

Sample Study Plan — Data Science and Economics

Year 1		Year 2		Year 3		Year 4	
Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2
Humanities	Social Sciences	Writing	Communities and Engagement	EC3101 Microeconomic Analysis II <u>or</u> EC3102	EC3102 Macroeconomic Analysis II <u>or</u> EC3101	EC4305 Applied Econometrics	Level 4000 elective 3***
Scientific Inquiry I	Asian Studies	Scientific Inquiry II	Artificial Intelligence	MA2311 Techniques in Advanced Calculus/ MA2104 <u>or</u> CS2040	EC3304 Econometrics II	Level 4000 elective 1***	Level 4000 elective 4***
Digital Literacy (CS1010S)	Design Thinking	MA2001 Linear Algebra I	CS2040 Data Structures and Algorithms <u>or</u> MA2104 Multivariable Calculus	DSA2102 Essential Data Analytics Tools: Numerical Computation <u>or</u> DSA2101	DSE3101 Practical Data Science for Economics	Level 4000 elective 2***	Level 4000 elective 5***
DSE1101* Introductory Data Science for Economics	MA2002 Calculus	ST2131 Probability	DSA2101 Essential Data Analytics Tools: Data Visualisation <u>or</u> DSA2102	ST3131 Regression Analysis <u>or</u> ST2132	DSA3102 Essential Data Analytics Tools: Convex Optimisation	UE 3	UE 5
EC1101E Introduction to Economic Analysis	EC2101 Microeconomic Analysis I <u>or</u> EC2102	EC2102 Macroeconomic Analysis I <u>or</u> EC2101	ST2132 Mathematical Statistics <u>or</u> ST3131	UE 1	UE 2	UE 4	UE 6

* DSE1101 fulfils the Data Literacy requirement

** DSE3101 is only offered in Semester 2 of every year, and students are strongly encouraged to take DSE3101 in Year 3 Semester 2.

*** Students are required to take **at least** one of the following four elective courses: DSE4211, DSE4212, DSE4231, DSE4288. Note that DSE4212 is offered in Semester 1, and DSE4211 & DSE4231 are offered in Semester 2.

Note on CHS Common Curriculum courses:

1. Students are strongly encouraged to complete all CHS Common Curriculum courses in their first two years except for the Communities and Engagement course – can be taken from Years 2 to 4*

***Important note on workload: Semester vs. Year-long C&E courses**

- Some C&E courses, usually the field/project-work courses, are regular intense 4-Unit courses with work completed within one semester.
 - Other C&E courses, especially the service-work courses, are spread out over two consecutive semesters, or up to one year, that is, **Semester 1 through Semester 2 to Special Term 2**; or **Semester 2 through the Special Terms to Semester 1 of following Academic Year (AY)**. You may click [here](#) for more details on the service-work courses.
 - For those students who read the year-long C&E courses which extend till Special Term (during the summer break) after their 8th semester, please note that grades are awarded at the end of Special Term 2, which means your degree will be conferred in end-Aug, and you will join the Commencement ceremony in the following year instead of the same AY of completion of the course. For more details, please check out the FAQ [here](#).
 - As such, students who prefer to take such year-long C&E courses instead of semester-long courses (where the latter might have limited capacity in each semester) are encouraged to plan in advance. You may do so by including the C&E course in your study plan earlier in your candidature; for example, during Year 2 of study.
 - This would allow students to plan for other enrichment programmes (such as Student Exchange programmes, NOC and/or UPIP/Internships) during Year 3 instead of delaying this requirement to Year 4 when students will need to devote time for their job search in the final semester as they complete the remaining graduation requirements.
 - For more enquiries, please check out the [FAQ](#), or email the C&E team at AskCnE@nus.edu.sg.
2. The actual pre-allocation may differ from the sample study plan. For the actual pre-allocation pairings, please click [here](#).
 3. DSE students are not required to take the two interdisciplinary courses under CHS Common Curriculum

Note on NUS Overseas Colleges (NOC) Program

For students participating in the Year-Long NOC programme, the 8-unit course TR3203N or ETP3202L may be used to substitute for DSE4288, subject to the following conditions:

1. Students must have successfully completed DSE3101 prior to commencing the Year-Long NOC programme.
2. The substitution is subject to case-by-case approval by the DSE Committee according to the following process:

Step 1: Pre-Internship Proposal

After confirming the internship company, the student must submit a proposal to the DSE Committee. The proposal should include:

- *Company background;*
- *Detailed job description; and*
- *An explanation of how the internship is expected to provide learning experiences aligned with the objectives of DSE4288.*

Step 2: Mid-Internship Progress Review

Upon approval of the proposal, the student must submit a draft case study report to the DSE Committee by the end of the fourth month of the internship. The Committee will review the draft to ensure that the internship continues to meet the intended learning outcomes and requirements for substitution.

Final approval of the substitution will be subject to the satisfactory completion of the internship and the submission of all required deliverables as determined by the DSE Committee.