

1. You are advised to read the instructions to courses registration posted in STARS. Please refer to STARS for the schedule of registration.
2. Students are only allowed to register for courses up to their **Normal Load** during their scheduled course registration day (during **both** their scheduled timeslot and between 5pm to 10pm on the same day). To register more than Normal Load, students would only be able to do so during the Add/Drop period. Please refer to the table below for the normal and maximum load requirement for your year of study.

Programme	Study Years	Normal Load	Maximum Load
MATH	All years	20	20
MADA, MAEN, MASN	All years	22	22

3. If you wish to read a course that will exceed your maximum load, you can apply online through this link: <https://raspberry.spms.ntu.edu.sg/overload/apply/default.aspx>. Please note that approval is granted to a specific course that you wish to overload.
4. The following courses are to be read during Semester 1 AY 2023/2024 (subject to pre-requisites).
5. Please refer to URL for the most updated ICC Core requirements: <https://www.ntu.edu.sg/spms/admissions/undergrad/core-courses>

MATH Year 1 (ICC intakes)			
Course Code	Course Title	Course Type	Course AU
MH1100	Calculus I	Core	4
MH1200	Linear Algebra I	Core	4
MH1300	Foundations of Mathematics	Core	4
PS0001	Introduction to Computational Thinking	Core	3
CC0003	Ethics & Civics in a Multi-Cultural World	ICC Core	2
CC0002	Navigating the Digital World	ICC Core	2

MATH -Year 2 (ICC intakes)			
Course Code	Course Title	Course Type	Course AU
MH2100	Calculus III	Core	4
MH2500	Probability and Introduction to Statistics	Core	4
ML0004	Career and Entrepreneurial Development for the Future World	ICC-Core	2
CC0006	Sustainability: Society, Economy & Environment	ICC-Core	3

MATH – Business Analytics Year 2 (ICC intakes)			
Course Code	Course Title	Course Type	Course AU
MH2100	Calculus III	Core	4
MH2500	Probability and Introduction to Statistics	Core	4
BE1402	Business Operations and Processes	Core	3
BU5601	Fundamentals of Management	Core	3
ML0004	Career and Entrepreneurial Development for the Future World	ICC-Core	2
CC0006	Sustainability: Society, Economy & Environment	ICC-Core	3

MATH – Applied Mathematics Year 3				
Course Code	Course Title	Course Type	Course AU	Remarks
HW0218	Effective Communication II	ICC-Core	2	
MH3101	Complex Analysis	Core	3	For non-ICC intakes only

MATH – Pure Mathematics Year 3			
Course Code	Course Title	Course Type	Course AU
HW0218	Effective Communication II	ICC-Core	2
MH3101	Complex Analysis	Core	

MATH – Statistics Year 3			
Course Code	Course Title	Course Type	Course AU
HW0218	Effective Communication II	ICC-Core	2
MH3510	Regression Analysis	Core	4

MATH – Business Analytics Year 3			
Course Code	Course Title	Course Type	Course AU
HW0218	Effective Communication II	ICC-Core	2

GER-Core (non-ICC intakes only)				
Course Code	Course Title	Course Type	Course AU	Remarks
ET0001	Enterprise & Innovation	GER-Core	1	Index: 70165
ML0003	Kickstart Your Career Success	GER-Core	1	Index: 70360
GC0001	Sustainability: Seeing Through the Haze	GER-Core	1	Index: 70170
PS0001	Introduction to Computational Thinking	GER-Core	3	
HY0001	Ethics & Moral Reasoning	GER-Core	1	FINAL OFFER

The following **GER-core courses** are no longer offered. Replacement course (if applicable) is indicated next to the respective course. Please email SPMSUndgrad@ntu.edu.sg if you need to take the replacement course **after** registering for Core and/or Major-PE courses.

Course Code & Course Title	Replacement Course (if applicable)
HW0128 Scientific Communication I	CC0001 Inquiry and Communication in an Interdisciplinary Word
HW0228 Scientific Communication II	HW0218 Communication Across the Sciences
PS8001 Defence Science	-NA-
PS0003 Plan your Career Path	-NA-

MATH – Applied Mathematics Major PE				
Course Code	Course Title	Course Type	Course AU	Remarks
MH3101	Complex Analysis	Major PE	4	ICC intakes only
MH3300	Graph Theory	Major PE	4	
MH3512	Stochastic Processes	Major PE	4	
MH4311	Cryptography	Major PE	4	
MH4320	Computational Economics	Major PE	4	
MH4700	Numerical Analysis II	Major PE	4	
MH4701	Mathematical Programming	Major PE	4	
MH4900	Final Year Project	Major PE	8	
MH4920	Supervised Independent Study I	Major PE	4	
MH4921	Supervised Independent Study II	Major PE	4	

MATH – Pure Mathematics Major PE				
Course Code	Course Title	Course Type	Course AU	Remarks
MH3220	Algebra II	Major PE	4	Mutually exclusive with MH3200
MH4300	Combinatorics	Major PE	4	
MH4311	Cryptography	Major PE	4	
MH4900	Final Year Project	Major PE	8	
MH4920	Supervised Independent Study I	Major PE	4	
MH4921	Supervised Independent Study II	Major PE	4	

MATH - Statistics Major PE			
Course Code	Course Title	Course Type	Course AU
MH3512	Stochastic Processes	Major PE	4
MH4320	Computational Economics	Major PE	4
MH4510	Statistical Learning and Data Mining	Major PE	4
MH4511	Sampling and Survey	Major PE	4
MH4513	Survival Analysis	Major PE	4
MH4701	Mathematical Programming	Major PE	4
MH4900	Final Year Project	Major PE	8
MH4920	Supervised Independent Study I	Major PE	4
MH4921	Supervised Independent Study II	Major PE	4

MATH – Business Analytics Major PE			
Course Code	Course Title	Course Type	Course AU
MH3510	Regression Analysis	Major PE	4
MH4320	Computational Economics	Major PE	4
MH4510	Statistical Learning and Data Mining	Major PE	4
MH4513	Survival Analysis	Major PE	4
MH4700	Numerical Analysis II	Major PE	4
MH4701	Mathematical Programming	Major PE	4
MH4900	Final Year Project	Major PE	8
MH4920	Supervised Independent Study I	Major PE	4
MH4921	Supervised Independent Study II	Major PE	4

6. You are allowed to read higher level courses if you have met the pre-requisites and there are vacancies available. Pre-requisites may also be met through exemptions.
7. The locations of the Mathematics Labs are as follow:

Mathematics Lab	Location
COMP LAB 1	SPMS-MAS-03-02
COMP LAB 2	SPMS-MAS-03-03
COMP LAB 3	SPMS-MAS-03-04

8. Students who have taken courses as pre-requisites during exchange programme in the current Semester, please submit your waiver request via the Online Waiver Application using this link: <https://walnut.spms.ntu.edu.sg/waiver/student/default.aspx> . Please upload a copy of the course mapping details and a copy of your exchange transcript (if any) in pdf format in your application.

9. For students admitted in AY20 and earlier - Prescribed Electives that are not in the prescribed lists (P1 to P4 lists for PMAS, A1 to A5 lists for AMAS, S1 to S3 lists for STAT) could be registered as UE from STARS. Do check if the course is offered as both UE and Major-PE course types **before registration**.
10. Some of the Major Prescribed Electives offered by other schools may not have any pre-requisites. Nevertheless, students are advised to strongly assess their own background before taking these courses. Students who find themselves to have insufficient background should drop the course **before** the end of add/drop period. Some of these Major Prescribed Electives have extremely limited vacancies hence they could only be initially registered as UE from STARS. To convert it to Major PE, you may send an e-mail request to SPMSundgrad@ntu.edu.sg by stating clearly your matriculation number, the course code and course type to be converted to **after the add/drop period**.
11. Students who are interested may apply to take graduate courses as prescribed electives or unrestricted electives. A minimum CGPA of 4.00 is required for the application. Graduate course information may be found from <https://www.ntu.edu.sg/spms/about-us/mathematics/grad/course-info>. The following graduate course is offered in AY2023 Semester 1. Please note that application is subject to approval.

Course Code	Course Title
MH7002	Discrete Methods <i>Previously listed as MAS711</i>

12. Students with Admission Year 2023 who are intending to take up higher level courses whereby the prerequisites are fulfilled through exemptions are to write in to SPMSundgrad@ntu.edu.sg. Exemptions will only be updated after add/drop period and will only be reflected at the end of the semester, together with semester results release.
13. The following BDE courses are also offered in Semester 1 AY 2023-2024:

Course Code	Course Title	Course AU	Remarks
MH5000	Mathematical Problem-Solving	2	Application procedure and timeline will be provided via email in mid-June 2023.
MH5100	Advanced Investigations in Calculus I	1	Must be read alongside MH1100. There is a qualifying test.
MH5200	Advanced Investigations in Linear Algebra I	1	Must be read alongside MH1200. There is a qualifying test.

14. Enquiries on courses registration may be directed to SPMSundgrad@ntu.edu.sg. Your matriculation number must always be included in your e-mail. Please refrain from sending multiple similar e-mails as this will not expedite the response but rather it will cause undue delay. All enquiries will be attended to and will be replied as soon as possible, depending on the nature of the request. Appeals for GER-PE and UE/BDE vacancies are to be submitted through the online appeal system and they will not be responded to if otherwise.
15. Enquiries on network performance, Studentlink password or STARS PIN may be directed to NSS Service Desk using the IT Service Desk Form below:
<https://www.ntu.edu.sg/life-at-ntu/internet-account-and-policy/service-desk-form>