UNIVERSITI MALAYA

Faculty of Science
Programme Brochure

Bachelor of Actuarial Science

Turning risks into opportunities with data and analytics

Scan the QR Code for further information

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KEY FACTS

Bachelor of Actuarial Science

Program Established Since
2016

Duration
4 YEARS

Total Credits
145

Average Class Size
60

Graduate On Time
92.8%

Graduate Employability
100%

Accreditation

Society of Actuaries, US recognizes our program as one of the University and College with Actuarial Program-Advanced Curriculum (UCAP-AC).

Institute and Faculty of Actuaries (IFoA), UK have an Accreditation by Subject Agreement, where students can be awarded exemptions to 4 IFoA papers if their university module mark reach a certain standard

Average Annual Salary Package

RM42,000.00

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WHY CHOOSE
BACHELOR OF ACTUARIAL SCIENCE?

Bachelor of Actuarial Science in Universiti Malaya is a four years programme designed to prepare for the industrial demand of the actuarial field. The programme covers a wide range of areas including economics, finance, mathematics, statistics risk modelling, and even the latest expansion to data analytics. The scope is applicable to a wide range of industry. The programme also prepares the students with tools to kick start research that is inevitable in the current world for the benefit of the society.

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COURSE DETAILS

DURATION 4 YEARS

Learning milestones

1

Fundamentals Strengthening
The courses that will be undertaken:
Science, Technology and Society Statistics; Basic Mathematics; Calculus I; Calculus II; Probability and Statistics I; Introduction to Accounting.

2

Introduction to the basic principles and concepts that are more actuarial specific

The courses that will be undertaken:
Advanced Calculus; Linear Algebra; Appreciation of Mathematics; Structured Programming; Probability and Statistics II; Foundations of Data Science; Microeconomics; Macroeconomics; Financial Mathematics and Derivatives

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COURSE DETAILS

DURATION 4 YEARS

Learning milestones

3

Exposure to more advanced principles and concepts of actuarial science

The courses that will be undertaken:
Actuarial Mathematics I; Actuarial Mathematics II; Portfolio Theory and Asset Models; Mathematics of Financial Derivatives; Risk Theory

4

Exposure to practical side of the knowledges and opportunity to solve practical problem in actuarial profession

The courses that will be undertaken:
Industrial Training and elective courses (Actuarial Science/Statistics/Mathematical Science/Applied Mathematics); Life Insurance and Takaful

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UNIQUE ELECTIVE COURSES FOR AN IMPACTFUL CAREER

Pension Mathematics

Foundation in Islamic finance

Generalized linear model

Python for Data Science

Financial & Business Management

To prepare for careers in industry

Emphasis on theories and how these can be applied in the actuarial related industries

LEARN

APPLY

IMPACT

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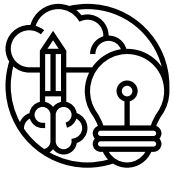
MINOR PACKAGE

In line with the University's future direction to embrace flexible education, Bachelor of Actuarial Science programme implemented minor packages for all students from Session 2022/2023 intake onwards.

Why minor package?

- Choice and flexibility
- Interdisciplinary specialization
- Producing future-ready graduates
- Broaden your skills
- Adding breadth to your studies
- Explore your personal interest
- Improve your future outlook
- Tap hidden potentials

Create you own minor



Creating your own minor is a powerful opportunity to explore a topic or subject that you find interesting. Complement your primary major with related or unrelated fields through minor package.
List of minor packages:

Malay Studies
Japanese Language
Arabic Language
Economy
Sports Management
Sports Science (Science Exercise)
Statistical Sciences
Mathematical Sciences
Chemistry
Geology
Physics
Biochemistry
Environmental Management
Ecology and Biodiversity
Microbiology and Molecular Genetics
Microbiology
Genetics
Information Technology

Islamic Studies
Performing Arts
Anthropology and Sociology
Geography
English
Environmental Studies
International and Strategic Studies
Southeast Asian Studies
East Asian Studies
Indian Studies
Chinese Studies
Social Administration
History
Gender Studies
Chemical Engineering
Electrical Engineering
Biomedical Engineering
Civil Engineering
Mechanical Engineering
Built Environment

Minor qualifications are only displayed on the transcript subject to the completion of a minimum of 25 credits under the relevant minor package

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ALUMNI PROFILES

Mr. Alvin Lim Yong Xin

Leadership Executive Accelerated Programme

Why did you choose this programme?

Mathematics is my passion. While both Mathematics and Actuarial Science degrees relate to mathematics, the scope of Actuarial Science spans across several interrelated subjects, including accounting, economics, finance, investment, insurance and programming. This knowledge has certainly helped to achieve my goal of being a well-rounded, mathematically oriented businessperson. I am currently working as the Leadership Executive Accelerated Programme (L.E.A.P) Executive in Malaysia Airlines. The L.E.A.P is a 36-month programme designed to develop future leaders for the organisation.

The airline industry is one of those industries that heavily relies on big data analytics. My background as a Bachelor of Actuarial Science graduate, with strong mathematical skills and the ability to demonstrate leadership and communication skills, have helped me in getting accepted into this programme.

I was fortunate to be elected as the president of the Universiti Malaya Actuarial and Financial Mathematics Society (UMACT) for the session of 2018/2019. I enjoyed every moment I spent together with all active members, organising activities such as Industrial Talks, Interaction Day, Bonding Camp, and National Secondary School Actuarial Camp (NSACT). This invaluable experience had also sharpened my soft skills and expanded my network.

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ALUMNI PROFILES

Ms. Jasmine Lim

Assistant Manager of
Pricing and Analytics

Why did you choose this programme?

I graduated from Universiti Malaya in 2018 with a CGPA of 3.99 in the Bachelor of Science in Actuarial and Financial Mathematics. I am currently the Assistant Manager of Pricing and Analytics Department in a general insurance company. I have also passed all professional papers under the Casualty Actuarial Society in December 2021.

Mathematics has been my best subject since secondary school. However, my parents, being the typical Asian parents, want me to become a doctor. I wish to prove to them that there are more things that I can achieve without a medical degree, including earning a higher salary. That is why I chose to pursue Actuarial Science in Universiti Malaya. Universiti Malaya is always my first choice as it is one of the most prestigious universities in Malaysia.

The curriculum of the Actuarial Science program is well-structured and comprehensive, making the graduates competitive and well-prepared for their career. Moreover, the compulsory internship program also provides a very good exposure for students to experience the real working environment in the industry.

I would say the highlights of my 4-year degree in Universiti Malaya are the various extra-curricular activities that I participated in. I was a committee member of Universiti Malaya Actuarial and Financial Mathematics Society (UMACT) where I was involved in organising several events at the university and national levels. Moreover, I was also given the opportunity to represent Universiti Malaya in the Simon Marais Mathematics Competition after being placed in the top 20 nationally in the Mathematical Olympiad of Public Universities in 2016.

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INTERNSHIP

Ms. Tan Yan Qing

Internship Company: FWD Takaful Bhd.
Internship Duration: 1st March 2022 – 30th June 2022 (4 months)
Position: Actuarial Intern (Pricing)

My internship at FWD Takaful as an actuarial intern in the pricing team had provided me with valuable insights in takaful pricing model and product analysis. The experience also helped me to get a closer look at the role of an actuary in the pricing team. I was assigned to handle various tasks including collecting validation data, preparing presentation slides, documentations, developing and validating models.

I valued the opportunity of working in a conducive environment where I was able to work on diverse models and my colleagues were approachable for any queries. I mostly worked with Excel to perform User Acceptance Testing (UAT), which strengthened my Excel skills. Meeting multiple deadlines at the same time has also trained me to manage and utilize my time in a more effective and productive way. Presentation skill is a key skill in the workplace. I learned to present all my findings, analysis, and views towards the issue clearly and effectively to ease the decision-making process for my manager. The internship module under the Bachelor of Actuarial Science programme has made all this possible.

INTERNSHIP

Mr. Tan Zi Cheng

Duration: 1st March 2022 – 30th June 2022 (4 months)
Company: Etiqa Life Insurance Berhad
Position: Actuarial Intern (Valuation)

I completed my internship with Etiqa Life Insurance Berhad as a member of the Statutory Valuation Reporting Team. My job scope was mainly related to IFRS 17 implementation projects, User Acceptance Testing (UAT) and assisting the team in any ad-hoc tasks when needed. I was involved in UAT on Variable Fee Approach (VFA), one of the three measurement models under IFRS 17 by using SAS software, to ensure its viability.

I was given a chance to learn new softwares such as Prophet and SAS Enterprise Guide to complete my tasks while reinforcing my skills in Excel and VBA coding to develop models for producing parameter tables for UAT purposes. Being able to deliver ideas clearly and accurately is important to increase efficiency at work. Paying close attention to details is also required for the tasks given to be completed immaculately. The internship opportunity provided under the Bachelor of Actuarial Science programme taught me to never stop exploring and never be afraid to ask. Even though the learning curve is steep, I am beyond grateful that all my colleagues are friendly and helpful.

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CONTACT US

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