Administration and Maintenance • Technopreneur Venture • Human Computer Interaction • Information Assurance and Security • Web Techniques and Application • System Integration and Architecture • Computer Security • Industrial Training	• Project • Applied Cryptography • Information Theory • Password Authentication and Biometrics • Integrative Programming and Technologies • Ethical Hacking and Security Assessment • Malware and Intrusion Detection • Digital Forensics

Elective Subjects (Choose any 4 subjects)

• Project Management for Business Analysts
• Organisational Behaviour
• Internet Marketing
• Cloud Computing
• Artificial Intelligence Fundamentals
• Expert Systems
• Introduction to Bioinformatics
• Knowledge Intelligence
• Network Security and Management

University Subjects

U2 - Subject code starts with MPU32XX (for local student who got exemption in SPM Bahasa Melayu & for International Students)
   - MPU3210 Bahasa Kebangsaan A (for local student without credit in SPM Bahasa Melayu)

U3 - Subject code starts with MPU33XX

U4 - Subject code starts with MPU34XX

U1 - Hubungan Etnik and Tamadun Islam dan Tamadun Asia (Local)
   - Bahasa Komunikasi 2 and Pengajian Malaysia 3 (International)

Bachelor of Science (Hons.) (Bioinformatics)

(R/481/6/0708) 02/21 (A6684)

Bioinformatics is dynamic and evolving, representing one of the most rapidly growing and challenging areas in science and technology today.

The MMU Bioinformatics programme is a balance of IT and Life Science plus training in specific applications. A significant component of our programme is practical laboratory experience and problem-based learning, alongside student presentations and lectures in small classes. Projects and Industry experience add another dimension to the knowledge gained in lectures.

Career Prospects: Bioinformatician, Biology Researcher in the health care industry, biomedical, pharmaceutical and biotechnology companies, agricultural industry, environmental management industry, forensics centre, research institutions and universities.

PROGRAMME STRUCTURE

Year 1	Year 2	Year 3
• Mathematical Techniques • Computer Programming • Database Systems • Cell Biology • Biochemistry I • Discrete Mathematics and Probability • Computer Architecture and Organisation • Data Communications and Networking • Bioinformatics Programming I • Biochemistry II	• Data Structures and Algorithms • Operating Systems • System Analysis and Design • Bioinformatics Programming II • Human Anatomy and Physiology • Bioinformatics Algorithms I • Parallel Computing • Basic Human Genetics • Basic Microbiology • Database Design and Management	• Project • Data Mining and Machine Learning • Bioinformatics Algorithms II • Introduction to Molecular Biology • Introductory Course in Pharmacology • Legal, Moral and Ethical Issues in Life Sciences • Industrial Training

Elective Subjects (Choose any 4 subjects)

• Computer Security
• Introduction to Human Pathology
• Computational Intelligence
• Web Techniques and Application
• Human Computer Interaction

• Cloud Computing
• Computer Graphics
• Information Systems Development
• Pattern Recognition
• Organisational Behaviour

University Subjects

U2 - Subject code starts with MPU32XX (for local student who got exemption in SPM Bahasa Melayu & for International Students)
   - MPU3210 Bahasa Kebangsaan A (for local student without credit in SPM Bahasa Melayu)

U3 - Subject code starts with MPU33XX

U4 - Subject code starts with MPU34XX

U1 - Hubungan Etnik and Tamadun Islam dan Tamadun Asia (Local)
   - Bahasa Komunikasi 2 and Pengajian Malaysia 3 (International)

Diploma in Information Technology

(R2/481/4/0010) 07/21 (A7461)

The programme provides students with computing knowledge in planning, implementation, configuration and maintenance of an organisation's computing infrastructure. Students will be exposed to various programming languages and web technologies with which they would be able to configure, integrate and deploy systems as well as provide technical support within an organisation.

The curriculum covers areas such as programming, database, software design, operating systems, data communication & networking, as well as mathematics. Apart from the technical subjects, students will also be exposed to soft skills such as writing and presentation skills to help enhance their interaction and communication and prepare them for real-life working environment.

After completion of the diploma programme, you can opt for a related degree programme from either FCI or FIST.

PROGRAMME STRUCTURE

Trimester 1	Trimester 2	Trimester 3	Trimester 4
• Computer Systems & Applications • Elective 1 • U3	• Mathematical Techniques 1 • Program Design • Computer Architecture • Contemporary Management & Entrepreneurship • English	• Mathematical Techniques 2 • Discrete Structures • Database Systems • U2 • U1	• Operating Systems • Systems Analysis & Design • Elective 2

Trimester 5	Trimester 6	Trimester 7	
• Data Communications & Networking • Internet & Web Publishing • Object Oriented Programming • U4	• Programming in Java • Data Structure & Algorithms • Computing Project • Elective 3 • Effective Communication Skills	• Industrial Training	

Elective Subjects

• E-Commerce
• Multimedia Applications
• Management Information Systems
• Introduction to Probability & Statistics

University Subjects

U1 – MPU2163 Pengajian Malaysia (for local student)
   – MPU2133 Bahasa Melayu Komunikasi 1 (For international student)
U2 – Subject code starts with MPU22XX (for student who get exemption subject BM in SPM & International student)
   – MPU3201 Bahasa Kebangsaan A (for student who have no credit for BM in SPM)

U3 – Subject code starts with MPU23XX
U4 – Subject code starts with MPU24XX

MINIMUM ENTRY REQUIREMENTS

Foundation in Information Technology

• Pass SPM/ O-level or its equivalent with minimum of grade C in at least five (5) subjects, inclusive of Mathematics and English; OR
• Pass UEC with minimum of grade B in at least four (4) subjects inclusive of Mathematics and English; OR
• Other equivalent qualification recognised by the Malaysian Government.

Foundation in Life Science

• Pass SPM/O-level or its equivalent with minimum of grade C in at least five (5) subjects, inclusive of Mathematics, English and any 2 Science subjects; OR
• Pass UEC with minimum of grade B in at least four (4) subjects inclusive of Mathematics and one of the Science subjects; OR
• Other equivalent qualification recognised by the Malaysian Government.

Bachelor of Computer Science (Hons.) (Software Engineering, Information Systems, Game Development and Data Sciences)

• Pass Foundation / Matriculation in related field from a recognised institution, and a credit in Additional Mathematics at SPM Level or its equivalent; OR
• Pass STPM / A level or its equivalent with 3 Principals inclusive of Mathematics, and a credit in Additional Mathematics at SPM Level or its equivalent; OR
• Pass UEC with minimum of grade B in at least five (5) subjects inclusive of Mathematics and English; OR
• Pass Diploma in related field from recognised institution with minimum CGPA of 2.50 and a credit in Additional Mathematics at SPM Level or its equivalent; OR
   *Candidates with CGPA below 2.50 but above 2.00 may be admitted subject to a rigorous internal assessment process.
• Pass any other Diploma in science and technology from recognised institution with minimum CGPA of 2.50 and a credit in Additional Mathematics at SPM level or its equivalent may be admitted subject to a rigorous internal assessment process.
   *Candidates without a credit in Additional Mathematics at SPM level or its equivalent may be admitted if the qualification contains subjects in Mathematics and the achievement is higher or equivalent to the requirement of the subject at SPM level or its equivalent.

Bachelor of Information Technology (Hons.) (Information System, Data Communication and Networking, Business Intelligence and Analytics, Artificial Intelligence and Security Technology)

• Pass Foundation / Matriculation in a related field from a recognised institution, and a credit in Mathematics at SPM Level or its equivalent; OR
• Pass STPM / A level or its equivalent with 3 Principals inclusive of Mathematics, and a credit in Mathematics at SPM Level or its equivalent; OR
• Pass UEC with minimum of grade B in at least five (5) subjects inclusive of Mathematics and English; OR
• Pass Diploma in a related field from a recognised institution with minimum CGPA of 2.50, and a credit in Mathematics at SPM Level or its equivalent; OR
• Pass any other Diploma in science and technology or business studies from a recognised institution with a minimum CGPA of 2.50 and a credit in Mathematics at SPM level or its equivalent may be admitted subject to a rigorous internal assessment process.
   *Candidates with CGPA below 2.50 but above 2.00 may be admitted subject to a rigorous internal assessment process.

Bachelor of Science (Hons.) (Bioinformatics)

• Pass Foundation / Matriculation in related field from a recognised institution; OR
• Pass STPM / A level or its equivalent with 3 Principals inclusive of Mathematics, and one of the Science subjects, and a credit in English at SPM Level; OR
• Pass UEC with minimum of grade B in at least five (5) subjects inclusive of Mathematics, English, and one Science subject; OR
• Pass Diploma in related field from a recognised institution.

Diploma in Information Technology

• Pass SPM/O-level or its equivalent with minimum of grade C in at least three (3) subjects inclusive of Mathematics, and a pass in English;OR
• Pass UEC with minimum of grade B in at least three (3) subjects inclusive of Mathematics, and a pass in English.; OR
• Pass in STPM / A level or its equivalent with minimum of grade C (Grade Point 2.0) in one (1) subject , and a credit in mathematics at SPM level or its equivalent, OR
• Pass in STAM in grade Maqbul, and a credit in mathematics at SPM level or its equivalent, OR
• Pass Certificate in related field from recognised institution and a credit in Mathematics at SPM level or its equivalent.*

*Candidates without a credit in Mathematics at SPM level or its equivalent may be admitted if the Certificate programme contains subjects in Mathematics that are equivalent to Mathematics at SPM Level.

English Entry Requirement for International Students:
• All programmes offered by Faculty of Computing & Informatics and Faculty of Information Science & Technology require a minimum score of 5.0 in IELTS or its equivalent.
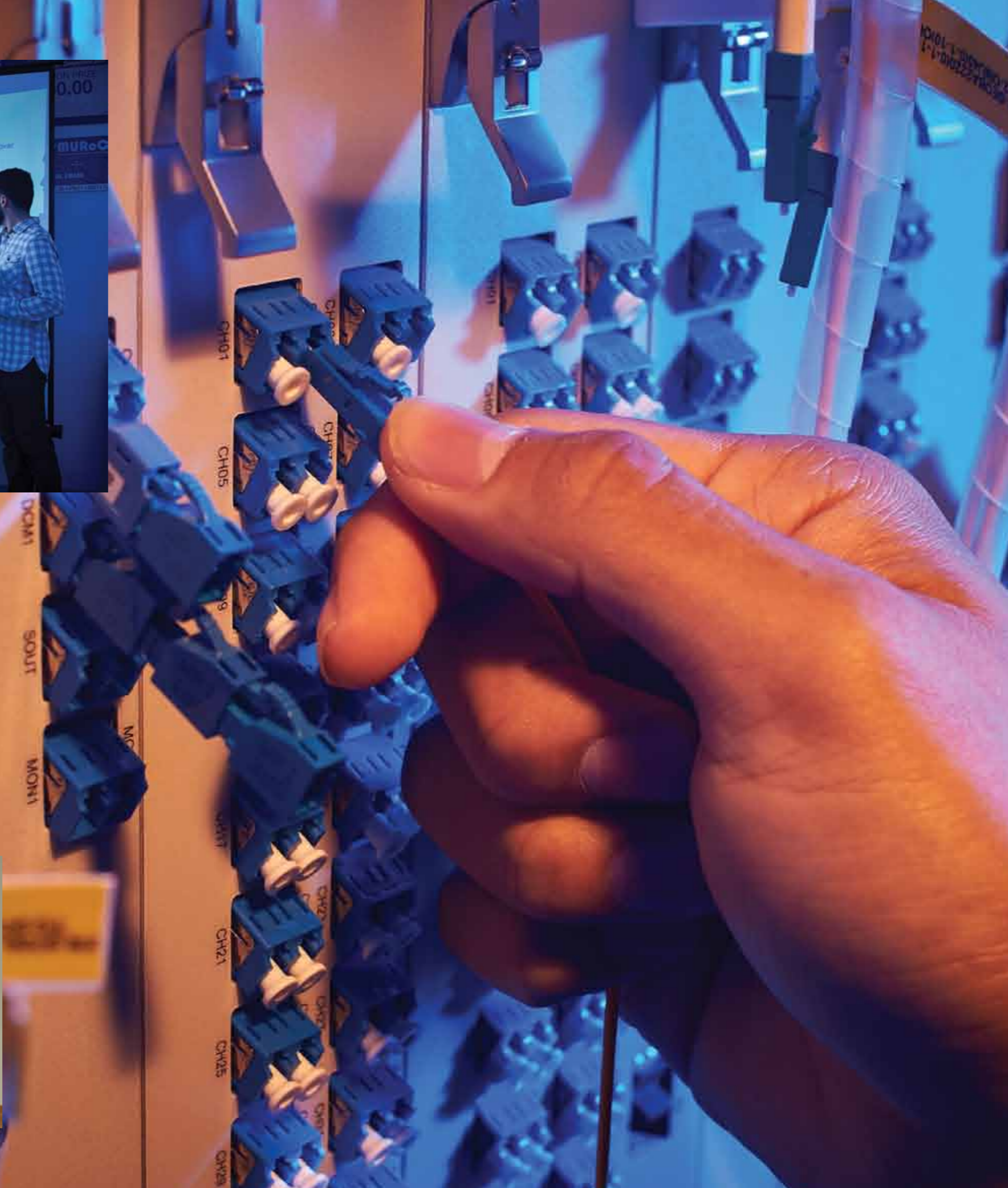
MULTIMEDIA UNIVERSITY [DU001(B)]

Cyberjaya Campus
Jalan Multimedia
63100 Cyberjaya
Selangor

Melaka Campus
Jalan Ayer Keroh Lama
75450 Melaka

Johor Campus
Persiaran Canselor 1
Educity@Iskandar
79200 Iskandar Puteri, Johor

Get in touch

1 300 800 668

www.mmu.edu.my
info@mmu.edu.my

mmu.malaysia
mmumalaysia