

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

Cohorts AY2021/2022 and AY2022/2023

Modular Requirements	Modular Credits (MCs)
Common Curriculum	
DTK1234 Design Thinking	4
SP1541 Exploring Science Communication through Popular Science ¹	4
GEA1000 Quantitative Reasoning with Data ^{1,2}	4
GEI1001 Computational Reasoning ^{1,2}	4
HS1501 Artificial Intelligence and Society	4
Communities and Engagement ¹	4
Integrated Asian Studies: HSA1000 Asian Interconnections ¹	4
Integrated Humanities: HSH1000 The Human Condition ¹	4
Integrated Social Sciences: HSS1000 Understanding Social Complexity ¹	4
Scientific Inquiry I: HSI1000 How Science Works, Why Science Works ¹	4
Scientific Inquiry II ¹	4
Interdisciplinary Module I ¹	4
Interdisciplinary Module II ¹	4
Sub-total for Common Curriculum	52
Major Requirements	
Major gateway module	4
Core modules and electives	56
Sub-total for Major Requirements	60
Unrestricted Electives	
Group A module for Second Major	4
Group B module for Second Major	4
Group C modules for Second Major (Innovation & Enterprise electives)	8
EG3301R DCP Project (over 2 consecutive semesters)	12
EG4301 DCP Dissertation or EG4301A Ideas to Start-up (over 2 consecutive semesters)	12
Other unrestricted electives	8
Sub-total for Unrestricted Electives	48
Total	160

Notes:

- ¹ Students may read equivalent modules in USP/NUSC, UTCP, and RVRC.
- ² Students in some majors may read other modules in lieu of these.

Recommended semester schedule

(for students who read DTK1234 in Semester 1)

Semester 1	MCs	Semester 2	MCs
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
DTK1234 Design Thinking	4	GEA1000 Quantitative Reasoning with Data	4
Major 1 (gateway module)	4	Major 2	4
UE	4	Group A module for Second Major	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
GEI1001 Computational Reasoning	4	HS1501 Artificial Intelligence and Society	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 B module for Second Major	4	EG3301R DCP Project	6
Sub-total	20	Sub-total	22

Semester 5	MCs	Semester 6 – can be used for SEP	MCs
EG3301R DCP Project	6	Innovation & Enterprise Elective 1	4
Interdisciplinary Module I	4	Interdisciplinary Module 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	MCs	Semester 8	MCs
EG4301 DCP Dissertation or EG4301A Ideas to Start-up	6	EG4301 DCP Dissertation or EG4301A 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	MCs	Semester 2	MCs
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
GEA1000 Quantitative Reasoning with Data	4	DTK1234 Design Thinking	4
Major 1 (gateway module)	4	Major 2	4
UE	4	UE	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
GEI1001 Computational Reasoning	4	HS1501 Artificial Intelligence and Society	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 module for Second Major	4	EG3301R DCP Project	6
Sub-total	20	Sub-total	22

Semester 5	MCs	Semester 6 – can be used for SEP	MCs
EG3301R DCP Project	6	Innovation & Enterprise Elective 1	4
Group B module for Second Major	4	Interdisciplinary Module II	4
Interdisciplinary Module I	4	Major 8	4
Major 6	4	Major 9	4
Major 7	4	Major 10	4
Sub-total	22	Sub-total	20

Semester 7	MCs	Semester 8	MCs
EG4301 DCP Dissertation or EG4301A Ideas to Start-up	6	EG4301 DCP Dissertation or EG4301A 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	MCs	Semester 2	MCs
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
GEA1000 Quantitative Reasoning with Data or DTK1234 Design Thinking	4	GEA1000 Quantitative Reasoning with Data or DTK1234 Design Thinking	4
Major 1 (gateway module)	4	Major 3	4
Major 2	4	Major 4	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
GEI1001 Computational Reasoning	4	HS1501 Artificial Intelligence and Society	4
SP1541 Exploring Science Communication through Popular Science	4	Communities and Engagement	4
Scientific Inquiry II	4	Major 7	4
Major 5	4	Major 8	4
Major 6	4	EG3301R DCP Project	6
Group A module for Second Major	4		
Sub-total	24	Sub-total	22

Semester 5	MCs	Semester 6 – NOC	MCs
EG3301R DCP Project	6	NOC	
Group B module for Second Major	4		
Interdisciplinary Module I	4		
Major 9	4		
Major 10	4		
Sub-total	22	Sub-total	20

Semester 7 – NOC	MCs	Semester 8	MCs
NOC		Interdisciplinary Module II	4
		Major 11	4
		Major 12	4
		Major 13	4
		Major 14	4
		Major 15	4
Sub-total	20	Sub-total	24

A year-long NOC programme comprises the following modules:

- TR3201N Entrepreneurship Practicum (8 MCs) – replaces EG4301A (4 MCs out of 12 MCs) and UE (4 MCs)
- TR3202N Start-up Internship Programme (12 MCs) – counted as UE
- TR3203N Start-up Case Study and Analysis (8 MCs) – replaces EG4301A (8 MCs out of 12 MCs)
- Entrepreneurship courses (up to 12 MCs) – replaces Innovation & Enterprise electives (up to 8 MCs) while the rest are counted as UE

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

Semester 1	MCs	Semester 2	MCs
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
GEA1000 Quantitative Reasoning with Data or DTK1234 Design Thinking	4	GEA1000 Quantitative Reasoning with Data or DTK1234 Design Thinking	4
Major 1 (gateway module)	4	Major 3	4
Major 2	4	Major 4	4
Sub-total	20	Sub-total	20

Semester 3	MCs	Semester 4	MCs
GEI1001 Computational Reasoning	4	HS1501 Artificial Intelligence and Society	4
SP1541 Exploring Science Communication through Popular Science	4	Communities and Engagement	4
Scientific Inquiry II	4	Major 6	4
Major 5	4	Major 7	4
Group A module for Second Major	4	EG3301R DCP Project	6
Sub-total	20	Sub-total	22

Semester 5	MCs	Semester 6 – NOC	MCs
EG3301R DCP Project	6	NOC	
Group B module for Second Major	4		
Interdisciplinary Module I	4		
Major 8	4		
Major 9	4		
Sub-total	22	Sub-total	20

Semester 7	MCs	Semester 8	MCs
EG4301 DCP Dissertation or EG4301A Ideas to Start-up	6	EG4301 DCP Dissertation or EG4301A Ideas to Start-up	6
Major 10	4	Interdisciplinary Module II	4
Major 11	4	Major 14	4
Major 12	4	Major 15	4
Major 13	4		
Sub-total	22	Sub-total	18

A one-semester NOC programme comprises the following modules:

- TR3202S Start-up Internship Programme (12 MCs) – counted as UE
- TR3204 Entrepreneurship Practicum (4 MCs) – replaces Innovation & Enterprise Elective 1
- Entrepreneurship course (4 MCs) – replaces Innovation & Enterprise Elective 2