

Facilities

- Library
- Computer Labs
- State-of-the-Art Science Labs
- Multidisciplinary Medical Labs
- Anatomy Lab
- Anatomy & Pathology Resource Centre
- Pharmacy Labs
- Biotechnology Lab
- Clinical Skills Lab
- Cafeteria
- Student Lounge
- Bookstore
- Music Room
- Fine Dining Restaurant
- Data Ecosystem Laboratory of Technology and Applications
- QIU Sustainable Agri-research
- Commercial Kitchen
- Buzz Hub Studio

Hostel

Accommodation

QIU's hostels provide accommodation for students who yearn for the experience of independent life in a secure environment. Nestled in the greenery of the Kinta Valley, our condominium units give students the option of staying in a single or twin- sharing room, with 4 or 6 occupants to a unit.

Transportation is provided to shuttle students between the residences and the city campus. Security checkpoints are installed outside each unit, as part of the 24-hour security surveillance system operated by QIU-appointed personnel.

- 24 Hours Security
- Free Internet & WIFI
- Outdoor Playground & Swimming Pool

Student Services

Student and Career Counselling

At QIU, our counsellors are available to help students with academic and/or personal concerns. Students at QIU will be given personalised attention to assist them in meeting their academic needs.

Assistance with Accommodation

QIU will help students with their accommodation arrangements, ensuring that they can enjoy a fun, enjoyable university experience.

Mentorship Programmes

At QIU, students are not just taught academic programmes but are mentored to excel in their future careers and become responsible citizens who will contribute to the betterment of society.



QUEST
INTERNATIONAL
UNIVERSITY

PERAK

Bachelor of Science (Hons) in Biotechnology

JPT/BPP(MQA/FA2343)12/24

Biotechnology is an interdisciplinary field that combines the knowledge of biology, chemistry, medicine, physics, engineering and mathematics. It involves the use of living organisms together with various modern technologies to improve existing products or to produce new ones for the benefit of mankind and the environment.

Our 4-year Bachelor of Science (Hons) Biotechnology programme places an emphasis on current advances in biotechnology that increase agricultural yield, prevent/cure ailments, produce a healthier & cleaner environment and minimise hazardous waste production in industries. Students will be introduced to modern high-end laboratories equipped with the latest Biotechnology instruments. In their final year of studies, a mini project will be assigned to each student to hone their research, innovation and problem-solving skills to gain self-confidence during real-world experiences. This will be followed by 6 months of internship at Biotechnology companies or universities as practical training in an actual working environment.

The curriculum, delivered by experienced professional academics and industry experts, will enhance the students' understanding of Biotechnology and real-life industry-related issues, equipping them with bio-entrepreneurship knowledge, presentation skills, and leadership qualities to succeed in their careers. Students graduating from the B.Sc. (Hons) in Biotechnology programme at QIU armed with these additional qualities and their knowledge in the current trends in Biotechnology will be outstanding candidates for even the most challenging of jobs.

Career Prospects

Career opportunities for young Biotechnologists are broad and promising in the areas of agriculture, healthcare, industry, and others. They include the following positions :

- Molecular Biologist
- Microbiologist in the Food Industry
- Microbiologist in Medical Laboratories
- Laboratory Technologist
- Life Science Product Specialist
- Agriculture, Food Science, Biofuel Technologist
- Cell Tissue Culture Technologist
- Food Quality Control Technologist
- Process Technologist (Downstream/Upstream)
- Water Quality Technologist
- Food Technologist
- Clinical Researcher
- Environmental Conservationist
- Food Safety Expert
- Genomics Expert
- Instrumentation Expert
- Research Scientist Academician
- Science Teacher/Scientific Officer
- Biosafety Expert
- Science Writer/Journalist
- Patent + IPR Officer
- Civil Servant

✓ **Intakes:**
April, July,
September /
October

Duration:
4 years

Mode of Study:
Full-time

Mode of Delivery:

Lectures, Tutorials, Practical Sessions, Case Studies, Problem-based Learning Sessions, Field Trip Visits, Research Project, Industrial Training



Assessment:

Mid Semester Examinations, Practical Reports, Practical Examinations, Assignments, Field Trip Reports, Project Reports, Quiz, Presentations, Final Year Research Project Dissertation

Bachelor of Science (Hons) in Biotechnology

JPT/BPP(MQA/FA2343)12/24



+605 2490500

Quest International University Perak (DU021(A))
No. 227, Plaza Teh Teng Seng (Level 2), Jalan Raja Permaisuri Bainun,
30250 Ipoh, Perak Darul Ridzuan, Malaysia.
Tel: +605 249 0500 Fax: +605 249 0503 Email: enquiries@qiup.edu.my

www.qiup.edu.my

Quest International University Perak

@qiup_edu

Minimum



Entry Requirements

i) Pass **Sijil Tinggi Persekolahan Malaysia (STPM)** with a minimum of Grade C (GPA 2.00) in any two (2) subjects, or its equivalent; and possess SPM with three (3) credits in Mathematics, one science subject and one any other subject, or its equivalent;

OR

ii) Pass **Unified Examination Certificate (UEC)** with at least grade B in five (5) subjects

OR

iii) Pass **Sijil Tinggi Agama Malaysia (STAM)** with a minimum grade of **Jayyid**, or its equivalent; and possess SPM with three (3) credits in Mathematics, one science subject and one other subject, or its equivalent;

OR

iv) **Matriculation/Foundation** with a minimum CGPA of 2.00, or its equivalent, and possess SPM with three (3) credits in Mathematics, one science subject and one any other subject, or its equivalent;

OR

v) A **Diploma** (Level 4, MQF) in a related field with a minimum CGPA of 2.00, or its equivalent.

Note: The credit requirement at SPM level for candidate in categories (i), (iii) and (iv) can be waived should the grades obtained at the STPM / STAM / Diploma / Matriculation / Foundation level are equivalent/higher.

English Requirements for International Students

International students are required to achieve a **minimum** score of 5.0 in IELTS **OR** Band 3 in MUET **OR** its equivalent.



Programme

Content

The following courses are offered in the **Bachelor of Science (Hons) in Biotechnology (JPT/BPP(MQA/FA2343)12/24)** programme:

General Studies Subjects

Local

- Hubungan Etnik
- TITAS
- Communication Skills/ Bahasa Kebangsaan A
- Media and Community
- Community Service

International

- Bahasa Melayu Komunikasi 2
- Malaysian Studies
- Communication Skills
- Media and Community
- Community Service

University Courses

- English for Academic Purposes
- Devices, Networks & Applications
- Disciplined Entrepreneurship

- Design Thinking
- Co-curriculum Activities

Compulsory Courses

- Chemistry for Biologists
- Biostatistics
- Genetics
- Biodiversity and Ecosystems
- Form and Function: Higher Plants and Animals
- Microbiology
- Biochemistry 1
- Cell and Molecular Biology
- Bioinformatics 1
- Plant *In Vitro* Tissue Culture and Development
- Animal Cell Culture and Development
- Immunology
- Fermentation Technology

- Research Methodology and Data Analysis
- Biochemistry 2
- Recombinant DNA and Genetic Modification
- Advanced Molecular Biology
- Scientific Writing
- Introduction to Business and Management
- Applied Microbiology
- Quantitative Genetics
- Bioethics, Biosafety and Bioregulation
- Research Project
- Industrial Training

Specialisation Courses

Specialisation

Agricultural Biotechnology

- Plant Physiology
- Animal Physiology
- Plant Breeding
- Crop Physiology & Biotechnology
- Postharvest Physiology, Storage and Biotechnology
- Plant Pathology and Biotechnology

Industrial Biotechnology

- Microbial Physiology
- Marine and Aquatic Biology & Biotechnology
- Animal Breeding
- Advanced Fermentation Technology
- Bioprocess Technology
- Genomics and Proteomics

Healthcare Biotechnology

- Animal Physiology
- Human Physiology
- Animal Breeding
- Medical Entomology
- Advanced Immunology and Immunogenetics
- Genomics and Proteomics

Elective Courses (To choose one course in Year 2 and two courses in Year 3)

- Animal Breeding
- Enzyme and Protein Technology
- Plant Breeding
- Microbial Physiology
- Bioinformatics 2

- Genomics and Proteomics
- Medical Entomology
- Introduction to Forensic Science and Analysis
- Nutrition and Food Science

Why

Choose QIU?

1

Academic experts with diverse research areas in the field of biotechnology

2

Wide range of dedicated Biotechnology laboratories

3

Collaborations with industrial partners

4

Comprehensive relevant hands-on training

5

Strong emphasis on inculcation of soft skills (language, presentation and communication)

6

Industry-linked final year research projects

7

Student tracking and mentor-mentee systems