

- 1. You are advised to read the instruction 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
MACS	Year 1-2	22	22
MACS	Year 3-4	19	22

\*ICC courses will be system-allocated for year 1 and 2 as per standard study plan after main registration (between 17 Jul – 23 Jul 2024).

- 3. If you wish to read a course that will exceed your maximum load, you can apply online through this link: <u>https://raspberry.spms.ntu.edu.sg/overload/apply/default.aspx</u>. Please note that approval is granted to a specific course that you wish to overload.
- 4. The following compulsory courses are to be read during Semester 1 AY 2024/2025 (subject to pre-requisites).
- 5. Please refer to URL for the most updated MACS course curriculum https://www.ntu.edu.sg/spms/about-us/mathematics/undergrad/degree-programmes

MACS Year 1 (U24)			
Course Code	Course Title	Course Type	Course AU
SC1003	Introduction to Computational Thinking and Programming	Core	3
SC1005	Digital Logic	Core	3
MH1100	Calculus I	Core	4
MH1200	Linear Algebra I	Core	4
MH1300	Foundations of Mathematics	Core	4
CC0003	Ethics & Civics in a Multi-Cultural World	ICC Core	2
CC0002	Navigating the Digital World	ICC Core	2

MACS Year 2 (U23)			
Course Code	Course Title	Course Type	Course AU
SC2001	Algorithm Design and Analysis	Core	3
SC2002	Object Oriented Design & Programming	Core	3
SC2005	Operating Systems	Core	3
MH2100	Calculus III	Core	4
MH2500	Probability and Introduction to Statistics	Core	4
CC0006	Sustainability: Society, Economy & Environment	ICC Core	3



MACS Year 3 (U22)			
Course Code	CodeCourse TitleCourse TypeCourse AU		
HW0218	Communication Around the Sciences	ICC Core	2

MACS Year 4 (U21)			
Course Code	Course Title	Course Type	Course AU
MH4900/SC4079	Final Year Project	Core	8

	GER-Core (non-ICC intakes only)				
Course Code	Course Title	Course Type	Course AU	Remarks	
ET0001	Enterprise & Innovation	GER-Core	1	Index: 70165	
PS0001	Introduction to Computational Thinking	GER-Core	3		

The following **GER-core courses** are no longer offered. Replacement course (if applicable) is indicated next to the respective course. Please email <u>SPMSUndgrad@ntu.edu.sg</u> if you need to take the replacement course <u>after</u> 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-
ML0003 Kickstart Your Career Success	To be confirmed; check with SPMSUndgrad
HY0001 Ethics & Moral Reasoning	To be confirmed; check with SPMSUndgrad
GC0001 Sustainability: Seeing Through the Haze	To be confirmed; check with SPMSUndgrad

	MATH Major PE (Matric Year 2021 onwards)				
Course Code	Course Title	Course Type	Course AU	Specialization	
MH3101	Complex Analysis	Major PE	4		
MH3210	Number Theory	Major PE	4	Cryptography and Cybersecurity	
MH3220	Algebra II	Major PE	4	Cryptography and Cybersecurity	
MH3300	Graph Theory	Major PE	4	Theoretical Computer Science	
MH3510	Regression Analysis	Major PE	4	Data Science; Financial Modelling	



MH3512	Stochastic Processes	Major PE	4	Financial Modelling
MH3520	Mathematics of Deep Learning	Major PE	4	
MH3702	Geometric Methods in Mathematical Physics	Major PE	4	
MH4300	Combinatorics	Major PE	4	Theoretical Computer Science
MH4301	Set Theory and Logic	Major PE	4	Theoretical Computer Science
MH4311	Cryptography	Major PE	4	Theoretical Computer Science; Cryptography and Cybersecurity
MH4320	Computational Economics	Major PE	4	
MH4510	Statistical Learning and Data Mining	Major PE	4	Data Science; Financial Modelling
MH4511	Sampling & Survey	Major PE	4	Data Science
MH4513	Survival Analysis	Major PE	4	Data Science
MH4518	Simulation Techniques in Finance	Major PE	4	Data Science; Financial Modelling
MH4700	Numerical Analysis II	Major PE	4	
MH4701	Mathematical Programming	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



- Students with Admission Year 2024 who are intending to take up higher level courses whereby the prerequisites are fulfilled through exemptions are to write in to <u>SPMSUndgrad@ntu.edu.sg</u>.
  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.
- 9. 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: <u>https://walnut.spms.ntu.edu.sg/waiver/student/default.aspx</u>. Please upload a copy of the course mapping details and a copy of your exchange transcript (if any) in pdf format in your application.
- 10. Enquiries on curriculum may be directed to :
  - <u>SPMSundgrad@ntu.edu.sg</u> (Mathematics courses)
- 11. Enquiries on courses registration may be directed to <u>SPMSundgrad@ntu.edu.sg</u>. 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.
- 12. Enquiries on network performance, Studentlink password or STARS PIN may be directed to NSS Service Desk using the IT Service Desk Form below: <u>https://www.ntu.edu.sg/life-at-ntu/internet-account-and-policy/service-desk-form</u>