

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
PHY	1,2,3,4	20	20

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 2 AY 2022-2023 (subject to fulfilling pre-requisites).
5. Please refer to URL for the most updated ICC or GER Core requirements: <https://www.ntu.edu.sg/spms/admissions/undergrad/core-courses>

PHY Year 1			
Course Code	Course Title	Course Type	Course AU
PH1106	Electricity and Magnetism	Core	3
PH1199	Physics Laboratory Ib	Core	2
MH1803	Calculus for Physics	Core	4
CC0001#	Inquiry and Communication in an Interdisciplinary World	ICC Core	2
CC0003#	Ethics & Civics in a Multicultural World	ICC Core	2
CC0005#	Healthy Living and Wellbeing	ICC Core	3

#Applicable to AY21 students onwards

PHY Year 2			
Course Code	Course Title	Course Type	Course AU
PH2101	Quantum Mechanics I	Core	3
PH2199	Physics Laboratory IIb	Core	2
PS0002	Introduction to Data Science and Artificial Intelligence	#ICC-Core/ *GER-Core	3
MH2801	Complex Methods for the Sciences	Core	3
CC0006#	Sustainability: Society, Economy & Environment	ICC-Core	3
CC0007#	Science & Technology for Humanity	ICC-Core	3
HY0001*	Ethics & Moral Reasoning Final Offer in AY22 Sem 2	GER-Core	1

*Applicable to AY19 – AY20 students only

#Applicable to AY21 students onwards

PHY Year 3 (APHY)			
Course Code	Course Title	Course Type	Course AU
PH3199	Physics Laboratory IIIa	Core	2
PH3399	Physics Lab IIIb (Final Offer in AY22 Sem 2)	Core	2
ET0001	Enterprise & Innovation	GER-Core	1
HW0228	Scientific Communication II (Final Offer in AY22 Sem 2)	GER-Core	2

PHY Year 3 (PPHY)			
Course Code	Course Title	Course Type	Course AU
PH3199	Physics Laboratory IIIa	Core	2
PH3201	Statistical Mechanics I	Core	4
ET0001	Enterprise & Innovation	GER-Core	1
HW0228	Scientific Communication II (Final Offer in AY22 Sem 2)	GER-Core	2

PHY Major PE (APHY)			
Course Code	Course Title	Course Type	Course AU
PH3404	Physics of Classical and Quantum Information	Major PE	3
PH3406	Open Quantum Systems	Major PE	4
PH3603	Biophysics	Major PE	3
PH4404	Nanoscale Physics	Major PE	3
PH4409	Quantum Electronics	Major PE	4
PH4414	Introduction to Spintronics	Major-PE	4
PH4418	Physics in the Industry	Major PE	4
PH4419	Computational Physics	Major PE	4
PH4605	Medical Physics for Radiotherapy	Major PE	4
PH4415	Final Year Project (AY16 batch till AY18 batch)	Major PE	11
PH4421	Final Year Project (AY19 batch and after)	Major PE	10
PH4417	Professional Internship (AY16 batch till AY18 batch)	Major PE	11
PH4420	Professional Internship (AY19 batch and after)	Major PE	10

PHY Major PE (PPHY)			
Course Code	Course Title	Course Type	Course AU
PH3404	Physics of Classical and Quantum Information	Major PE	3
PH3406	Open Quantum Systems	Major PE	4
PH4404	Nanoscale Physics	Major PE	3
PH4409	Quantum Electronics	Major PE	4
PH4414	Introduction to Spintronics	Major-PE	4
PH4418	Physics in the Industry	Major PE	4
PH4419	Computational Physics	Major PE	4
PH4508	Introduction to General Relativity	Major-PE	3
PH4509	Quantum Field Theory with applications in Condensed Matter Physics	Major PE	4
PH4415	Final Year Project (AY16 batch till AY18 batch)	Major PE	11
PH4421	Final Year Project (AY19 batch and after)	Major PE	10
PH4417	Professional Internship (AY16 batch till AY18 batch)	Major PE	11
PH4420	Professional Internship (AY19 batch and after)	Major PE	10

6. You are allowed to read higher level courses provided that 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 with Admission Year 2022
9. who are intending to take up higher level courses whereby the pre-requisites 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.
10. Students who are interested may take graduate courses as prescribed electives or unrestricted electives. A minimum CGPA of 4.00 is required for the application. Students will be required to fulfill at least 10 AU of level 4 [excluding PH4405/PH4415 Final Year project (10 AU/11 AU) or PH4407/PH4413/PH4417/PH4421 Professional Internship (10 AU/11AU)] and above courses as part of their graduation requirement under Major PE. Graduate course information may be found from <https://www.ntu.edu.sg/spms/about-us/physics/grad/course-info>. Students may write in to SPMSundgrad@ntu.edu.sg for more details on the application process.

These are the graduate courses offered in AY2022/2023 Semester 2:

- PH7024 - Graduate Quantum Mechanics
- PH7021 – Quantum Information
- PH7015 – Nonlinear Optics

Please note that PH7015 Nonlinear Optics is mutually exclusive with PH4409. All applications for Graduate Courses are subject to approval.

11. 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 matching details and a copy of your exchange transcript (if any) in pdf format in your application. This is subjected to approval from approving officer.
12. Enquiries on curriculum may be directed to :
 - Assoc Prof Cheong Siew Ann (cheongsa@ntu.edu.sg)
 - Ms Tan Soo Pei, Juliet (JulietTanSP@ntu.edu.sg)
13. 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 vacancies are to be submitted through the online appeal system and will not be responded to if submitted otherwise.
14. Enquiries on network performance, Studentlink password or STARS PIN may be directed to NSS Service Desk using the IT Service Desk Form below:
 - [ServiceNow](#)
 - [Password Services](#) (To change or reset Network Account password)
 - Service Desk Form: <https://www.ntu.edu.sg/life-at-ntu/internet-account-and-policy/service-desk-form>