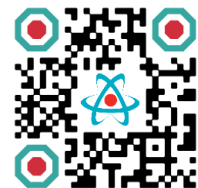




Undergraduate Programmes

APPLIED SCIENCES



Bachelor of Science (Hons) In Biotechnology

(R2/545/6/0024) (07/23) (A 9263)

Introduction

Faculty of Applied Sciences (FAS) has set its goals to promote cutting-edge multidisciplinary programmes that are infused with the elements of innovativeness and technopreneurship designed to enhance market competitiveness. FAS offer BSc (Hons) in Biotechnology, BSc (Hons) in Bioinformatics, Master of Science (MSc) in Biotechnology (Research Mode) and Doctor Philosophy (PhD) in Biotechnology (Research Mode).

BSc (Hons) in Biotechnology programme will provide adequate knowledge and essential skills to the student on the various scope of biotechnological processes that impact our daily lives. The student will discover and explore the importance of biotechnology in the rapidly developing health, food, agriculture, environmental industrial sectors. The programme is fully-accredited by Malaysian Qualification Agency (MQA). The BSc (Hons) Biotechnology programme received Grade A (91/100) by MQA. FAS teaching staff are highly experienced academicians from different fields of interests. Upon graduation, the student will be well-equipped with the knowledge of biotechnological processes, techniques and industrial experience to embark on an exciting career



Career Opportunities

Entrepreneur
Environmental / Safety Officer
Laboratory Specialist
Liaison Officer
Licensing Associate
Patent Agent
Product Sales and Marketing
Product Specialist
Quality Controller
Research Officer
Scientific Officer
Science / Biotechnology writer/ Tutor

Course Structure

The three year BSc (Hons) in Biotechnology programme emphasizes the integration of theory with specialized practicals, while ensuring a sound basis in the relevant biological sciences that underpin the programme.

In the First Year, the students will acquire a good foundation in the critical life science courses, as well as in information technology that are tailored for biological applications.

The Second Year programme integrates genetics-based courses with modern biotechnology and includes an introduction to bioinformatics. At the end of the Second Year, students will undergo an internship training either locally or overseas.

The Third Year courses expand further into special areas in biotechnology and molecular biology, and also cover issues of biosafety, bioethics and the basics of business management for biotechnology enterprises. Students will carry out a research project on selected topics in biotechnology.

Minimum Entry Requirements

- **A-Levels/ STPM/STAM/ equivalent**
Min pass with grade C in 2 subjects.
Pass STAM (grade jayyid) with full pass in 2 subject
- **UEC**
Pass with grade B in 5 subjects
- **AIMST Foundation in Science**
Pass in 3 subjects, including Biology (minimum 50% or Grade C or CGPA of 2.0)
- **Diploma in related field**
CGPA \geq 2.0

Year 1

Basic Chemistry
Biochemistry
Biocomputing
Biodiversity
Biophysics
Cell and Molecular Biology
Genetics
Humanistic Perspectives in Biotechnology
Microbiology

Year 2

Algal and Fungal Science
Bioinformatics
Bioinstrumentation
Bioprocess Technology
Biostatistics
Biotech Trends
Cell Culture
Downstream processing
Food technology
Genetic Engineering
Human Physiology
Immunology
Industrial Training
Plant Science
Virology

Year 3

Aquaculture
Bioethics, Bioregulation & Biosafety
Biomolecular Diagnostics
Business Management
Environmental Biotechnology
Forensic Science
Comparative Genomics
Medical Biotechnology
Metabolomics
Molecular Modeling
Molecular Pathogenesis
Pharmacogenomics
Laboratory Biorisk Mangement
Research Methodology
Research Project



Bachelor of Science (Hons) Bioinformatics

(N/421/6/0038) (12/21) (MQA/PA 6184)

Introduction

The BSc (Hons) in Bioinformatics programme is a three year programme conducted by Faculty of Applied Sciences. Bioinformatics is a new, exciting and challenging multidisciplinary field that combines mathematical, statistical, computer science and information technology methods to solve problems in biology. The programme is an outcome based curriculum, which aims to produce quality graduates who will be able to work in Biotechnology and Bioinformatics industries; Bioinformatics research educational institution; next generation sequence analysis; drug discovery and molecular evolution.

The BSc (Hons) Bioinformatics programme brings together the knowledge of bioinformatics with the tremendous potential of biotechnological tools for wealth and knowledge creation. Advances in experimental technologies have produced huge amount of data. Therefore, managing and extracting useful information from these sources are important if we are to discover new knowledge to advance our understanding of the living world. The BSc (Hons) Bioinformatics programme provides an alternative study option for students interested in bioinformatics.

| YEAR | COURSES |
|--------|---|
| FIRST | Basic Chemistry Genetics Biodiversity Cell and Molecular Biology Microbiology Biochemistry Biocomputing Humanistics Perspective in Biotechnology Biophysics |
| SECOND | Genetic Engineering Bioinstrumentation Proteomics and RNomics Object Oriented Programming with C++ Cell Culture Biostatistics Perl Programming and Bioperl Downstream Processing Biomathematics Introduction to Algorithms Bioinformatics Trends Permutation and Combinations Virology |
| THIRD | Research Project Research Methodology Molecular Modeling Next Generation Sequence Analysis Artificial Neural Network Biopython Metabolomics Pharmacogenomics Comparative Genetics Web Designing and Internet Programming Molecular Evolution Bioethics, Bioregulation & Biosafety Business Management Database Management System Forensic Science |

Career Opportunities

Bioinformatics Researchers
Bioinformatics Facilities Manager
Bioinformatics Software Engineering
Bioinformatics Computer Programmer
Biology System Analyst
Computational Biology Developer
Data Analyst
Big Data Scientist
Entrepreneur
Evolutionary Scientist
Research Officer
Tutor



Minimum Entry Requirement

1. A-Levels / STPM/ equivalent

Pass with CGPA \geq 2.0 (Grade C) in 3 subjects including Biology

2. AIMST Foundation in Science / Foundation/ / Matriculation / Pre-University Programme in related field

Pass in 3 subjects, including Biology (minimum 50% or Grade C or CGPA of 2.0)

3. CIMP / SAM / CPU / MUFY / NSW / HSC / UNSW Foundation

Grades C in 3 subjects, including Biology

4. Diploma (Level 4,KKM) (Computer Science, IT/ Health Sciences

Min Pass 50% or Grade C or CGPA \geq 2.0

5. Degree (Level 6,KKM) (Computer Science, IT/ Health Sciences

Min Pass 50% or Grade C or CGPA \geq 2.0

6. International Baccalaureate

Pass with min score of 24 points.

7. Other qualifications

To be referred to KPT.

Testimonials



Year of graduation:
2014

Current position: MSc
Biotechnology Enterprise at
Johns Hopkins University

The BSc (Hons) Biotechnology program in AIMST University has given me a solid foundation in the field of biotechnology and it serves as a platform that has equipped me with knowledge, experience and skills to pursue a graduate degree in an international university.

Putt Yoke Yin



Receives great recognition from top MNCs. A well diverged course for those interested to work in food pharma production/research/academic/environmental monitoring and many other fields.

Year of graduation:
2013

Current position: Project
Microbiologist at ALS Global



Satish Raj Krishnan



Year of graduation:
2015

Current position: MSc.
Biomedical Science (Clinical
Biochemistry) at Middlesex
University, London

Without any question in my mind, completing Biotechnology undergraduate program in AIMST gave me the analytical and practical skills that required to use everyday for work and even for current research on my postgraduate program.

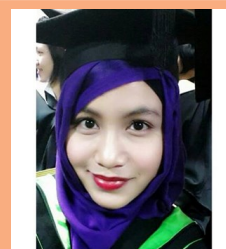
Low Kaan



•This program has provided me with a lot of knowledge that can be applied in various fields of science. Besides, the lecturers were also very helpful and very efficient in teaching skills.

Year of graduation:
2013

Current position: MSc. (Hons)
Bioscience at University of
Technology Malaysia



Nur Hidayah Bt Abdullah



State of the Art Facilities



Student activities & Recreation

At AIMST, we encourage students not only to excel academically but also to participate in extra-curricular activities, including participation in student clubs and societies as well as sports activities. Students may also form new organization by contacting the Student Affairs Division.

The sports and recreational facilities available include:

- Badminton court
- Gymnasium
- Running track
- Olympic-sized swimming pool
- Basketball/netball court
- Volleyball court
- Six-a-side hockey field
- Five-a-side football field
- Aerobics/yoga room
- 400-metre track
- Tennis/squash room
- Mosque & Prayers rooms

In addition, there is a purpose-built Student's Activities Room as well as a comfortable Students' Study Area.

Healthcare

The AIMST on-campus Student Healthcare Clinic is open to provide routine medical care for students and staff alike.

Student Affairs & Accommodation

The Student Affairs Division is responsible for catering to the needs and welfare of students and covers all aspects related to student development. The Student Affairs Officers will assist in making arrangements for hostel facilities for out-of-town and overseas students. In addition, it oversees development and management of student activities via societies and clubs and through events such as sports, cultural and debating activities.



Food

AIMST cafeteria caters for staff and students. Our cafeteria serves both vegetarian and non-vegetarian (halal) food. We have a wide selection of dishes on the menu, which includes delectable local and Western cuisine.

International Office

Our International Office provides several services for overseas students, some of which are:

- Visa/Student pass application
- Arranging for student permits
- Establishing contact with embassies
- Organizing approvals from relevant authorities
- Counselling
- Advice on financial aid resources Admission

International

- 8 passport-size photograph
- Certified true copy of passport
- Certified true copy of all academic examination certificates
- Processing fee: RM 500* (non-refundable) payable to "AIMST SDN.BHD.REV Account"

Malaysia

- 1 passport-size photograph
- Certified true copy of identification card
- Certified true copy of all academic examination certificates (e.g. SPM/STPM/A-LEVEL)
- Processing fee: RM 100* (non-refundable) payable to "AIMST SDN.BHD.REV Account"

AIMST PROGRAMMES

Foundation Programmes

- Foundation in Science (R2/010/3/0134) (07/23) (A 9160)
- Foundation in Business (R2/010/3/0218) (07/24) (A 10633)

Diploma Programmes

- Diploma in Electrical and Electronic Engineering (R2/523/6/0078) (02/22) (A 7448)
- Diploma in Physiotherapy (R2/726/4/0004) (11/21) (A 7211)
- Diploma in Nursing (R2/723/4/0068) (04/23) (MQA/FA 3099)

Undergraduate Programmes

- Bachelor of Medicine and Bachelor of Surgery (MBBS) (R2/721/6/0032) (07/25) (MQA/FA 4034)
- Bachelor of Dental Surgery (R2/724/6/0016) (08/26) (MQA/FA 3470)
- Bachelor of Dental Technology (N/724/6/0017) (05/20) (MQA/FA 0208)
- Bachelor of Pharmacy (Hons) (R/727/6/0065) (07/20) (MQA/FA 8482)
- Bachelor of Physiotherapy (Hons) (R/726/6/0022) (03/23) (MQA/FA 1192)
- Bachelor in Nursing Science (Hons) (N/723/6/0161) (06/22) (MQA/PA 5046)
- Bachelor of Science (Hons) Biotechnology (R2/545/6/0024) (07/23) (A 9263)
- Bachelor of Science (Hons) Bioinformatics (N/421/6/0038) (12/21) (MQA/PA 6184)
- Bachelor of Engineering (Hons) in Electrical & Electronic Engineering (R3/523/6/0075) (08/25) (MQA/FA 2774)
- Bachelor of Electronic Engineering with Hons (N/523/6/0313) (09/24) (MQA/PA 11676)
- Bachelor of Science (Hons) Finance and Management (R2/343/6/0175) (08/26) (A 4797)
- Bachelor of Science (Hons) Business and Marketing (R2/340/6/0515) (08/26) (A 4798)
- Bachelor of Science (Hons) Management Information Systems (R2/322/6/0004) (08/26) (A 4799)
- Bachelor of Science (Hons) Accounting and Finance (R/344/6/0172) (08/25) (MQA/FA 2849)

Postgraduate Programmes

- Master in Science (Medical Biochemistry) (R2/421/7/0026) (03/25) (A 9669)
- Master in Science (Medical Physiology) (R2/720/7/0099) (08/24) (A 9670)
- Master in Science (Human Anatomy) (R2/721/7/0068) (08/24) (A 9339)
- Master of Science (Medical Microbiology) (N/421/7/0025) (11/20) (A 9590)
- Master of Pharmacy (Clinical Pharmacy) (R/727/7/0044) (10/23) (MQA/FA 2491)
- Master of Science (Pharmacy) (R/727/7/0053) (08/24) (MQA/FA 3541)
- Master of Science (Pharmaceutical Chemistry) (N/727/7/0084) (01/23) (MQA/PA 8239)
- MSc Biotechnology (R2/545/7/0051) (02/27) (A 4623)
- Master of Physiotherapy (Musculoskeletal) (N/726/7/0032) (09/26) (MQA/PA 11198)
- Master of Science in Management (R/345/7/0325) (05/25) (MQA/FA 2847)
- Doctor of Philosophy (Biotechnology) (R2/545/8/0048) (08/25) (A 8453)
- Doctor of Philosophy (Pharmacy) (N/727/8/0052) (12/19) (MQA/FA 3542)
- Doctor of Philosophy (Medical Microbiology) (N/421/8/0037) (12/21) (MQA/PA 6185)



For further information on courses and registration procedure please contact:

Student Recruitment Division

Campus

AIMST University
Semeling, 08100 Bedong
Kedah Darul Aman, Malaysia
Tel: +604-429 8108 (D/L)
Tel: +604-429 8000 (G/L)
Fax: +604-429 8009



www.aimst.edu.my



choose@aimst.edu.my



[aimst2u](https://www.facebook.com/aimst2u)

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Awards :



Accredited by:

Approved by:

Financial Aids :



Partner Universities:



Industry Panels :

