

**AIMST
UNIVERSITY**
Educating Tomorrow's Leaders

FACULTY OF **ENGINEERING & COMPUTER TECHNOLOGY**

About AIMST University

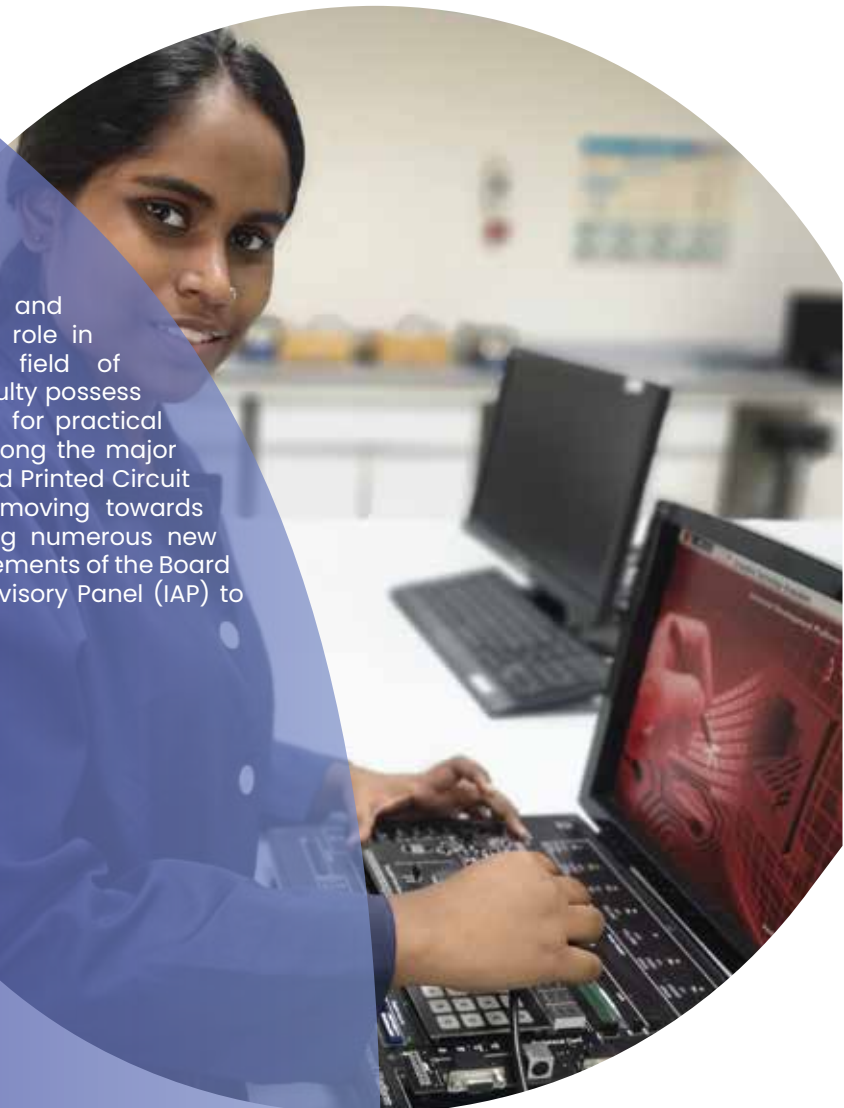
AIMST University is a premier private university catering to the needs of local and international students. It offers high-quality education globally recognised by the relevant professional bodies and industries. The University also emphasizes international exposure through a network of numerous international partners. In addition, student exchange programmes help our students to develop global perspectives and skill sets. As a result, AIMST's graduates enjoy 100% employability in leading national and international organizations within six months of graduation.



Dean's Message

Mr. Raman Raguraman
Deputy Dean, Faculty of Engineering and Computer Technology

AIMST University's Faculty of Engineering and Computer Technology (FECT) plays a major role in producing all-rounded engineers in the field of electrical and electronics engineering. The faculty possess a highly integrated laboratory that is tailored for practical sessions for real-time industrial exposure. Among the major fields of expertise are VLSI Design & Testing and Printed Circuit Board (PCB) Design & Fabrication. FECT is moving towards Industrial Revolution 4.0 (IR4.0) by integrating numerous new technologies and emphasising the strict requirements of the Board of Engineers Malaysia (BEM) and Industrial Advisory Panel (IAP) to ensure 100% employability.





Diploma in Electrical & Electronic Engineering

(R3/523/4/0078) (02/29) (A 7448)

Engineers have created modern technology and structures in which we live. Engineering is therefore challenging and creative. It requires hardwork but is fulfilling.

Uniqueness of the Programme



The programme is accredited by MQA whereby students will be able to pursue to BEM accredited Engineering bachelor programme.



1 year credit exemption will be offered to candidate pursuing B.Engineering programme



Rebate provided



Get employed to reputable industries



Students are exposed to hands-on activity



Course Structure

YEAR 1	YEAR 2	YEAR 3
<ul style="list-style-type: none"> • Mathematics I • Electronic Devices and Circuits • Electrical Circuits • Introduction to Computer Programming • Engineering Science • MPU 2 (Elective 1) • English I • Mathematics II • Electrical Machines I • Principles of Communication Systems • Digital Electronics • MPU 1 (Compulsory) • English II 	<ul style="list-style-type: none"> • Mathematics III • Electrical Machines II • Generation and Transmission • Industrial Management Safety and Ethics • CAD, Simulation and Drafting • MPU 3 (Elective) • Distribution and Utilisation • Microprocessor and Microcontroller • Power Electronics • Instrumentation and Control Systems • Estimation of Electrical Installations • MPU 4 • Industrial Training 	<ul style="list-style-type: none"> • Power System Protection and Switchgears • Electrical Drives and Control • Final Year Project • Robotics • Troubleshooting of Electrical Machines • Renewable Energy Resources • VLSI Techniques • PLCs and Applications

Entry Requirement

- **SPM or its equivalent**
Pass with at least credits in THREE (3) subjects, including Mathematics and ONE (1) relevant science / technical / vocational subject AND a pass in English
- **Sijil Tinggi Persekolahan Malaysia (STPM) or its equivalent**
Pass in Mathematics, English and ONE (1) relevant science / technical / vocational subject at the SPM level
- **Recognised related Vocational and Technical / Skills Certificate or its equivalent**
Pass with ONE (1) year of relevant work experience or a minimum of ONE (1) semester of a bridging programme.
- **Recognised Certificate in Engineering / Engineering Technology or its equivalent**
- **Other qualifications**
Will be assessed and referred for approval on case by case basis
 - For International students, TOEFL score of 500 or IELTS score of 5.0 OR its equivalent.

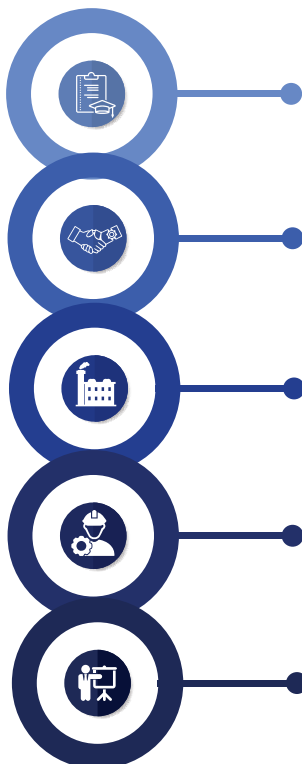


Bachelor of Engineering (Hons) in Electrical & Electronic Engineering

(R3/523/6/0075) (08/25) (MQA/FA 2774)

Electrical and Electronic Engineering has rapidly penetrated into many diverse areas such as Power Generation and Distribution, Process Control and Automation, VLSI Design, Manufacturing and Computer Engineering.

Uniqueness of the Programme



Accreditation by EAC. Therefore our programme is also recognised by the Sydney and Washington accord which will enable students to pursue their engineering carrier further internationally.

Industrial Revolution 4.0 (IR 4.0) related courses have been implemented (such as Robotics, IOT, Cyber Security, Big Data Analytics)

Strong engagement with industry. Currently our Industrial Advisory Panels (IAP) are from potential industries (such as Intel, Kontron, and Telecom)

100% employability. All our graduated candidates are employed in prominent industries

Qualified and competent local and international academic staff



Course Structure

YEAR 1	YEAR 2
<ul style="list-style-type: none"> • Engineering Mathematics 1A • Electronic Devices • Programming Technique • Electrical Circuits • English for Specific Academic Purposes • Engineering Mathematics 1B • Engineering Materials • Digital Circuits & System Design • English for Professional Purposes • MPU Compulsory • MPU Elective 	<ul style="list-style-type: none"> • Engineering Mathematics 2A • Electronic Circuits • Electromagnetic Fields & Waves • Electrical Machines 1 • Measurements & Instrumentation • MPU Elective • Engineering Mathematics 2B • Signals & Systems • Communication Systems • Electrical Machines 2 • MPU Compulsory • MPU Elective
YEAR 3	YEAR 4
<ul style="list-style-type: none"> • Control Systems • Generation & Transmission • Linear Integrated Circuits • Microprocessor & Microcontroller • Project Management & Finance • Digital Signal Processing • Engineers & Society • Power System Analysis • Power Electronics & Drives • Electric Power Distribution & Utilization • Integrated Design Project-Phase I • Industrial Training 	<ul style="list-style-type: none"> • Final Year Project –Phase I • High Voltage Engineering • Integrated Design Project-Phase II • Internet of Things • Big Data Analytics • Artificial Intelligence • Final Year Project –Phase II • Sustainable Engineering • Robotics • Cyber Security • Smart Grid

Entry Requirement

- AIMST Foundation/ STPM/Matriculation/ Pre-University Programme or its equivalent
Pass with minimum Grade C (CGPA 2.0) in Mathematics and ONE (1) relevant Science subject and Pass SPM or its equivalent with at least a pass in English
 - Recognised Diploma in Engineering / Engineering Technology or its equivalent
Pass with minimum CGPA 2.0
 - Recognised related Vocational and Technical / Skills Diploma
Pass with minimum CGPA 2.0 and a pass in English at SPM level.
 - Other qualifications
Will be assessed and referred for approval on case by case basis
- For Malaysian students MUET band 2 upon registration for Bachelor Engineering programme
- For international candidates pass IELTS with min band of 5.0 or TOEFL with min 500 paper-based or equivalents



Bachelor of Computer Science

(N/481/6/0838)(01/29)(MQA/PA15140)

● Specialism in Artificial Intelligence

Machine Learning / Applications of Deep Learning / Natural Language Processing / Neural Networks / Statistical Modelling and Data Analysis / Internet of Things / E- Commerce / Robotics / Data Warehouse Manager / Digital Image Processing / Law in Intelligent System

● Specialism in Data Analytics






Data Mining / Introduction to Big Data / Statistical Modelling and Analysis / Applications of Deep Learning / Internet of Things / Database Management System / E-Commerce / Investigation in Data Analytics / Data Structures / Data Base Security / Data Warehouse Manager

● Specialism in Cyber Security

Cryptography and Network Security / Internet of Things / Cloud Computing / Wireless Communication for 5G / Web Technology / Digital Forensic / Ethical Hacking / Security Audit and Assessment / Software Security Assurance / Firewall and Intrusion Detection / E-Commerce

Computer science is the study of computers and computing as well as their theoretical and practical applications. Computer science applies the principles of mathematics, engineering, and logic to a plethora of functions, including algorithm formulation, software and hardware development, and artificial intelligence.

Uniqueness of the Programme

-  Industrial Revolution 4.0 (IR 4.0) syllabus featuring AI, Cyber Security, and Data Analysis
-  Access to specialized computing labs with high-performance cyber platforms
-  Exposure to employer projects and collaboration from our industry partners
-  Design and develop systems, software and application technologies
-  Prominent internship opportunities at multinational companies



Course Structure

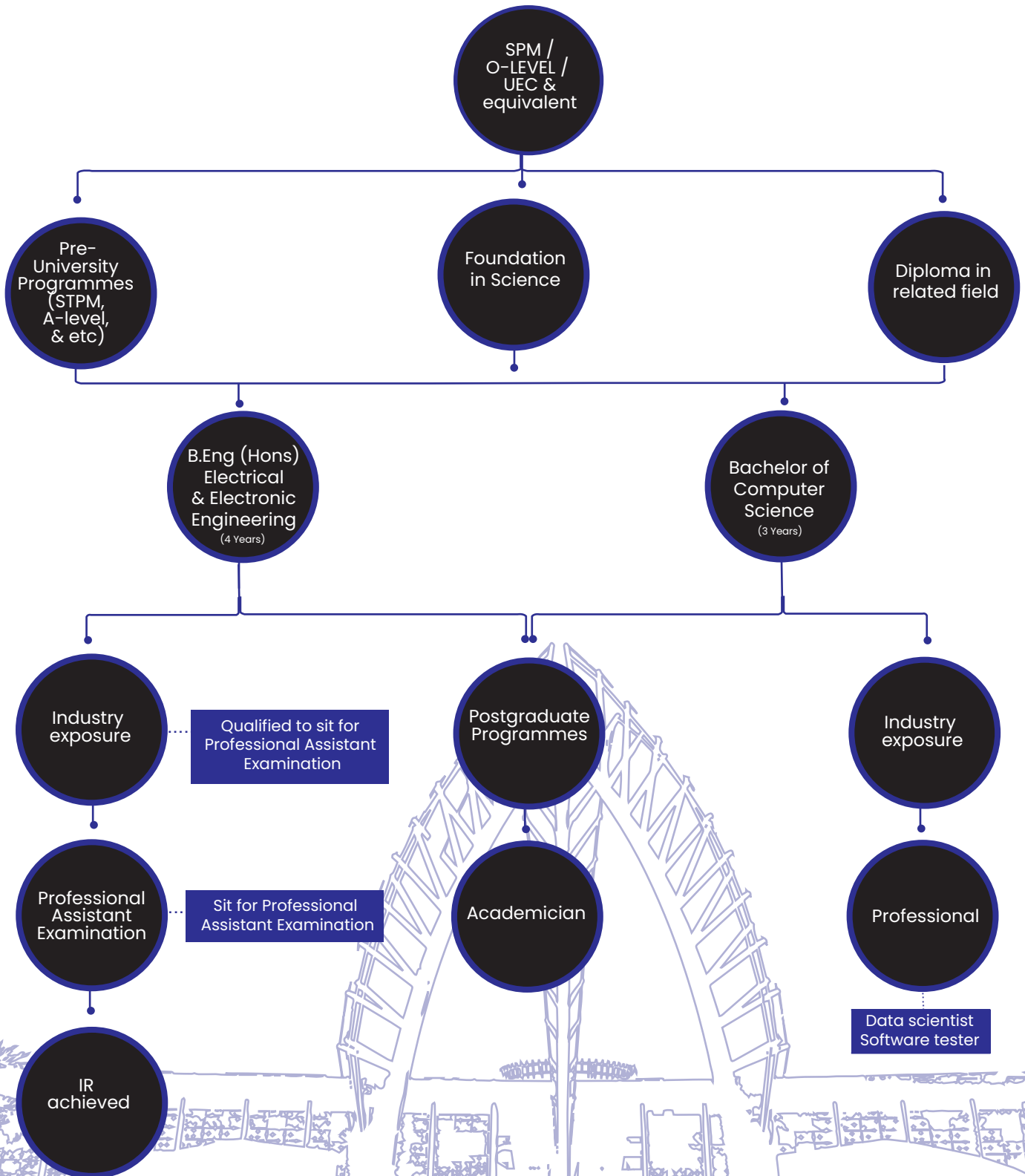
Bachelor of Computer Science

YEAR 1	YEAR 2	YEAR 3
<ul style="list-style-type: none"> • Computing Mathematics • Computer Organization and Architecture • Programming Technique • Operating Systems • Python Programming • Object-Oriented Programming with C++ • Discrete Structures 	<ul style="list-style-type: none"> • Artificial Intelligence & Intelligent Agents • Networking & Communications • Software Development Fundamentals • Project Management & Finance • Social Issues and Professional Practice • Information Management • Software Engineering Methods • Parallel and Distributed Computing • Information Assurance and Security • Elective- 1 • Elective- 2 • Elective- 3 	<ul style="list-style-type: none"> • Human-Computer Interaction • Algorithms and Complexity • Elective- 4 • Elective- 5 • Elective- 6 • Final Year Project Phase-I • Embedded System Fundamentals • Graphics and Visualization • Elective- 7 • Elective- 8 • Elective- 9 • Final Year Project Phase-II
		YEAR 4
		<ul style="list-style-type: none"> • Industrial Training - 6 months

Entry Requirement

- AIMST Foundation/Matriculation/ Pre-University Programme or its equivalent
A pass in Matriculation or Foundation studies with minimum CGPA of 2.0 and a credit in Additional Mathematics or its equivalent at SPM level .
- STPM
 - 2 Passes in STPM in Science stream with minimum Grade C (GPA 2.0) in Mathematics and one Science or ICT Subject.
 - 2 Passes in STPM with minimum Grade C (GP 2.0) in any subject with a credit in Additional 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.
- A-level
 - 2 Passes in A-Level in Science stream with a Pass in Mathematics and one Science or ICT subject.
 - 2 Passes in A-Level with a Credit in Additional Mathematics at SPM/IGCSE/O-Level or equivalent.
 - 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.
- UEC
 - 5 Grade B Passes in UEC in Science Stream 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.
- Other qualifications
Will be assessed and referred for approval on case by case basis

Study Pathway



What our Alumni say?



Huang Zen Yen

Engineering,
AIMST

Software Engineer,
Greatech Sdn.Bhd, Penang

The engineering knowledge as well as learning experience I gained throughout my 4 years of degree studies in AIMST had well-prepared me for today's competitive job market in engineering field



Gopinath Marefeen

Engineering,
AIMST

Senior Engineer,
INTEL Technology Sdn.Bhd

I really like the outcome based education process of our engineering faculty, everyone is working really hard for all students so that they could get easily placed in best multinational companies, I got placed in Intel as an engineer and now I got promoted to senior engineer within five years.



Thenugadevi

Engineering,
AIMST

Validation Engineer,
UST Global Sdn.Bhd

My experience at AIMST University Engineering faculty has lead to career advancement to a highly responsible and technically challenging position in a leading-edge Multi National Company



Namani Srilahari

Engineering,
AIMST

Pursuing Postgraduate,
NUS, Singapore

My experience as an international student in AIMST was brilliant. AIMST has given me various opportunities to prove myself in my career path. With the lessons and experiences gained from AIMST, I believe that I can pave path to my success and create a positive impact in the society



PROGRAMMES

◆ Foundation Studies

Foundation in Science (1400/1501/16/17/20/18/19/22)
 Foundation in Business (1010/1012/1018/1020/10/18/20)

◆ Diploma Studies

Diploma in Nursing (1012/1018/1020/1022/10/18/20)
 Diploma in Physiotherapy (1012/1018/1020/1022/10/18/20)
 Diploma in Electrical and Electronic Engineering (1012/1018/1020/1022/10/18/20)
 Diploma in Biotechnology (1012/1018/1020/1022/10/18/20)
 Diploma in Finance (1012/1018/1020/1022/10/18/20)
 Diploma in Business Management (1012/1018/1020/1022/10/18/20)

◆ Undergraduate Studies

Bachelor of Medicine & Bachelor of Surgery (MBBS) (1012/1018/1020/1022/10/18/20)
 Bachelor of Dental Surgery (1012/1018/1020/1022/10/18/20)
 Bachelor of Dental Technology (Honours) (1012/1018/1020/1022/10/18/20)
 Bachelor of Pharmacy (Hons) (1012/1018/1020/1022/10/18/20)
 Bachelor of Science (Hons) Biomedical Sciences (1012/1018/1020/1022/10/18/20)
 Bachelor of Physiotherapy (Hons) (1012/1018/1020/1022/10/18/20)
 Bachelor in Nursing Sciences (Honours) (1012/1018/1020/1022/10/18/20)
 Bachelor of Science (Honours) Biotechnology (1012/1018/1020/1022/10/18/20)
 Bachelor of Science (Hons) Bioinformatics (1012/1018/1020/1022/10/18/20)
 Bachelor of Engineering (Hons) in Electrical and Electronic Engineering (1012/1018/1020/1022/10/18/20)
 Bachelor of Computer Science (1012/1018/1020/1022/10/18/20)
 Bachelor (Honours) in Business Marketing (1012/1018/1020/1022/10/18/20)
 Bachelor of Science (Honours) Accounting & Finance (1012/1018/1020/1022/10/18/20)
 Bachelor (Honours) in Finance & Management (1012/1018/1020/1022/10/18/20)
 Bachelor of Science (Hons) Management Information Systems (1012/1018/1020/1022/10/18/20)
 Bachelor of Accountancy (Honours) (1012/1018/1020/1022/10/18/20)
 Bachelor in Information Systems (Data Analytics) (Honours) (1012/1018/1020/1022/10/18/20)

◆ Postgraduate Studies

Master in Science (Medical Biochemistry) (1012/1018/1020/1022/10/18/20)
 Master in Science (Medical Physiology) (1012/1018/1020/1022/10/18/20)
 Master in Science (Medical Microbiology) (1012/1018/1020/1022/10/18/20)
 Master in Science (Human Anatomy) (1012/1018/1020/1022/10/18/20)
 Master in Science (Pharmacy) (1012/1018/1020/1022/10/18/20)
 Master of Pharmacy (Clinical Pharmacy) (1012/1018/1020/1022/10/18/20)
 Master of Science Biotechnology (1012/1018/1020/1022/10/18/20)
 Master of Physiotherapy (Musculoskeletal) (1012/1018/1020/1022/10/18/20)
 Master of Science in Management (1012/1018/1020/1022/10/18/20)
 Master of Business Administration (MBA) (1012/1018/1020/1022/10/18/20)
 Doctor of Philosophy (Medical Microbiology) (1012/1018/1020/1022/10/18/20)
 Doctor of Philosophy (Medical Physiology) (1012/1018/1020/1022/10/18/20)
 Doctor of Philosophy (Pharmacy) (1012/1018/1020/1022/10/18/20)
 Doctor of Philosophy (Biotechnology) (1012/1018/1020/1022/10/18/20)

ACCREDITATION



RANKING



PARTNERS



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