
**Special Program in
Mathematics
(SPM) Briefing**

January 2018

Definition

Special program consists of
5 core S-modules,
2 topics modules, and
almost-all graduate modules in mathematics.

A student completes the program after he/she
has passed **at least 6** of the above modules.

Five S-modules

- MA2202S Algebra I
[Sem 1] – Dr ZHANG Lei
 - MA3110S Mathematical Analysis II
[Sem 1] – A/P CHIN Chee Whye
 - MA2101S Linear Algebra II
[Sem 2] – A/P CHIN Chee Whye
 - MA2108S Mathematical Analysis I
[Sem 2] – A/P SUN Rongfeng
 - MA3111S Complex Analysis I
[Sem 2] – Prof DINH Tien Cuong
-

Two topic modules

1. MA4291 Undergraduate Topics in Mathematics I
[Sem 1]
2. MA4292 Undergraduate Topics in Mathematics II
[Sem 2]



-
- 2009/10 Sem 2 – *Finite group actions and representations*
by A/P TAN Kai Meng
 - 2010/11 Sem 1 – *Calculus on Manifolds*
by A/P Denny LEUNG
 - 2010/11 Sem 2 – *An introduction to modular forms*
by A/P LOKE Hung Yean
 - 2011/12 Sem 1 – *Linear representations of finite groups*
by A/P LOKE Hung Yean
 - 2011/12 Sem 2 – *Riemann surfaces*
by Dr CHIN Chee Whye
 - 2012/13 Sem 1 – *Matrix Groups*
by Prof ZHU Chengbo
 - 2012/13 Sem 2 - *Descriptive set theory and analysis*
by Dr Dilip RAGHAVAN
 - 2012/13 Sem 1 – *Fractal Sets*
by Prof SHEN Weixiao
 - 2013/14 Sem 2 – *Algebraic Number Theory*
by Prof GAN Wee Teck
 - 2015/16 Sem 2 – *Coxeter Groups*
by A/P TAN Kai Meng
 - 2017/18 Sem 1 – *Probabilistic Combinatorics*
by Prof VU Van Ha
-

Almost all graduate modules

Almost all MA5xxx modules can be taken in place of MA4291 and MA4292. The **five exceptions** are:

1. MA5203 Graduate Algebra I
 2. MA5205 Graduate Analysis I
 3. MA5245 Advanced Financial Mathematics
 4. MA5247 Computational Methods in Finance
 5. MA5248 Stochastic Analysis in Mathematical Finance
-

Sample Study Plan

for Students Admitted from AY2016/17

SEM	RECOMMENDED MODULES
Year 1, Semester 1	<ul style="list-style-type: none">• MA1100 Fundamental Concepts of Mathematics• MA1101R Linear Algebra I• MA1102R Calculus
Year 1, Semester 2	<ul style="list-style-type: none">• MA1104 Multivariable Calculus• MA2108S Mathematical Analysis I (S)• MA2101S Linear Algebra II (S)• Other MA modules (MA2xxx)
Year 2, Semester 1	<ul style="list-style-type: none">• MA2202S Algebra I (S)• MA3110S Mathematical Analysis II (S)• Other MA modules (MA2xxx/MA3xxx)
Year 2, Semester 2	<ul style="list-style-type: none">• MA3111S Complex Analysis I (S)• Other MA modules (MA2xxx/3xxx/MA4xxx)
Year 3, Semester 1	<ul style="list-style-type: none">• MA4291 Undergraduate Topics in Mathematics I (if offered)• Other MA modules (MA3xxx/MA4xxx/MA5xxx²)
Year 3, Semester 2	<ul style="list-style-type: none">• MA4292 Undergraduate Topics in Mathematics II (if offered)• Other MA modules (MA3xxx/MA4xxx/MA5xxx²/MA6xxx)

S-modules vs SPM

A student can take one or more S-modules without enrolling in the SPM.

Comparison between MA2108S and MA2108

- ❑ S versions of an essential module
(for Math and Applied Math majors)
 - ❑ Enhanced syllabus
 - ❑ Same time slots for classes, same exam dates.
 - ❑ Separate lectures, lecturers, tests, tutorials and exams.
 - ❑ 1 additional tutorial hour per week.
 - ❑ 1 additional MC.
 - ❑ Deals more with theory (i.e. lots of proofs!).
-

SPM Students

- Intake: Up to 15 per year.
 - Students have strong passion and aptitude for mathematics.
 - Target Math and Applied Math majors.
 - Also welcome students from QF, Statistics, CS, Physics, Engineering.
-

Benefits

- ❑ SPM certificate after completion of program.
 - ❑ SPM prize \$500 every year. Past recipients:
 - ❑ 2008/2009 : GAO Fan
 - ❑ 2009/2010 : TEO Wei Hao
 - ❑ 2010/2011 : GOH Jun Le
 - ❑ 2011/2012 : SHI Xiaojie
 - ❑ 2012/2013 : Luo Yusheng
 - ❑ 2013/2014 : Johan GUNARDI
 - ❑ 2014/2015 : Stefanus LIE
 - ❑ 2015/2016 : KHOR Shi-Jie
 - ❑ 2016/2017 : GAO Yuan and LEE Si Ying
 - ❑ Small classes.
 - ❑ Recommendation letters for graduate schools.
 - ❑ Strong support from the math department.
-

More Benefits

Less tangible but more important benefits:

- Greater depth and sophistication.
 - Better understanding of mathematics as a whole.
 - Learning together with other keen students.
 - Enjoy learning.
-

What if I find the S-modules too tough?

You may drop or switch to the non-S version within Week 1 to Week 4 without penalty.

After Week 4, we follow the usually NUS procedure.

Reading S-modules

We do not enforce that SPM students to read all the S-modules.

Students manage and decide when to take an S-module, as long as they could fulfill the requirements to complete the SPM program in time.

SPM students could also map an S-module with another university when they go for overseas exchange program for one semester.

What if I have other commitments
and I cannot complete the
requirements for SPM?

There is no penalty for discontinuing SPM after
the exams.

How to enroll in SPM or S-modules?

1. Do well in MA1100, MA1101R and MA1102R or the equivalent modules.

2. Apply online:

ww1.math.nus.edu.sg/undergraduates.aspx?f=UP-SPM

> Apply for this Programme

(This application portal is not mobile-friendly yet, so it's advisable to use a computer/notebook to access and apply.)

3. Indicate the S-modules you want to take in the coming semester.

4. Wait for our email reply. May need an interview.

5. Bid for your non-S version modules as usual.

- We will put you into the S-module of your choice once we approve your application.
-

General guidelines for approval

A student has to show the potential to get at least an A- for the S-module.

This includes a willingness to commit time and effort to the S-module.

- If CAP > 4.5, then no questions asked.
- If CAP between 4 and 4.5, then we may arrange for an interview and ask a few questions....
- If CAP < 4, then we will interview and ask many questions....

Contact us

- Prof LOKE Hung Yean

- Deputy Head for Teaching; S17-06-03

- A/P CHIN Chee Whye

- SPM Coordinator; S17-07-14

