

Courses

No.	Elective Courses (12 units, choose 3 courses)	
1.	MGM 501/4	Analysis
2.	MGM 503/4	Combinatorics
3.	MGM 563/4	Statistical Inference
4.	MGM 581/4	Mathematics and Technology
5.	PLG 561/4	Theories of Teaching and Learning Mathematics

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Duration of Candidature:

Postgraduate Programmes	Full Time		Part Time	
	Min (Months)	Max (Months)	Min (Months)	Max (Months)
Doctor of Philosophy (Ph.D.)	24	60	36	90
Master of Science (M.Sc.)	12	36	24	72
Mixed Mode Master of Science (Mathematics) Master of Science (Statistics)	12	24	24	48
Coursework Mode Master of Science (Teaching of Mathematics)	18	24	30	48

Admission Requirements

Master

- A Bachelor degree in Mathematics (related discipline) with minimum CGPA 2.75 or second class honours) from a recognized institution

Ph.D

- A good Master of Science in Mathematics (related discipline) or Bachelor of Science (First Class or Equivalent) from a recognized institution
- In cases where the candidates do not meet the minimum CGPA requirements, working or research experience or journal publications may be used to support applications for postgraduate studies.

Online Application

- All applications must be submitted via online at <http://onlineips.usm.my/admission/>
- Application for Research, Coursework and Mixed Mode are open year-around



**MORE INFO
AND ENQUIRIES
PLEASE
CONTACT:**



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SCHOOL OF MATHEMATICAL SCIENCES

UNIVERSITI SAINS MALAYSIA



POSTGRADUATE DEGREE PROGRAMMES



UNIVERSITI SAINS MALAYSIA

PUSAT PENGAJIAN

SAINS MATEMATIK

ABOUT US

School of MATHEMATICAL SCIENCES

The School of Mathematical Sciences, USM, was established in 1974. The school has currently more than 45 lecturers, grouped into 3 main departments, namely Pure Mathematics, Applied Mathematics and Statistics/Operations Research. As for postgraduate programmes, the school offers the Doctor of Philosophy (Ph.D) and Master of Science (M.Sc.) by research; M.Sc. (Statistics) and M.Sc. (Mathematics) via mixed mode; and M.Sc. (Teaching of Mathematics) via coursework. The school also actively organizes numerous short courses, such as time series econometrics, statistical data analysis, statistical quality control and linear regression to industrial practitioners, college and university lecturers, and postgraduate students.

POSTGRADUATE PROGRAMMES OFFERED:

RESEARCH MODE:

A Doctor of Philosophy (Ph.D)

B Master of Science (M. Sc.)

Research Mode

- Master of Science (Mathematics)
- Master of Science (Statistics)

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Master of Science (Mathematics)

Mixed Mode

Objective

The objective of the programme is to produce experts in the field of Computational and Applied Mathematics who are able to undertake research and development activities in addition to teaching of Computational and Applied Mathematics at the postgraduate level.

Program Structure

Students are required to obtain at least a B grade for the 20 units taught courses, pass the dissertation and achieve a CGPA of at least 3.0 to graduate.

Courses

No.	Courses	
1.	MAT 514/4	Mathematical Modelling
2.	MAT 515/4	Computational Mathematics
3.	MAT 516/4	Curve and Surface for CAGD
4.	MAT 517/4	Computational Linear Algebra
5.	MAT 518/4	Numerical Methods for Differential Equation
6.	MAT 510/20	Dissertation

Master of Science (Statistics)

Mixed Mode

Objective

The objective of the programme is to produce experts in the field of statistics who are able to undertake research and development activities in addition to the teaching of statistics at the postgraduate level.

Program Structure

Students are required to obtain at least a B grade for the 20 units taught courses, pass the dissertation and achieve a CGPA of at least 3.0 to graduate.

Courses

No.	Courses	
1.	MST 561/4	Statistical Inference
2.	MST 562/4	Stochastic Processes
3.	MST 564/4	Statistical Reliability
4.	MST 565/4	Linear Models
5.	MST 567/4	Categorical Data Analysis
6.	MST 566/20	Dissertation

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Master of Science (Teaching of Mathematics)

Coursework Mode

Objective

The objectives of the programme is to increase teachers' expertise in teaching mathematics courses at pre-university level and to nurture research activities among teachers.

Program Structure

Candidates have to complete 44 units of the required coursework consisting of 32 units of compulsory courses (including 8 units Project) and 12 units of elective courses by obtaining at least a B grade and achieving a CGPA of at least 3.0. Candidates are also required to participate in seminars organized by the School of Mathematical Sciences from time to time.

Courses

No.	Compulsory Courses (32 units)	
1.	MGM 502/4	Number Theory
2.	MGM 511/4	Linear Algebra
3.	MGM 531/4	Euclidean Geometry
4.	MGM 551/4	Operations Research
5.	MGM 561/4	Statistical Methods for Research
6.	MGM 562/4	Probability Theory
7.	MGM 599/8	Project