

**Bachelor of Science
with Second Major in Innovation & Design**

Cohort AY2024/2025

Course Requirements	Units
Common Curriculum	
Artificial Intelligence	4
Communities and Engagement	4
Data Literacy	4
Digital Literacy	4
Design Thinking: DTK1234 Design Thinking	4
Writing: SP1541 Exploring Science Communication through Popular Science	4
Integrated Asian Studies: HSA1000 Asian Interconnections	4
Integrated Humanities: HSH1000 The Human Condition	4
Integrated Social Sciences: HSS1000 Understanding Social Complexity	4
Scientific Inquiry I	4
Scientific Inquiry II	4
Interdisciplinary Course I	4
Interdisciplinary Course II	4
Sub-total for Common Curriculum	52
Major Requirements	
Major gateway course	4
Core courses and electives	56
Sub-total for Major Requirements	60
Unrestricted Electives	
Group A course for Second Major	4
Group B course for Second Major	4
Group C courses for Second Major (Innovation & Enterprise electives)	8
CDE3301 Ideas to Proof-of-Concept (over 2 consecutive semesters)	12
CDE4301 Innovation & Design Capstone <u>or</u> CDE4301A Ideas to Start-up (over 2 consecutive semesters)	12
Other unrestricted electives	8
Sub-total for Unrestricted Electives	48
Total	160

Note:

Some courses in the Common Curriculum may be fulfilled by those in NUS College (NUSC), University Town College Programme (UTCP), and Ridge View Residential Programme (RVRC).

Recommended semester schedule
(for students who read DTK1234 in Semester 1)

Semester 1	Units	Semester 2	Units
HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4	HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4
HSA1000 Asian Interconnections or Scientific Inquiry I	4	HSA1000 Asian Interconnections or Scientific Inquiry I	4
DTK1234 Design Thinking	4	Data Literacy	4
Major 1 (gateway course)	4	Major 2	4
UE	4	Group A/B course for Second Major	4
Sub-total	20	Sub-total	20

Semester 3	Units	Semester 4	Units
Digital Literacy	4	Artificial Intelligence	4
SP1541 Exploring Science Communication through Popular Science	4	Communities and Engagement	4
Scientific Inquiry II	4	Major 4	4
Major 3	4	Major 5	4
Group A/B course for Second Major	4	CDE3301 Ideas to Proof-of-Concept	6
Sub-total	20	Sub-total	22

Semester 5	Units	Semester 6 – can be used for SEP	Units
CDE3301 Ideas to Proof-of-Concept	6	Innovation & Enterprise Elective 1	4
Interdisciplinary Course I	4	Interdisciplinary Course II	4
Major 6	4	Major 9	4
Major 7	4	Major 10	4
Major 8	4	Major 11	4
Sub-total	22	Sub-total	20

Semester 7	Units	Semester 8	Units
CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6	CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6
Innovation & Enterprise Elective 2	4	Major 14	4
Major 12	4	Major 15	4
Major 13	4	UE	4
Sub-total	18	Sub-total	18

Recommended semester schedule
(for students who read DTK1234 in Semester 2)

Semester 1	Units	Semester 2	Units
HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4	HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4
HSA1000 Asian Interconnections or Scientific Inquiry I	4	HSA1000 Asian Interconnections or Scientific Inquiry I	4
Data Literacy	4	DTK1234 Design Thinking	4
Major 1 (gateway course)	4	Major 2	4
UE	4	Group A/B course for Second Major	4
Sub-total	20	Sub-total	20

Semester 3	Units	Semester 4	Units
Digital Literacy	4	Artificial Intelligence	4
SP1541 Exploring Science Communication through Popular Science	4	Communities and Engagement	4
Scientific Inquiry II	4	Major 4	4
Major 3	4	Major 5	4
Group A/B course for Second Major	4	CDE3301 Ideas to Proof-of-Concept	6
Sub-total	20	Sub-total	22

Semester 5	Units	Semester 6 – can be used for SEP	Units
CDE3301 Ideas to Proof-of-Concept	6	Innovation & Enterprise Elective 1	4
Interdisciplinary Course I	4	Interdisciplinary Course II	4
Major 6	4	Major 9	4
Major 7	4	Major 10	4
Major 8	4	UE	4
Sub-total	22	Sub-total	20

Semester 7	Units	Semester 8	Units
CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6	CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6
Innovation & Enterprise Elective 2	4	Major 13	4
Major 11	4	Major 14	4
Major 12	4	Major 15	4
Sub-total	18	Sub-total	18

Recommended semester schedule
(for students in year-long NOC programmes)

Semester 1	Units	Semester 2	Units
HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4	HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4
HSA1000 Asian Interconnections or HSI1000 How Science Works, Why Science Works	4	HSA1000 Asian Interconnections or HSI1000 How Science Works, Why Science Works	4
Data Literacy or DTK1234 Design Thinking	4	Data Literacy or DTK1234 Design Thinking	4
Digital Literacy	4	Major 2	4
Major 1 (gateway course)	4	Group A/B course for Second Major	4
Sub-total	20	Sub-total	20

Semester 3	Units	Semester 4	Units
SP1541 Exploring Science Communication through Popular Science	4	Artificial Intelligence	4
Scientific Inquiry II	4	Communities and Engagement	4
Major 3	4	Major 6	4
Major 4	4	Major 7	4
Major 5	4	CDE3301 Ideas to Proof-of-Concept	6
Group A/B course for Second Major	4		
Sub-total	24	Sub-total	22

Semester 5	Units	Semester 6 – NOC	Units
CDE3301 Ideas to Proof-of-Concept	6	NOC	
Interdisciplinary Course I	4		
Major 8	4		
Major 9	4		
Major 10	4		
Sub-total	22	Sub-total	20

Semester 7 – NOC	Units	Semester 8	Units
NOC		Interdisciplinary Course II	4
		Major 11	4
		Major 12	4
		Major 13	4
		Major 14	4
		Major 15	4
Sub-total	18	Sub-total	24

A year-long NOC programme comprises the following courses:

- ETP3206L Innovation & Enterprise Internship (16 units) – counted as UE (16 units)
- ETP3202L Innovation & Enterprise Case Study & Analysis (8 units) – replaces CDE4301A (8 units out of 12 units)
- ETP3203L Innovation & Enterprise Internship Practicum (8 units) – replaces CDE4301A (4 units out of 12 units) and UE (4 units)
- ETP2271 Discovering Resilience and Purpose (2 units) – counted as UE (2 units)
- Entrepreneurship courses (4 or 8 units) – replaces Innovation & Enterprise electives (up to 8 units – students will need to complete additional Innovation & Enterprise Electives in NUS if they are unable to complete 8 units of entrepreneurship courses during NOC)

Recommended semester schedule
(for students in one-semester NOC programmes)

Semester 1	Units	Semester 2	Units
HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4	HSH1000 The Human Condition or HSS1000 Understanding Social Complexity	4
HSA1000 Asian Interconnections or HSI1000 How Science Works, Why Science Works	4	HSA1000 Asian Interconnections or HSI1000 How Science Works, Why Science Works	4
Data Literacy or DTK1234 Design Thinking	4	Data Literacy or DTK1234 Design Thinking	4
Digital Literacy	4	Major 2	4
Major 1 (gateway course)	4	Group A/B course for Second Major	4
Sub-total	20	Sub-total	20

Semester 3	Units	Semester 4	Units
SP1541 Exploring Science Communication through Popular Science	4	Artificial Intelligence	4
Scientific Inquiry II	4	Communities and Engagement	4
Major 3	4	Major 6	4
Major 4	4	Major 7	4
Major 5	4	CDE3301 Ideas to Proof-of-Concept	6
Group A/B course for Second Major	4		
Sub-total	24	Sub-total	22

Semester 5	Units	Semester 6 – NOC	Units
CDE3301 Ideas to Proof-of-Concept	6	NOC	
Interdisciplinary Course I	4		
Major 8	4		
Major 9	4		
Major 10	4		
Sub-total	22	Sub-total	22

Semester 7	Units	Semester 8	Units
CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6	CDE4301 Innovation & Design Capstone or CDE4301A Ideas to Start-up	6
Major 11	4	Interdisciplinary Course II	4
Major 12	4	Major 14	4
Major 13	4	Major 15	4
Sub-total	18	Sub-total	18

A one-semester NOC programme comprises the following courses:

- ETP3201L Innovation & Enterprise Internship (12 units) – counted as UE (12 units)
- ETP3204S Innovation & Enterprise Internship Practicum (4 units) – replaces Innovation & Enterprise Elective 1 (4 units)
- Entrepreneurship course (4 units) – replaces Innovation & Enterprise Elective 2 (4 units)
- ETP2271 Discovering Resilience and Purpose (2 units) – counted as UE (2 units)