



## BSc in Actuarial Science (International Programme)

### BACHELOR OF SCIENCE PROGRAMME IN ACTUARIAL SCIENCE

(INTERNATIONAL DUAL DEGREE)

#### Degree Offered

- Bachelor of Science (Actuarial Science)
- Abbreviation: B.Sc. (Actuarial Science)

#### Responsible Units

- Department of Mathematics  
Faculty of Science, Mahidol University
- Department of Mathematics  
Curtin University of Technology

#### Philosophy

- Every person and organization faces risk.
- Actuaries are the analytical backbone of our society's financial security programs.
- There is currently a great shortage of actuaries.

#### Objectives

- To produce highly qualified graduates in actuarial science.
- To prepare the graduates for employment.
- To support economic growth, and enhance the country's competitive capability in the financial world.





## Admission Requirements

- Holding a high-school (Grade 12) diploma or its equivalence.
- Passing an entrance examination conducted under the supervision of the Dept of Mathematics, Fac of Science.
- Passing an English requirement as specified by the Department of Mathematics, Faculty of Science, or have a TOEFL score of no less than 500 on PBT, 173 on CBT, or ILTS 6.0 or better, or the equivalence.

## Selection Method

- A written examination and/or an interview

## Academic System

- Mahidol University semester system, composed of two regular semesters.
- Credit system which corresponds to the system under Mahidol University's (or Curtin University of Technology's) rules and regulations.

## Language

- English: instructions, examinations, term papers and course reports

## Registration

- Full time student
- A minimum of 9 credits and a maximum of 22 credits per regular semester and is a maximum of 9 credits per summer semester



## Evaluation and Graduation Requirements

- Evaluation: subject to rules and regulations of Mahidol University when studying at Mahidol University, and those of Curtin University of Technology when studying at Curtin University of Technology .
- Graduation Requirements: 120 credits and grade point average of 2.00

## Graduates' Expectation

- To gain knowledge and capability in the field of actuarial science.
- Excellent job opportunities.
- High salary scales and fast promotion.
- To be able to competently apply the knowledge in their career.

## Venues

- Conduct programme at Department of Mathematics, Faculty of Science, Phayathai Campus, and at Curtin University of Technology, Perth, Australia
- Spend first 5 semesters at Mahidol University plus, by choice,
  - last 3 semesters at CUT if academically and financially qualified, or
  - last 3 semesters at MU otherwise.

## Budget

- 51,800 baht in Thailand and 240,000 baht in Australia, per regular semester for one student

## Scholarships

- Scholarships are available for bright students.

## Duration of Study

- 4 years (maximum of 8 years)

## Curriculum Structure

A student is required to take at least 120 credits of courses

30 Credits of General Education Courses  
84 Credits of Specific Education Courses  
6 Credits of Free Elective Courses

## Specific Education Courses

### Year I

SCMA 128 Mathematics I  
SCMA 188 Statistical Data Analysis I  
SCMA 129 Mathematics II  
SCMA 189 Statistical Data Analysis II  
SCMA 195 Science Communications

### Year II

SCMA 218 Advanced Calculus  
SCMA 282 Statistical Data Analysis III  
SCMA 169 Principles of Actuarial Science  
SCMA 286 Mathematical Statistics  
SCMA 269 Economics  
SCMA 259 Linear Algebra





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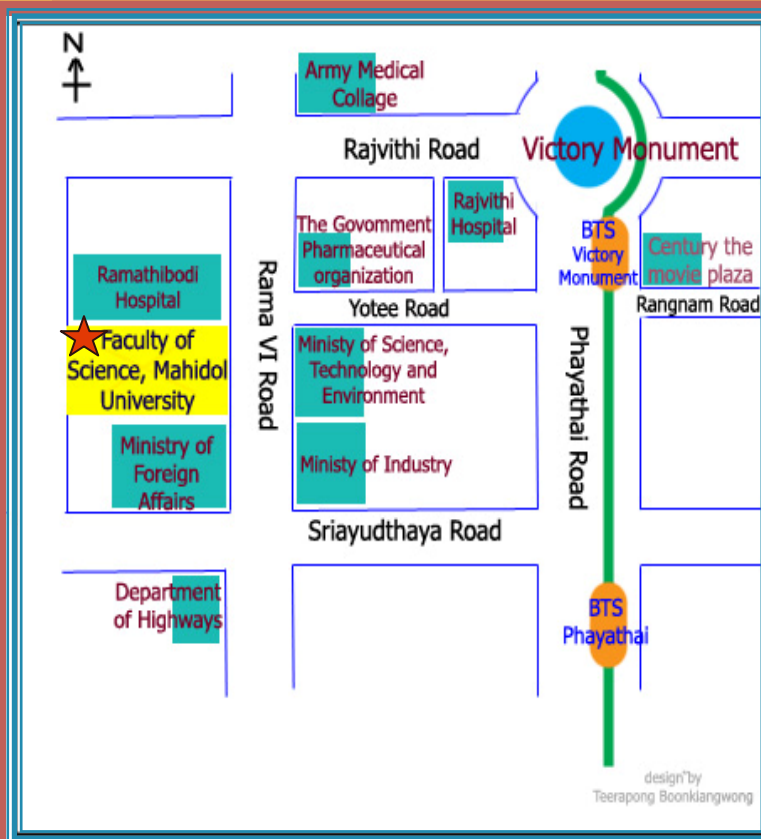


## Year III

- SCMA 287 Experimental Design & Analysis
- SCMA 361 Theory of Interest
- SCMA 379 Macro Economics
- SCMA 378 Accounting
- SCMA 359 Principles of Insurance and Superannuation
- SCMA 289 Principles of Finance
- SCMA 377 Practical Mathematical Financial Modeling

## Year IV

- SCMA 451 Actuarial Economics I
- SCMA 469 Actuarial Statistics I
- SCMA 472 Life Contingencies I
- SCMA 478 Statistical Modeling
- SCMA 459 Actuarial Economics II
- SCMA 470 Risk Analysis and Credibility
  
- SCMA 477 Life Contingencies II
- SCMA 479 Survival Analysis



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