

**Bachelor of Arts (Architecture)
with Second Major in Innovation & Design**

Cohort AY2026/2027

Course Requirements	Units
Common Curriculum	
GEA1000 Quantitative Reasoning with Data ¹	4
GE: Critique and Expression ²	4
GE: Cultures and Connections ²	4
GE: Communities and Engagement ²	4
AR2524 Spatial Computational Thinking <u>or</u> CS1010E Programming Methodology (or other variants) ²	4
CDE2212 AI for Design <u>or</u> HS1501 Artificial Intelligence and Society <u>or</u> EE2211 Introduction to Machine Learning <u>or</u> EE2213 Introduction to Artificial Intelligence	4
CDE2501 Sustainable Systems for Liveable Cities ²	4
DTK2234 Advanced Design Thinking	4
EG1311 Design and Make <u>or</u> EG1311BE Design and Make	4
PF1101A Project Management and Finance	4
Sub-total for Common Curriculum	40
Major Requirements	
AR1101A Design 1: Seeing, Thinking, Making	8
AR1102 Design 2	8
AR2101 Design 3	8
AR2102 Design 4	8
AR3101 Design 5	8
AR1328A Architectural Materials and Construction	4
AR1329 Climate, Ecology & Architecture	4
AR2227 History & Theory of Architecture I	4
AR2228 History & Theory of Architecture II	4
AR2328A Architectural Tectonics and Structural Systems	4
AR3223 Introduction to Urbanism	4
AR3328 Architectural Structures and Forces	4
AR3722 Sustainable Environmental System	4
CDE4301 Innovation & Design Capstone <u>or</u> CDE4301A Ideas to Start-up (over 2 consecutive semesters) ⁴	8
Sub-total for Major Requirements	80
Unrestricted Electives	
CDE3301 Ideas to Proof-of-Concept (over 2 consecutive semesters) ³	12
CDE4301 Innovation & Design Capstone <u>or</u> CDE4301A Ideas to Start-up (over 2 consecutive semesters) ⁴	4
Electives for Second Major ³	16
Other unrestricted electives	8
Sub-total for Unrestricted Electives	40
Total	160

NUS Innovation & Design Programme
College of Design and Engineering

Notes:

- ¹ Students may read other approved courses for Data Literacy in lieu of GEA1000.
- ² Students may read equivalent courses in NUS College (NUSC), University Town College Programme (UTCP), and Ridge View Residential Programme (RVRC). CDE2501 fulfils GE: Singapore Studies.
- ³ Students should clear at least one elective course from List I prior to CDE3301.
- ⁴ The 12 units for CDE4301/CDE4301A are counted towards 8 units for Integrated Project (in lieu of AR3102 Design 6) while 4 units are counted as unrestricted elective.

Sample study plan

(for students who are not going for NOC)

Semester 1	Units	Semester 2	Units
AR1101A Design 1: Seeing, Thinking, Making	8	AR1102 Design 2	8
EG1311 Design and Make or EG1311BE Design and Make	4	AR1328A Architectural Materials and Construction	4
DTK2234 Advanced Design Thinking	4	AR2227 History & Theory of Architecture I	4
GEA1000 Quantitative Reasoning with Data	4	AR2524 Spatial Computational Thinking	4
Sub-total	20	Sub-total	20

Semester 3	Units	Semester 4	Units
AR2101 Design 3	8	AR2102 Design 4	8
AR2228 History & Theory of Architecture II	4	AR1329 Climate, Ecology & Architecture	4
AR2328A Architectural Tectonics and Structural Systems	4	CDE2501 Sustainable Systems for Liveable Cities	4
CDE2212 AI for Design	4	CDE3301 Ideas to Proof-of-Concept	6
Elective 1 for Second Major (from List I)	4		
Sub-total	24	Sub-total	22

Semester 5	Units	Semester 6 – can be used for SEP	Units
AR3101 Design 5	8	AR3722 Sustainable Environmental System	4
AR3223 Introduction to Urbanism	4	PF1101A Project Management and Finance	4
AR3328 Architectural Structures and Forces	4	GE	4
CDE3301 Ideas to Proof-of-Concept	6	GE	4
		Elective 2 for Second Major (from List I)	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
Elective 3 for Second Major	4	Elective 4 for Second Major	4
GE	4	UE	4
UE	4		
Sub-total	18	Sub-total	14

Sample study plan

(for students in year-long NOC programmes)

Semester 1	Units	Semester 2	Units
AR1101A Design 1: Seeing, Thinking, Making	8	AR1102 Design 2	8
EG1311 Design and Make or EG1311BE Design and Make	4	AR1328A Architectural Materials and Construction	4
DTK2234 Advanced Design Thinking	4	AR2227 History & Theory of Architecture I	4
GEA1000 Quantitative Reasoning with Data	4	AR2524 Spatial Computational Thinking	4
		Elective 1 for Second Major (from List I)	4
Sub-total	20	Sub-total	24

Semester 3	Units	Semester 4	Units
AR2101 Design 3	8	AR2102 Design 4	8
AR2228 History & Theory of Architecture II	4	AR1329 Climate, Ecology & Architecture	4
AR2328A Architectural Tectonics and Structural Systems	4	CDE2501 Sustainable Systems for Liveable Cities	4
CDE2212 AI for Design	4	GE	4
Elective 2 for Second Major (from List I)	4	CDE3301 Ideas to Proof-of-Concept	6
Sub-total	24	Sub-total	26

Semester 5	Units	Semester 6 – NOC	Units
AR3101 Design 5	8	NOC	
AR3223 Introduction to Urbanism	4		
AR3328 Architectural Structures and Forces	4		
CDE3301 Ideas to Proof-of-Concept	6		
Sub-total	22	Sub-total	20

Semester 7 – NOC	Units	Semester 8	Units
NOC		AR3102 Design 6 *	8
		AR3722 Sustainable Environmental System	4
		PF1101A Project Management and Finance	4
		GE	4
		GE	4
Sub-total	20	Sub-total	24

* A year-long NOC programme cannot be used to fulfil AR3102.

A year-long NOC programme comprises the following courses (up to 40 units):

- 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)
- Entrepreneurship courses (up to 8 units) – replaces Electives 3 and 4 for Second Major (students will need to complete Electives 3 and/or 4 for Second Major in NUS if they are unable to complete 8 units of entrepreneurship courses during NOC)

Sample study plan

(for students in one-semester NOC programmes)

Semester 1	Units	Semester 2	Units
AR1101A Design 1: Seeing, Thinking, Making	8	AR1102 Design 2	8
EG1311 Design and Make or EG1311BE Design and Make	4	AR1328A Architectural Materials and Construction	4
DTK2234 Advanced Design Thinking	4	AR2227 History & Theory of Architecture I	4
GEA1000 Quantitative Reasoning with Data	4	AR2524 Spatial Computational Thinking	4
		Elective 1 for Second Major (from List I)	4
Sub-total	20	Sub-total	24

Semester 3	Units	Semester 4	Units
AR2101 Design 3	8	AR2102 Design 4	8
AR2228 History & Theory of Architecture II	4	AR1329 Climate, Ecology & Architecture	4
AR2328A Architectural Tectonics and Structural Systems	4	CDE2501 Sustainable Systems for Liveable Cities	4
CDE2212 AI for Design	4	CDE3301 Ideas to Proof-of-Concept	6
Elective 2 for Second Major (from List I)	4		
Sub-total	24	Sub-total	22

Semester 5	Units	Semester 6 – NOC	Units
AR3101 Design 5	8	NOC	
AR3223 Introduction to Urbanism	4		
AR3328 Architectural Structures and Forces	4		
CDE3301 Ideas to Proof-of-Concept	6		
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
GE	4	AR3722 Sustainable Environmental System	4
GE	4	PF1101A Project Management and Finance	4
GE	4	UE	4
UE	4		
Sub-total	22	Sub-total	18

A one-semester NOC programme comprises the following courses (up to 20 units):

- ETP3201S Innovation & Enterprise Internship (12 units) – counted as UE (12 units)
- ETP3204S Innovation & Enterprise Internship Practicum (Short) (4 units) – replaces Elective 3 for Second Major (4 units)
- Entrepreneurship course (4 units) – replaces Elective 4 for Second Major (4 units)