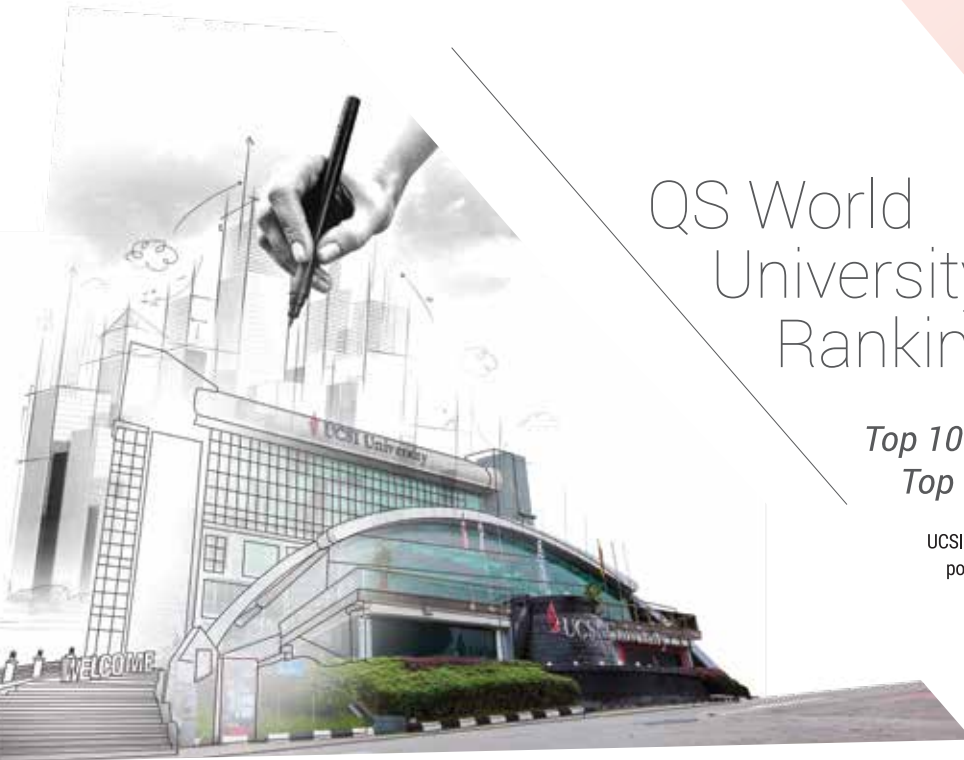


FACULTY OF **APPLIED SCIENCES**



ucsiuniversity.edu.my





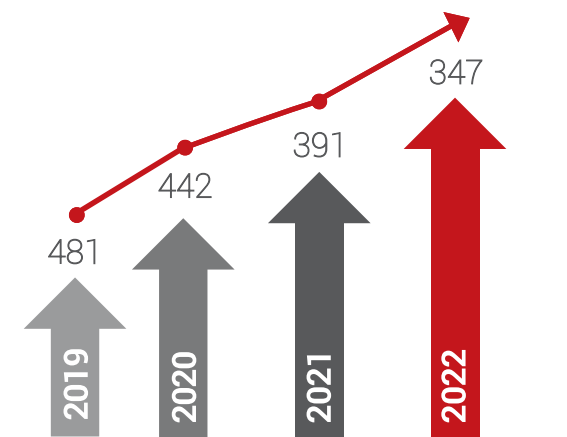
QS World University Rankings 2022

**Top 10 in Malaysia –
Top 1.1% in the world.**

UCSI University continues to hold a formidable position in the QS World University Rankings 2022 after it broke yet another barrier to be placed among the top 350 varsities worldwide. Climbing 44 spots, UCSI has been placed among the top 1.1% of the world's universities.



A steady rise to the top.
with a Breakthrough to Top 350



UCSI's Milestones

QS World University Rankings 2022

- A top seven university in Malaysia, along with the nation's five research universities.
- Ranked in the top 1.1% of all universities in the world.

QS Graduate Employability Rankings 2020

- A top three university in Malaysia for producing employable graduates.

QS World University Rankings by Subject 2021

- Ranked in the top 50 for performing arts.
- Ranked in the top 100 for hospitality and leisure management.
- Ranked in the top 150 for petroleum engineering.
- Ranked in the top 300 for business and management.



UCSI University is the first and only private university in Malaysia to be recognised as a Regional Centre of Expertise (RCE) by the United Nations University – the academic and research arm of the UN.



100%
EMPLOYABILITY SCORE

for 84 of the 87 UCSI's programmes listed in the Higher Education Ministry's Graduate Employability 2020 survey

Averagely, all 87 programmes scored **99.8%** in the survey.

MORE THAN 4500
global companies provide our students with internships.



Of our co-op partners would like to rehire UCSI Interns.

Students from over **110 NATIONS**
30% of UCSI's student population is international.



>49% of UCSI's academic staff are PhD holders and a further 20% are pursuing their doctorate.



The 1st university in Malaysia's private higher education sector to offer programmes in Aquatic Science, Biotechnology, Food Science, Music and Nutrition.



The artist's impression of UCSI's education city.

Tomorrow's Education Today

***It's not just a campus
expansion. It's an education
city in the making.***

Long-renowned for its excellent track record in teaching and learning, UCSI University is quickly making a name for itself in research and innovation. As the best private university for two years in a row according to the QS World University Rankings 2019 and 2020, UCSI is a higher learning institution that opens doors for students and staff to achieve their full potential.

Since 2014, UCSI's top students have been annually selected to advance high impact research at Harvard University, Imperial College London, the University of Chicago and Tsinghua University, among others.

Over the years, tens of thousands of students from 110 different countries have studied at UCSI University, making the campus a vibrant melting pot of culture and diversity. At present, the university runs what is Malaysia's largest

university-industry network through its Employment and Co-Operative Placement (Co-Op) programme, which provides employment support services for undergraduates and graduates, including alumni.

Today, it has over 4,200 global companies to provide each student with at least two months of internships each year. This network includes many of the world's best firms like Accenture, CIMB, Citibank, Deloitte, DHL, Ernst & Young, Hewlett-Packard, HSBC, KPMG, Maybank, Nestle, Samsung, Schlumberger, Standard Chartered, Ogilvy, P&G, Petronas and PWC, among others.

With these and more, UCSI stands out as a university that offers an education few can, provides experiences others can't and delivers life-defining outcomes for students everywhere.

Faculty of Applied Sciences

UCSI University's Faculty of Applied Sciences provides smarter solutions for a smarter planet. Students and staff drive innovation on a daily basis with their research areas being as impressive as they are diverse such as the suitability of local herbs in cancer treatment, and the use of jellyfish toxins as therapeutic solutions, to name a few.

This dynamic culture of scientific discovery is driven by the Faculty's goal to develop effective biology-based technology for application in everyday life. Nothing is ever taken for granted and each conjecture is thoroughly debated, assessed, tested, and refined. The Faculty is making great strides in drug discovery, food and water safety, greater crop yield, and the cure of diseases, among others with no signs of stopping.

Research is a central theme at the Faculty as most of the academics are PhD holders who stand out in their respective disciplines, being actively involved in publishing their work in international research journals while being fully committed to supervising their students. Many of them have worked overseas at top leading companies, research facilities, and universities. They bring their vast academic and industry network along with them, thus creating collaboration opportunities for students and staff.

Your journey begins here, at UCSI.



Why study Applied Sciences at UCSI?

>85% OF STAFF ARE PHD HOLDERS

>80% OF STAFF ARE EQUIPPED WITH THE POSTGRADUATE DIPLOMA IN TERTIARY TEACHING (PGDTT)

ACHIEVED 100% GRADUATE EMPLOYABILITY SCORE IN A MINISTRY OF HIGHER EDUCATION SURVEY (2020)

>40% INDUSTRY CONSULTANTS ARE APPOINTED TO COACH STUDENTS

RESEARCH OPPORTUNITIES TO RENOWNED UNIVERSITIES LIKE HARVARD AND YALE

Renowned Academics

Learn from a team of acclaimed professors and academics who are at the forefront of their respective disciplines. Work with them, be mentored by them and benefit from their wealth of experience.



ASSOCIATE PROFESSOR DR LIONEL IN LIAN AUN

Dean, Faculty of Applied Sciences

PhD Molecular Oncology
MSc Biotechnology
BSc Biotechnology



ASSOCIATE PROFESSOR DR CRYSTALE LIM SIEW YING

Deputy Dean, Faculty of Applied Sciences

PhD (Molecular Medicine)
BSc (Hons) Biomedical Sciences
Recipient of the L'Oreal-UNESCO 'For Women in Science'
National Fellowship 2006



ASSISTANT PROFESSOR DR PUI LIEW PHING

Head of Department, Food Science and Nutrition

PhD (Food Biotechnology)
Master of Science (Food Biotechnology)
BSc Biotechnology



ASSISTANT PROFESSOR DR SERENE TUNG EN HUI

Head of Programme, Nutrition with Wellness

PhD Community Nutrition
MSc Community Health
BSc (Hons) (Biology)



ASSISTANT PROFESSOR DR MICHELLE SOO OI YOON

*Head of Programme, Aquatic Science and
Diploma in Aquaculture with Entrepreneurship*

PhD Fish Parasitology & Molecular Biology
BSc Ecology & Biodiversity



ASSOCIATE PROFESSOR DR NYAM KAR LIN

Head of Research and Postgraduate Studies

PhD Food Technology
BSc (Hons) Food Science and Technology
Member, AOAC



ASSISTANT PROFESSOR ALICE PHUA CHOON YEN

Head of Department, Foundation in Science

MSc Reproductive Biotechnology
BSc (Hons) Biomedical Technology



ASSOCIATE PROFESSOR DR WONG CHEN WAI

Head of Department, Biotechnology

PhD Enzyme & Food Biotechnology
BSc (Hons) Biotechnology



DR NUR HALIZA BINTI HASSAN

Head of Programme, Forensic Science

PhD Forensic Genetics
MSc Forensic Science
Postgraduate Diploma Radiation Protection & Safety
BSc Molecular Biology



ASSOCIATE PROFESSOR DR PATRICK NWABUEZE OKECHUKWU

*Head of Praxis, Industry and Community Engagement,
Biotechnology*

PhD Pharmacology
MSc Pharmacology
BSc (Hons) Plant Sc & Biotechnology (Biological Sciences)



EMERITUS PROFESSOR DR PHANG SIEW MOI, FASc

*Professor | Department of Biotechnology
Deputy Vice-Chancellor, Research and Postgraduate*

PhD Botany (Applied Phycology)
MSc Botany
BSc Botany
Fellow Academy of Sciences Malaysia



VISITING PROFESSOR DR KESHAVAN NIRANJAN

*Department of Food and Nutritional Sciences,
University of Reading, UK*



VISITING PROFESSOR DR CHYE MEE LEN

*School of Biological Sciences, Faculty of Science,
The University of Hong Kong*



VISITING PROFESSOR DR JOHN BEARDALL

*School of Biological Sciences
Monash University, Australia*



Foundation

Pioneer biotechnological breakthroughs in medicine and drug discovery. Improve crop yield. Harness the ocean's untapped potential and discover its hidden secrets. Preserve the ecosystem for generations to come.

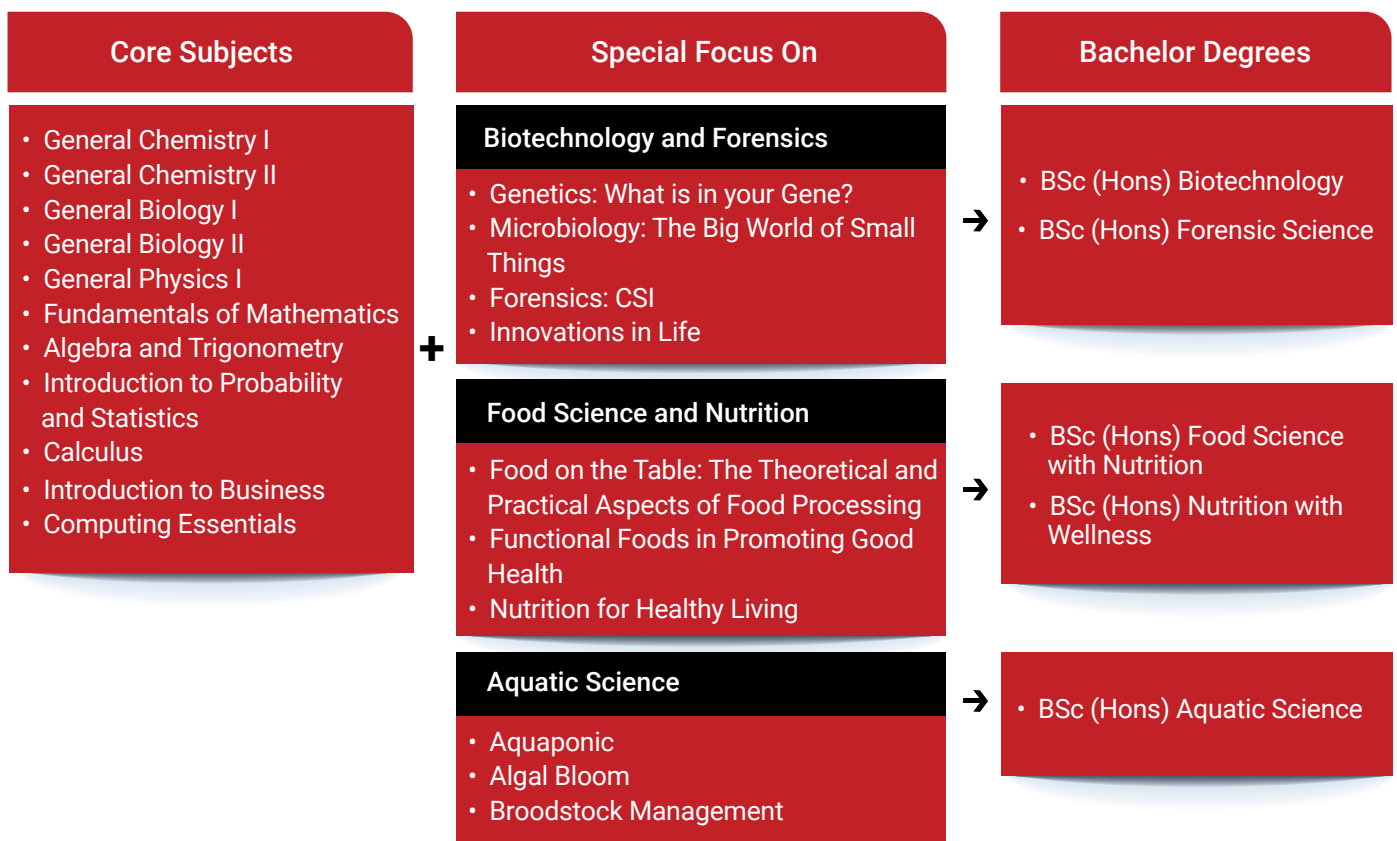
At UCSI University, we have long acknowledged the importance of science. To provide an ideal start to prodigious students like you, we have introduced our specialised foundation pathways in Applied Sciences to provide you with avenues to specialise from day one of your pre-university studies. On top of easing your transition to degree studies in the future, these pathways in Biotechnology, Aquatic Science, and Food Science and Nutrition provide you with an edge as you will be equipped with a deeper understanding in your

preferred discipline. You will learn from an acclaimed team of academics who have extensive ties with the industry. Many have won accolades for their contributions to science and research and you can look forward to sharing their passion for science. From the classroom to the lab to industry visits, learning is convivial and dynamic. You will enjoy access to state-of-the-art facilities and vast repositories of knowledge. As you mature into an independent and critical thinker, you will appreciate how your Foundation study was the watershed pursuit of scientific knowledge.

This is the dynamic environment you can look forward to with the specialised foundation pathways in Applied Sciences. Start focused and raise your aspirations.

Start Focused. Stay Ahead.

UCSI's specialised foundation pathway helps you acquire a much stronger grasp of your chosen field of study while covering the overall reach of a standard foundation programme. Apart from helping you immensely as you progress to degree studies, UCSI's foundation programme also provides you with an early taste of what the industry expects.



Diploma in Aquaculture with Entrepreneurship

(R/620/4/0001) (10/2024) (MQA/FA4100)



Anchored on the scientific understanding of aquatic management, this programme addresses the exploration, improvement and conservation of all freshwater and marine food resources. In ensuring students have an edge after graduation, this programme integrates the scientific aspects of aquaculture with the business aspects thus enabling one to venture into commercial activities such as business and entrepreneurship. You will develop the edge needed to thrive in a booming industry and the know-how to balance commercial benefit and sustainability concerns. And with a credential that inspires confidence, you can look forward to make a pertinent contribution in the industry.

** This programme received a 100% graduate employability score in the Ministry of Higher Education's Graduate Employability 2020 survey. (source: ge.mohe.gov.my/)*

Subject Listing

Year 1

- Malaysian Studies (Local)/BM Komunikasi 2 (International)
- Fundamentals of Chemistry
- Aquatic Microbiology
- Introduction to Biological Research and Analysis
- Operational Management for Aquaculture
- Aquatic Biodiversity and Conservation
- Aquatic Biology
- Water Systems: Management, Quality and Analysis
- Current Topics in Aquaculture
- Basic and Practises of Marketing
- Fundamentals of Management
- Malaysian Ecotourism /Traditional Food
- Extra-curricular Learning Experience I
- Co-Operative Placement 1

Year 2

- Aquaculture Facility Selection and Design
- Broodstock Management for Aquaculture
- Aquatic Health and Diseases
- Aquaculture Species Selection and Development: Project 1
- Aquaculture Species Selection and Development: Project 2
- Fish Nutrition and Feed Technology
- Seafood Industry
- Selective Breeding and Hybridisation in Aquaculture
- Principles of Accounting
- Business Communication for Diploma
- Entrepreneurship
- Logistics Business Strategy and Planning
- Extra-curricular Learning Experience II
- Co-Operative Placement 2

Career Opportunities

Aquaculture Entrepreneurs | Researchers | Aquarists | Aquaculture Farmer/Manager | Seafood Scientists/Quality Control Inspectors | Science/Research Assistant | Water Filtration/Management Consultant | Fish and Game Warden | Aquaculture Feed Production Line

BSc (Hons) Biotechnology

(R2/545/6/0029) (06/2024) (MQA/A10420)

As one of the first Biotechnology education providers in the Malaysian private higher education sector, we have numerous strategic tie-ups with some of the world's biggest companies in science. This opens doors for students and staff through technology transfers, internship opportunities, numerous site visits, industry talks on campus, and, of course, job opportunities. Versatility is a hallmark of the programme. As a student of this programme, you will be addressing critical issues in biotechnology through the study of genetic engineering, pharmacology, fermentation technology, among others. You will complement your abiding interests in science with the market sense to translate academic mastery into business opportunities. And with a firm footing in both fields, doors will open wherever you go.

* This programme received a 100% graduate employability score in the Ministry of Higher Education's Graduate Employability 2020 survey. (source: ge.mohe.gov.my/)

Subject Listing

Year 1

- Chemistry 1
- Biology
- Calculus and Analytical Geometry for Applied Sciences
- University Life
- Extra-curricular Learning Experience 1
- Human Physiology
- Chemistry 2
- Microbiology
- Structural Biochemistry
- Bioinformatics
- Co-Operative Placement 1

Year 2

- Religions in Malaysia / Business Law – Malaysian Perspective
- Biochemistry and Metabolism
- Microbes and Immunology
- Statistics and Its Applications
- Entrepreneurship for Applied Sciences
- Extra-curricular Learning Experience 2
- Research Methodology, Safety and Ethics
- Pharmacology
- Molecular Cell Biology
- Recombinant Technology
- Enzyme Technology
- Co-Operative Placement 2

Year 3

- Human Molecular Genetics
- Environmental Biotechnology and Sustainability
- Cell and Tissue Culture
- Biotechnology Research Project 1
- Extra-curricular Learning Experience 3
- Fermentation Technology and Downstream Processing
- Biotechnology Research Project 2
- Bioprocess Engineering
- Biotechnology Research Project 3
- Co-Operative Placement 3
- Elective (Choose one)**
 - Food Microbiology
 - Fundamentals of Marketing
 - Introduction to Public Speaking

International Degree Pathways

• **University of Queensland, Australia (1.5+1.5)**
Bachelor of Biomedical Science

• **University of Queensland, Australia (1.5+1.5)**
Bachelor of Science
Major: Biochemistry and Molecular Biology / Biomedical Science / Ecology / Genetics / Marine Science

Career Opportunities

Researcher | Quality Control and Quality Assurance | Clinical Research Co-Ordination | Bioinformatics Computational Analyst | Venture Capitalist Business | Biotechnology Technopreneurs | Intellectual Property (IP) and Patent Law | Sales and Support Services for the Biotechnology Industry, Ecology, Waste Management and Environment Pollution Control

BSc (Hons) Food Science with Nutrition

(R2/541/6/0018) (03/2024) (MQA/A10009)

Through our dynamic Food Science with Nutrition degree programme, you will explore the secret science behind food production, development and safety while you develop the research skills to enable you to pursue an exciting career within the food manufacturing industry, research institutes, government, and consumer organisations. As the market leader of Food Science studies in Malaysia, you will be able to utilise the latest practices in the industry and experience first-hand how technology affects food production and flavour delivery. You will enjoy avenues to create new food products and market them. And with a sound understanding of food safety, nutrition and legislation, you can rest assured that your future endeavours will change lives.

* This programme received a 100% graduate employability score in the Ministry of Higher Education's Graduate Employability 2020 survey. (source: ge.mohe.gov.my/)

Subject Listing

Year 1

- Extra-curricular Learning Experience 1
- Chemistry 1
- Calculus and Analytical Geometry for Applied Sciences
- Human Physiology
- University Life
- Chemistry 2
- Structural Biochemistry
- Statistics and its Applications
- Microbiology
- Principles of Nutrition
- Nutrition and Metabolism
- Co-Operative Placement 1

Year 2

- Extra-curricular Learning Experience 2
- Food Chemistry
- Lifespan Nutrition
- Fundamentals of Food Engineering
- Entrepreneurship for Applied Sciences
- Analytical Chemistry
- Food Processing and Packaging
- Food Microbiology
- Halal and Food Legislation
- Research Methodology, Safety and Ethics
- Business Law – Malaysian Perspective / Religions in Malaysia
- Co-Operative Placement 2
- Free elective courses (select one)**
 - Fundamentals of Marketing
 - Introduction to Public Speaking
 - Introduction to Internet Technologies

Year 3

- Extra-curricular Learning Experience 3
- Food Safety and Quality System
- Nutritional Assessment
- Food Commodities
- Food Science and Nutrition Research Project 1
- Nutrition and Chronic Diseases
- Food Science and Nutrition Research Project 2
- Product Development and Sensory Evaluation
- Food Science and Nutrition Research Project 3
- Co-Operative Placement 3
- Professional elective courses (select one)**
 - Enzyme Technology
 - Fermentation Technology and Downstream Processing
 - Nutrition and Functional Food
 - Nutrition, Food and Society

International Degree Pathways

- **Northumbria University, United Kingdom (1+2)**
BSc (Hons) Food Science and Nutrition
- **Northumbria University, United Kingdom (1+2)**
BSc (Hons) Human Nutrition
- **University of Queensland, Australia (1+3)**
B Food Technology (Hons)
- **University of Queensland, Australia (1.5+1.5)**
B Science Major: Food Science and Nutrition / Food Science

Career Opportunities

Food Scientists | Food Technologist | Quality Control and Quality Assurance Executive | Research and Development Executive | Food Microbiologists | Food Safety Inspectors | Food Regulatory Affair Executive | Halal and Systems Executive | Food Product Development Scientist | Food Quality Auditor | Flavour Chemists | Researcher

BSc (Hons) Nutrition with Wellness

(R/726/6/0039) (12/2025) (MQA/FA2967)



If you are passionate about food, eager to explore how it affects the health of the individual and the nation, and curious to discover how diet can be used in the treatment of disease, our Nutrition with Wellness programme is for you. You will broaden your knowledge through a broad range of courses that underpin nutritional sciences. Our programme has an active application across a range of health and professional industries and will equip you with the knowledge, skills and expertise required to excel in this fascinating field. So whether your future lies in the nutrition and wellness, health and fitness advisory, health food and supplement sales and marketing, health education or government policy, you can rest assured that you will inspire confidence.

** This programme received a 100% graduate employability score in the Ministry of Higher Education's Graduate Employability 2020 survey. (source: ge.mohe.gov.my/)*

Subject Listing

Year 1

- Introduction to Food Science
- University Life
- Basic Food Preparation
- Principles of Nutrition
- Malaysian Experiential Tourism
- Microbiology
- Extracurricular Learning Experience 1
- Food and Beverage Management
- Nutrition, Food and Society
- Human Physiology
- Food Safety and Legislation
- Elective I – Free Elective
- Elective II – Field Elective

Year 2

- Sports Nutrition and Physical Activity
- Food Composition and Analysis
- Elective III - Free Elective
- Health Psychology
- Nutrition and Metabolism
- Extracurricular Learning Experience 2
- Food Security and Policy
- Nutrition and Health Promotion
- Elective IV – Field Elective
- Nutritional Assessment
- Nutrition Education
- Research Methods and Data Analysis
- Co-Operative Placement I

Year 3

- Seminar: Current topics in Nutrition and Wellness
- Elective V - Field Elective
- Basic Nutritional Epidemiology
- Nutritional Immunology and Genetics
- Final Year Project Paper 1
- Extracurricular Learning Experience 3
- Final Year Project Paper 2
- Diet and Diseases
- Principles of Wellness Coaching
- Community Project
- Final Year Project Paper 3
- Co-Operative Placement 2

Elective Modules (Choose 3 Field Electives and 2 free electives)

Free Electives:

- Fundamentals of Marketing
- Introduction to Public Speaking
- One to One Marketing
- E-Marketing
- Entrepreneurship for Applied Sciences
- Food Microbiology
- Food Processing & Packaging

Field Electives:

- Principles of Health and Wellness
- Functional Food for Wellness
- Complementary and Alternative Therapies in Wellness
- Wellness for Healthy Aging

Career Opportunities

Health and Nutrition Advisor | Nutrition Educator | Public Health Nutritionist | Nutrition Consultant/ Private Practice | Nutrition Executives (Sales and Marketing) | Nutrition and Wellness Coach | School Nutritionists | Weight Management Nutritionist | Nutrition Health Expert (Media) | Nutrition Programme Developer | Researcher/Academic

BSc (Hons) Aquatic Science

(R/620/6/0002) (10/2024) (MQA/FA4099)



Water covers more than 70% of the earth's surface. It is home to millions of aquatic species. And most importantly, it sustains human life. An invaluable resource must be managed responsibly and this programme was launched on this very basis. Addressing crucial issues in the aquatic ecosystem, the programme equips students with the know-how to develop solutions for an ever-changing planet.

You can look forward to developing a solid foundation in the basic sciences such as – analytical chemistry, microbiology, structural chemistry and statistics before delving into the intensive study of environmental monitoring and assessment, aquatic biodiversity and taxonomy, principles in aquatic pollution and toxicology, among many others. You will also enjoy two different avenues of specialisation in your final year where you will opt for Aquatic Health and Management or Seafood Processing and Safety. Research is also an important component of the programme and you will have the opportunity to focus on ecosystem-based management, natural resources management, sustainable aquaculture, as well as impact of modernisation on natural ecosystems.

Define yourself at UCSI and keep the world's most vital resource flowing.

* This programme received a 100% graduate employability score in the Ministry of Higher Education's Graduate Employability 2020 survey. (source: ge.mohe.gov.my/)

Subject Listing

Year 1

- Extra-curricular Learning Experience 1
- Biology
- Chemistry 1
- University Life
- Chemistry 2
- Structural Biochemistry
- Microbiology
- Analytical Chemistry
- Fundamentals of Management
- Co-Operative Placement 1

Year 2

- Extra-curricular Learning Experience 2
- Ecology and Sustainability
- Business Communication
- Environmental Monitoring and Assessment
- Aquatic Biodiversity and Taxonomy
- Entrepreneurship for Applied Science
- Statistics and its Applications
- Aquaculture Operation and System
- Current Topics in Aquatic Science
- Aquatic Pollution and Toxicology
- Research Methodology, Safety and Ethics
- Co-Operative Placement 2

MPU (select one)

- Malaysian Experiential Tourism
- Malaysian Ethnic Food
- Business Law – Malaysian Perspective

Year 3

(Choose either Aquatic Health and Management or Seafood Processing and Safety)

Aquatic Health and Management

- Extra-curricular Learning Experience 3
- Aquatic Science Research Project 1
- Conservation and Management of Aquatic Resources
- Molecular Cell Biology
- Recombinant Technology
- Aquatic Science Research Project 2
- Water and Wastewater Engineering
- Tools for Aquatic Resource Management
- Aquatic Diseases and Diagnostics
- Aquatic Science Research Project 3
- Co-Operative Placement 3

Free elective (select 2)

- Strategic Management
- Seafood Industry
- Introduction to Internet Technologies
- Operation Management

Seafood Processing and Safety

- Extra-curricular Learning Experience 3
- Aquatic Science Research Project 1
- Halal and Food Legislation
- Food Chemistry
- Food Microbiology
- Aquatic Science Research Project 2
- Seafood Industry
- Food Processing and Packaging
- Food Safety and Quality Systems
- Product Development and Sensory Evaluation
- Aquatic Science Research Project 3
- Co-Operative Placement 3

Free elective (select 2)

- Strategic Management
- Introductory Accounting
- Internet in Practice
- Operation Management

Career Opportunities

Researcher/Academic | Aquarists | Aquaculture Manager | Food Scientists/Quality Control Inspectors | Environmental Consultant | Marine Archaeologist | Hydrologist | Mangrove Ecologist | Aquatic Conservationist | Climatologist | Oceanographer | Underwater Filmmaker | Work with the local Fisheries department | Geoscientist | Marine Mammal Trainer | Marine Park Management

BSc (Hons) Forensic Science

(N/725/6/0102) (03/2027) (MQA/PA12112)

Applying scientific knowledge to practical applications, developing investigative and analytical skills in a variety of scenarios are some of the many areas the Forensic Science programme covers. This programme is designed to match the current career direction of this field, covering present-day topics and concepts, practical applications related to forensic science such as chemistry, biology, health science, psychology, management, entrepreneurship, crime scene investigation, and criminal law. The Forensic Science programme is taught by renowned academics and forensic scientists who are competent and experienced in various aspects of forensic fields including crime scene investigation, forensic chemistry, DNA profiling, forensic pathology, digital forensics, and criminal law. You will also be trained to develop your analytical skills so you are able to analyse any piece of evidence. Complemented by additional emphasis on the professional practice of the roles of the crime scene investigators, you can be assured that this is your pathway to become a forensic scientist of the highest caliber.

Subject Listing

Year 1

- Chemistry 1
- Human Anatomy and Physiology
- Microbiology
- University Life
- Extra-curricular Learning Experience 1
- Chemistry 2
- Inorganic Chemistry 1
- Cell Biology
- Physical Chemistry 1
- Hubungan Etnik (for Malaysians) / Bahasa Melayu Komunikasi 3 (for international students)
- Forensic Analytical Chemistry 1
- Tamadun Islam dan Tamadun Asia (for local students) / Pengajian Malaysia (for international students)

Year 2

- Forensic Biology
- Organic Chemistry 1
- Physical Chemistry 2
- Inorganic Chemistry 2
- Religions in Malaysia / Business Law – Malaysian Perspective
- Extra-curricular Learning Experience 2
- Organic Chemistry 2
- Forensic Anthropology
- Spectroscopy and Structural Chemistry
- Human Genetics
- Forensic Environmental Chemistry

Year 3

- Research Methodology and Data Analysis
- Forensic Analytical Chemistry 2
- Forensic DNA Profiling and Analysis
- Forensic Serology and Microscopy
- Extracurricular Learning Experience 3
- Drug and Medicinal Chemistry
- Forensic Pathology Material and Polymer Chemistry
- Criminal Law
- Co-Operative Placement 1

Year 4

- Forensics Final Year Project – A
- Digital Forensics
- Crime Scene Investigation
- Fire Investigation
- Extra-curricular Learning Experience 4
- Forensic Final Year Project – B
- Ballistics and Explosive
- Criminology and Forensic Psychology
- Forensic Final Year Project – C
- Co-Operative Placement 2

Free Elective Modules (select any two)

- Entrepreneurship for Applied Sciences
- Introduction to Internet Technologies
- Introduction to Biomaterials
- Bioinformatics
- Introduction to Public Speaking

Career Opportunities

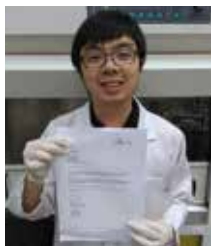
Forensic Scientist | Forensic Document Examiner | Crime Scene Investigator | Blood Pattern Analyst | Scientific Officer | Chemist | Cyber Forensic Incident Response Officer | Forensic and Integrity Officer/Consultant | Insurance Adjuster | Occupational Safety Officer | Private Investigator | Lecturer | Researcher

Hall Of Fame

AMOS GOH ENG LIANG

Alumnus, Master of Science (Applied Sciences) by Research, BSc (Hons) Biotechnology and Foundation in Science

Won the Mini Symposium for Phenotype Microarray Award by Focus Biotech, where he was awarded with 10 plates of GEN III Microplate worth RM855 and 15 tubes of IF-A worth RM185, 2017.



KANG ZHI YONG

Currently studying BSc (Hons) Aquatic Science

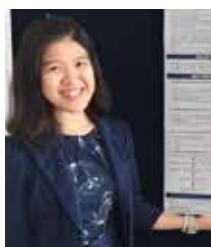
Current President of Aquatic Science Student Association (AQSA) and is also the recipient of UCSI University Trust Scholarship since his first year of study. Selected to conduct a research on mangrove ecology at Third Institute of Oceanography (TIO) in Xiamen, China for 2 months (2019).



CHOO YIK JIN

Alumna, BSc (Hons) Biotechnology

Won the Best Poster prize at the 30th Intersociety Biochemistry Seminar (IBS) organised by the Malaysian Society of Biochemistry and Molecular Biology (MSBMB) at University of Nottingham Malaysia, 2019.



CHARIS WONG YI HUEY

Alumna, BSc (Hons) Food Science with Nutrition

Valedictorian with First Class Honours in 2016 who has also volunteered in humanitarian and education-related missions across China, India, Indonesia, Nepal, Thailand and the Philippines.



CHANG EE WEN

Currently studying BSc (Hons) Aquatic Science, completed Diploma in Aquaculture with Entrepreneurship

Active member of Aquatic Science Student Association (AQSA).



TANASHA AZALEA SUHANDANI

Alumna, BSc (Hons) Nutrition with Wellness

Currently an Assistant Brand Manager at Danone Dumex who is also a Co-Founder of Hands of Hope; Spring 2018 YSEALI Academic Fellow in the United States; and made the Dean's Honours List twice.



Hall Of Fame

LEE YEE JEAT

Currently studying BSc (Hons) Nutrition with Wellness

Full scholarship recipient and a Dean's list student for eight semesters. Received the ICOMES Good Abstracts Awards in 2020 for her outstanding abstracts submitted at the 2020 International Congress on Obesity and Metabolic Syndrome (ICOMES) online conference.



JOEL PHUA JIA MENG

Currently studying BSc (Hons) Biotechnology

Attached for the Undergraduate Research Project (2019-2020) with Harvard Medical School.



YVONNE AERUTHAYAN

Alumna, BSc (Hons) Nutrition with Wellness

A scholar for the Global UGRAD programme at Kansas State University, United States of America and Director of Alumni Relations, Kansas State University Asian American Student Union Graduate Council in 2020.



THO GABRIELLE NGO

Currently studying BSc (Hons) Food Science with Nutrition

Winner of the Climate Action Video Competition, Cambridge Zero Climate Change Festival 2020



WAN PEI YEE

Currently studying BSc (Hons) Food Science with Nutrition

Eppendorf Asia Pacific Best Undergraduate Project Proposal Presenter Award 2019 and UCSI University Trust Scholarship recipient. Dean's list honouree for all semesters.



KIRTHANI ANAMALAY

Alumna, BSc (Hons) Food Science with Nutrition

Bagged silver for best oral presentation at International E-conference on biotechnology, bioinformatics and biomedicine 2020



ALEXANDER CORNEILIUS

Currently studying BSc (Hons) Biotechnology

Recipient of the Gold Medal International Putra InnoCreative Poster Competition (IPIPC) (poster competition) at the International Putra InnoCreative Carnival in Teaching & Learning (IPICTL) 2020. Co-founder of Fitness Grub, a health-based company.



MAK WEN SHEAN

Currently studying BSc (Hons) Nutrition with Wellness

Kuok Foundation Study Award 2020 recipient



Illustrious Alumni



DEVANDAREN GANESAN

Managing Director, Malayan Food Venture (MFV)

*BSc (Food Science with Nutrition)
Graduated 2015*

1. Tell us about your achievement

I learnt and focused on different areas of specialisation over the years from Sales and Marketing to Research and Development. With the knowledge I have obtained, I ventured into initiating my own food manufacturing start-up, called Malayan Food Venture (MFV), with my siblings. We managed to manufacture Fast Moving Consumer Goods (FMCG) and established Home brands such as Trevor's, Rasto, Algeris and Dilon. All these brands cater specifically for its own kind of market. Our products are being sold in over 2500 retail outlets throughout Malaysia and at major hypermarkets.

2. How has UCSI helped you in your endeavour?

Honestly, I was just an average student. I believe in practicality and the application of theory to practice. The Faculty of Applied Sciences at UCSI fascinated me when I was taught of the way science came to play in food. As an undergraduate student, I was essentially taught of the principles of staying focus, determination and being positive regardless of the outcome of your experience. And these aspects help shape the person I am today.

3. What would you advise your juniors at UCSI?

UCSI is your launchpad to greater aspects of life. UCSI's 3 years programme equips students with a broad spectrum of knowledge related to Food Sciences and Nutrition. The Food Industry Visit, Internship and Food Innovation competition are some of the programmes that will sharpen your skills needed to futureproof yourself. So ask as many questions as you can and try to grasp as much as you can from the knowledgeable lecturers from the faculty.



WONG LOK YEE

Nutritional Executive under Dutch Lady Milk Industries Berhad

*BSc (Food Science with Nutrition)
Graduated 2018*

1. Tell us about your achievement

I completed my final year project on Microencapsulation of Probiotic and successfully published my research paper afterwards. I have carried out a research project under the supervision of a Professor from National Ilan University, Taiwan. Now I am working as a Nutritional Executive with Dutch Lady Milk Industries Berhad. My job scope, among others, is to provide nutritional information to Health Care Professionals and organise related talks or events.

2. How has UCSI helped you in your endeavour?

I am glad that I selected UCSI to pursue my degree studies as UCSI offers a conducive study environment and the lecturers have been nothing short of exceptional. I have gained sufficient knowledge in my field of study and managed to acquire laboratory skills which assisted me in completing my studies and my research project.

3. What would you advise your juniors at UCSI?

UCSI is definitely a good platform to understand the working environment. The academics are experts in their own field with sufficient knowledge of the industry. I would suggest not to just focus on studies but also to join more extracurricular activities at UCSI because there are a lot of learning opportunities. Soft skills such as communication, presentation and leadership skills are essential elements when you step out to the working world.



KUMAR VEERAPEN, PhD

Research Fellow.

Hail Support and Community Outreach Manager.

Affiliations:

- *Analytic and Translational Genetics Unit, Center for Genomic Medicine, Massachusetts General Hospital, Boston, Massachusetts, USA*
- *Stanley Center for Psychiatric Genetics, The Broad Institute of MIT and Harvard, Cambridge, Massachusetts, USA*
- *Harvard Medical School, Boston, Massachusetts, USA*

BSc (Biotechnology) Graduated 2009

1. Tell us about your achievement

One of my greatest achievements was to obtain my PhD in human genetics from the University of Miami. It has always been a passion of mine since I was 14 years old to gain the expertise in analysing genetic data. Through the training provided to me from UCSI and the University of Miami, I then secured my position at the Broad Institute of MIT and Harvard and the Massachusetts General Hospital as a research fellow and outreach manager for Hail as a genomics analysis tool.

2. How has UCSI helped you in your endeavour?

Most of the things that I learned during my undergraduate degree has transitioned with me through the following stages in my career where I first was a tutor at UCSI for 2 years, graduate student at the University of Miami for 5 years, and finally, my current position since July 2016. Many of the skills that I learned honed into my interest in science and cultivated an incredible thirst for answers. I had amazing lecturers who constantly allowed me to question everything which is a quality that makes a stupendous scientist.

3. What would you advise your juniors at UCSI?

The amazing thing about UCSI is the praxis method that has always been a major advantage of our graduates over graduates from other schools – our students have a good grasp on the theoretical aspects of science while also given the practical applications of these knowledge. Therefore you are enrolling into a school that will not churn out robots but rather a school that feeds into your potential as an individual and fuels you for eventual success.

Illustrious Alumni



YAU MEI YUEN

*General Manager, Bio Life
Nutraceuticals Sdn Bhd*

*BSc (Hons) Food Science & Nutrition,
graduated 2015*

1. Tell us about your achievement

I did my internship at Bio Life Nutraceuticals, an OEM health food supplement company. From just an intern in the quality control department, I rose the ranks to become the General Manager at Bio Life within five years. Today, I manage departments in production, quality assurance, quality control, research and development, sales and marketing and purchasing, among others.

2. How has UCSI helped you in your endeavour?

It's indeed an honour to study at UCSI University. The Food Science and Nutrition programme is well-known and many companies view the university as an established higher learning institution that provides education excellence. This translated to the confidence Bio Life had in me when I joined as an intern. UCSI and this programme have immensely helped in my career.

3. What would you advise your juniors at UCSI?

If you give me a second chance, I will still choose UCSI. It is where I found the joy of learning with my lecturers and fellow course mates. The education system makes me feel comfortable, the environment is conducive and the location is strategic.



JOKO LOGIS (INDONESIAN)

*Support Specialist (APAC Region), BMG
Labtech (Australia)*

*BSc (Hons) Biotechnology, graduated 2014
MSc Applied Sciences, graduated 2017*

1. Tell us about your achievement

My first job following graduation from UCSI with a Master's degree was with Progene Link Sdn Bhd, an innovative local company that focuses to service Biotechnology and Nanotechnology researchers in Malaysia. This is indeed an achievement, given that I did my internship here prior to my Master's studies. In other words, UCSI helps futureproof its students.

2. How has UCSI helped you in your endeavour?

UCSI had helped me greatly during my undergraduate and postgraduate studies. I'm lucky and grateful to have found many lecturers and faculty staff members that were always willing to help me. Special mention goes to the Deputy Dean of the Faculty of Applied Sciences, the amazing Dr Crystale, who was my supervisor during my undergraduate and Master's studies.

3. What would you advise your juniors at UCSI?

Education is important, but do remember to have fun as well. Part of the university experience is making new friends and inculcating a love for various recreational activities. Go and join the myriad of clubs available in UCSI. You will then graduate with not just a certificate and knowledge that came with it, but also with an experience that will last forever.

Facilities

The Faculty of Applied Sciences is Malaysia's leading private hub for scientific studies since 1999. Its cutting-edge labs and facilities have played an integral part in research and in assisting students make great strides in various scientific discovery.



The wet and dry aquatic labs are equipped with aquarium tanks to home jellyfish and seahorses.



This facility houses a wide range of instruments used to determine the physiochemical properties and sensory characteristics of food.



This facility is equipped with advanced imaging technology that enables researchers to visualise the cell growth and condition.



It houses all the bacterial and fungal cultures used in research and teaching that supports cutting-edge research in the areas of drug discovery, environmental health and more.



This facility supports the analysis of biochemical enzymes, as well as organic and inorganic molecules to identify and separate components within natural and artificial materials.



Used for plant-related research, this lab is equipped with the latest research instruments including high-end liquid and gas chromatographs and microencapsulator.

Academic Requirements

INTAKES: January, May and September

QUALIFICATIONS	FOUNDATION IN SCIENCE	DIPLOMA IN AQUACULTURE WITH ENTREPRENEURSHIP
SPM/O-Level/equivalent	Minimum 5 credits (inclusive of Mathematics and 1 Science subject)	Minimum 3 credits (inclusive of Mathematics and 1 Science subject)
UEC	Minimum Grade B in 3 subjects (inclusive of Mathematics and 1 Science subject)	Minimum Grade B in 3 subjects (inclusive of Mathematics and 1 Science subject)
Other qualifications/ Polytechnic certificates authorised by Malaysian government	Admission on a case-by-case basis	Admission on a case-by-case basis
English requirement	Not required	Local Students: Pass (Grade E) in SPM/O-Level; Pass (Grade C) in UEC English; Band 3 in MUET International students: Band 5 for IELTS; a score of 35-45 for TOEFL; 150 in Cambridge Linguaskill.

QUALIFICATIONS	BSC (HONS) BIOTECHNOLOGY	BSC (HONS) FOOD SCIENCE WITH NUTRITION	BSC (HONS) AQUATIC SCIENCE	BSC (HONS) NUTRITION WITH WELLNESS	BSC (HONS) FORENSIC SCIENCE
UCSI Foundation in Science or equivalent in Malaysia	Minimum CGPA 2.00 and Possess SPM with three credits inclusive of Mathematics and one science subject	Minimum CGPA 2.00, inclusive of: · Chemistry · Biology/Physics/Mathematics and *Additional requirement for UCSI Foundation in Science **Additional requirement for Foundation in Science or equivalent	Minimum CGPA 2.00	Minimum GPAs of 2.33 in ANY TWO: · Chemistry · Biology · Physics/ Mathematics	Minimum CGPA 2.50, inclusive of minimum GPAs of 2.50 in: · Chemistry · Biology/Physics and *Additional requirement
National Matriculation	Minimum CGPA 2.00 and Possess SPM with three credits inclusive of Mathematics and one science subject	Minimum CGPA 2.00, inclusive of: · Chemistry · Biology/Physics/Mathematics and **Additional requirement	Minimum CGPA 2.80, inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum GPAs of 2.33 in ANY TWO: · Chemistry · Biology · Physics/Mathematics	Minimum CGPA 2.50, inclusive of minimum GPAs of 2.50 in: · Chemistry · Biology/Physics and *Additional requirement
STPM	Minimum GPA 2.00 in any Two (2) subjects and Possess SPM with 3 credits inclusive of Mathematics and one science subject	Minimum CGPA 2.00, inclusive of Grade Cs in: · Chemistry · Biology/Physics/Mathematics and **Additional requirement	Minimum CGPA 2.00, inclusive of Grade Cs in: · Chemistry · Biology · Physics/ Mathematics	Minimum GPAs of 2.33 in ANY TWO: · Chemistry · Biology · Physics/ Mathematics	Minimum CGPA 2.50, inclusive of minimum GPAs of 2.50 in: · Chemistry · Biology/Physics and *Additional requirement
UEC	Minimum of Grade B in 5 subjects, inclusive of: · Mathematics · one science subject or Minimum Grade B in 5 subjects and SPM with 3 credits inclusive of Mathematics and one science subject	Minimum Grade B in 5 subjects, inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum Grade B in 5 subjects, inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum Grade B in these 5 subjects: · Chemistry · Biology · Physics · Mathematics · English	Minimum Grade B in 5 subjects, inclusive of: · Chemistry · Biology/Physics
A-Level	Minimum Grade D in any 2 subjects and SPM with 3 credits inclusive of Mathematics and one science subject	Minimum Grade D in: · Chemistry · Biology/Physics/Mathematics and *Additional requirement	Minimum Grade E in ANY TWO: · Chemistry · Biology · Physics/ Mathematics	Minimum Grade D in ANY TWO: · Chemistry · Biology · Physics/ Mathematics	Minimum Grade D in: · Chemistry · Biology/Physics *Additional requirement
Australian High/ Secondary School Diploma (Grade 12) - SAM/AUSMAT/ SACE/ TEE/ NTCE/WACE	Minimum ATAR 60% or minimum 60% average in five (5) subjects inclusive of: · Mathematics · One Science subject	Minimum ATAR 60% or minimum 60% average five (5) subjects inclusive of: · Chemistry · Biology/Physics/ Mathematics and *Additional requirement	Minimum ATAR 60% or minimum 60% average five (5) subjects inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum ATAR 60% or minimum 60% average five (5) subjects inclusive of: · Chemistry · Biology · Physics/Mathematics	Minimum ATAR 60% or minimum 60% in 5 subjects inclusive: · Chemistry · Biology/Physics
Canadian Grade 12 – CPU/CIMP	Minimum 60% in 6 subjects inclusive of · Mathematics · one science subject	Minimum average of 60% in 6 subjects inclusive of: · Chemistry · Biology/Physics/ Mathematics and *Additional requirement	Minimum average of 60% in 6 subjects inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum average of 60% in 6 subjects inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum average of 60% in 6 subjects inclusive of: · Chemistry · Biology/Physics
International Baccalaureate (IB)	Minimum score of 26/42 from 6 subjects inclusive of · Mathematics · one science subject	Minimum score of 26/42 from 6 subjects, inclusive of: · Chemistry · Biology/Physics/Mathematics and *Additional requirement	Minimum score of 26/42 from 6 subjects, inclusive of a minimum score of 4/7 in: · Chemistry · Biology · Physics/ Mathematics	Minimum score of 26/42 from 6 subjects, inclusive of: · Chemistry · Biology · Physics/ Mathematics	Minimum score of 26/42 from six (6) subjects, inclusive of: · Chemistry · Biology/ Physics

Academic Requirements

INTAKES: January, May and September

QUALIFICATIONS	BSC (HONS) BIOTECHNOLOGY	BSC (HONS) FOOD SCIENCE WITH NUTRITION	BSC (HONS) AQUATIC SCIENCE	BSC (HONS) NUTRITION WITH WELLNESS	BSC (HONS) FORENSIC SCIENCE
Diploma/ Advanced Diploma	Minimum CGPA 2.0	Minimum CGPA 2.00, inclusive of: · Chemistry · Biology/ Physics/ Mathematics	Minimum CGPA 2.00, inclusive of: · Chemistry · Biology · Physic/ Mathematics	Minimum CGPA 2.75 in a related diploma from recognised institutions OR CGPA below 2.75 (above 2.00) in a related diploma from recognised institutions plus a minimum of 36 months working experience in the same field.	Minimum CGPA 2.75 in a related diploma from recognised institutions OR CGPA below 2.75 (above 2.00) in a related diploma from recognised institutions and a minimum of 36 months working experience in the same field.
Other qualifications recognised by the Malaysian government	Admission: Case by case basis				

*Additional requirement: 5Cs or equivalent in SPM/equivalent, 3Cs of which must be in Biology / Physics / Mathematics / Chemistry / English.

**Additional requirement: 5Cs or equivalent in SPM/equivalent in Biology, Physics, Mathematics, Chemistry and English

English Language Requirements

STUDENTS (LOCAL/ INTERNATIONAL)	QUALIFICATIONS	BSC (HONS) BIOTECHNOLOGY BSC (HONS) FOOD SCIENCE WITH NUTRITION BSC (HONS) AQUATIC SCIENCE	BSC (HONS) NUTRITION WITH WELLNESS	BSC (HONS) FORENSIC SCIENCE
Local Students	SPM English Language	A Minimum grade of B+	N/A	
	SPM English language 1119/O-Level English/ IGCSE	A minimum grade of C	N/A	
	UEC English Language	A Minimum grade of A2	N/A	
	MUET (Malaysian University English Test)	Band 3	Band 3	
	IELTS	N/A	Band 5.5	
	TOEFL	N/A	A Minimum Score of 550	
	Note: In the event that the English language requirements are not met, applicants will be required to take the Basic English and English Foundation for in-sessional academic enhancement concurrently with the programmes. It is applicable to Diploma Aquaculture with Entrepreneurship, BSc (Hons) Biotechnology, BSc (Hons) Aquatic Science, and BSc (Hons) Food Science with Nutrition.		N/A	
Foreign Students	MUET (Malaysian University English Test)	Band 3	Band 3	Band 4
	IELTS	Band 5	Band 5.5	Band 6
	TOEFL iBT	A Minimum Score of 42	A Minimum Score of 46	A Minimum Score of 60
	Pearson Test of English	A Minimum Score of 47	A Minimum Score of 51	A Minimum Score of 59
	Cambridge English Qualification and Tests	A Minimum Score of 154	A Minimum Score of 160	A Minimum Score of 169
	Cambridge Linguaskill	A Minimum Score of 154	N/A	N/A
	TOEFL PBT	N/A	N/A	550
	Note: International applicants who do not meet the respective academic programme's English Language Requirement will need to improve their proficiency by enrolling into the English for Tertiary Education programme (R/KJP/00920-00929) which helps them prepare for attaining a required band score. It is applicable to Diploma Aquaculture with Entrepreneurship, BSc (Hons) Biotechnology, BSc (Hons) Aquatic Science, and BSc (Hons) Food Science with Nutrition.		N/A	

While the above information is accurate at the time of printing, please note that entry requirements are subject to change. Please visit the university website for the most updated information.



UCSI EDUCATION SDN BHD [198901008177 (185479-U)]

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