

**Bachelor of Science (Project and Facilities Management)  
with Second Major in Innovation & Design**

**Cohort AY2021/2022**

<b>Modular Requirements</b>	<b>Modular Credits (MCs)</b>
<b>Common Curriculum</b>	
GEA1000 Quantitative Reasoning with Data <sup>1</sup>	4
CS1010S Programming Methodology	4
ES2631 Critique and Communication of Thinking and Design <sup>1</sup>	4
GE: Cultures and Connections <sup>1</sup>	4
GE: Singapore Studies <sup>1</sup>	4
GE: Communities and Engagement <sup>1</sup>	4
CDE2000 Creating Narratives	4
DTK1234 Design Thinking	4
EG1311 Design and Make	4
EG2501 Liveable Cities	4
IE2141 Systems Thinking and Dynamics	4
PF1101 Fundamentals of Project Management	4
PF3211 AI Applications for the Built Environment	4
EG4301 DCP Dissertation or EG4301A Ideas to Start-up (over 2 consecutive semesters) <sup>2</sup>	8
<b>Sub-total for Common Curriculum</b>	<b>60</b>
<b>Major Requirements</b>	
PF1103 Digital Construction	4
PF1107 Infrastructure and Project Management Law	4
PF1108 Introduction to Building Performance	4
PF2103 Measurement (Building Works)	4
PF2107 Construction Technology	4
PF2108 Project Cost Management	4
PF2109 Project Feasibility	4
PF2110 Infrastructure and Facilities Management	4
PF3104 Project Execution	4
PF3105 Research Methods	4
PF4102 Contract and Procurement Management	4
PFM elective modules	16
<b>Sub-total for Major Requirements</b>	<b>60</b>
<b>Unrestricted Electives</b>	
Group A module for Second Major	4
Group B module for Second Major	4
Group C modules for Second Major	8
EG3301R DCP Project (over 2 consecutive semesters)	12
EG4301 DCP Dissertation or EG4301A Ideas to Start-up (over 2 consecutive semesters) <sup>2</sup>	4
Other unrestricted electives <sup>3</sup>	8
<b>Sub-total for Unrestricted Electives</b>	<b>40</b>
<b>Total</b>	<b>160</b>

**Innovation & Design Programme**  
**NUS College of Design and Engineering**

Notes:

<sup>1</sup> Students may read equivalent modules in USP/NUSC, UTCP, and RVRC.

<sup>2</sup> Replaces PF4101 Dissertation, subject to approval from home department.

The 12 MCs for EG4301/EG4301A are counted towards 8 MCs for the Integrated Project requirement in the Common Curriculum while 4 MCs are counted as unrestricted elective.

<sup>3</sup> Can be used for PF2404 Work Experience Internship and PF3401 Practical Training Scheme during summer vacations between Year 2 and Year 3, and between Year 3 and Year 4.

**Recommended semester schedule – JC-intake students or equivalent**

Semester 1	MCs	Semester 2	MCs
GEA1000 Quantitative Reasoning with Data	4	CS1010S Programming Methodology	4
DTK1234 Design Thinking	4	EG1311 Design & Make	4
PF1101 Fundamentals of Project Management	4	PF1103 Digital Construction	4
PF1107 Infrastructure and Project Management Law	4	PF1108 Introduction to Building Performance	4
GE	4	Group A module for Second Major	4
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>20</b>

Semester 3	MCs	Semester 4	MCs
EG2501 Liveable Cities	4	ES2631 Critique and Communication of Thinking and Design	4
PF2107 Construction Technology	4	IE2141 Systems Thinking & Dynamics	4
PF2109 Project Feasibility	4	PF2103 Measurement (Building Works)	4
PF3211 AI Applications for the Built Environment	4	PF2108 Project Cost Management	4
Group B module for Second Major	4	PF2110 Infrastructure and Facilities Management	4
		EG3301R DCP Project	6
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>26</b>

Semester 5	MCs	Semester 6 – can be used for SEP	MCs
EG3301R DCP Project	6	Innovation & Enterprise Elective 1	4
PF3104 Project Execution	4	PFM Elective 1	4
PF3105 Research Methods	4	PFM Elective 2	4
CDE2000 Creating Narratives	4	GE *	4
		GE *	4
<b>Sub-total</b>	<b>18</b>	<b>Sub-total</b>	<b>20</b>

Semester 7	MCs	Semester 8	MCs
EG4301 DCP Dissertation	6	EG4301 DCP Dissertation	6
Innovation & Enterprise Elective 2	4	PFM Elective 4	4
PF4102 Contract and Procurement Management	4	UE	4
PFM Elective 3	4	UE	4
<b>Sub-total</b>	<b>18</b>	<b>Sub-total</b>	<b>18</b>

\* Students in UTCP and RVRC will need to overload in Semesters 2 to 4 in order to clear these modules earlier.

**Recommended semester schedule – JC-intake students or equivalent**  
(for students in year-long NOC programmes)

Semester 1	MCs	Semester 2	MCs
GEA1000 Quantitative Reasoning with Data	4	CS1010S Programming Methodology	4
DTK1234 Design Thinking	4	EG1311 Design & Make	4
PF1101 Fundamentals of Project Management	4	PF1103 Digital Construction	4
PF1107 Infrastructure and Project Management Law	4	PF1108 Introduction to Building Performance	4
GE	4	Group A module for Second Major	4
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>20</b>

Semester 3	MCs	Semester 4	MCs
EG2501 Liveable Cities	4	ES2631 Critique and Communication of Thinking and Design	4
PF2107 Construction Technology	4	IE2141 Systems Thinking & Dynamics	4
PF2109 Project Feasibility	4	PF2103 Measurement (Building Works)	4
PF3211 AI Applications for the Built Environment	4	PF2108 Project Cost Management	4
Group B module for Second Major	4	PF2110 Infrastructure and Facilities Management	4
GE *	4	EG3301R DCP Project	6
<b>Sub-total</b>	<b>24</b>	<b>Sub-total</b>	<b>26</b>

Semester 5	MCs	Semester 6 – NOC	MCs
EG3301R DCP Project	6	NOC	
PF3104 Project Execution	4		
PF3105 Research Methods	4		
PF4102 Contract and Procurement Management	4		
CDE2000 Creating Narratives	4		
<b>Sub-total</b>	<b>22</b>	<b>Sub-total</b>	<b>20</b>

Semester 7 – NOC	MCs	Semester 8	MCs
NOC		PFM Elective 1	4
		PFM Elective 2	4
		PFM Elective 3	4
		PFM Elective 4	4
		GE *	4
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>20</b>

\* Students in UTCP and RVRC will need to overload in Semesters 2 to 4 in order to clear this module earlier.

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 – JC-intake students or equivalent**  
(for students in one-semester NOC programmes)

Semester 1	MCs	Semester 2	MCs
GEA1000 Quantitative Reasoning with Data	4	CS1010S Programming Methodology	4
DTK1234 Design Thinking	4	EG1311 Design & Make	4
PF1101 Fundamentals of Project Management	4	PF1103 Digital Construction	4
PF1107 Infrastructure and Project Management Law	4	PF1108 Introduction to Building Performance	4
GE	4	Group A module for Second Major	4
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>20</b>

Semester 3	MCs	Semester 4	MCs
EG2501 Liveable Cities	4	ES2631 Critique and Communication of Thinking and Design	4
PF2107 Construction Technology	4	IE2141 Systems Thinking & Dynamics	4
PF2109 Project Feasibility	4	PF2103 Measurement (Building Works)	4
PF3211 AI Applications for the Built Environment	4	PF2108 Project Cost Management	4
Group B module for Second Major	4	PF2110 Infrastructure and Facilities Management	4
		EG3301R DCP Project	6
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>26</b>

Semester 5	MCs	Semester 6 – NOC	MCs
EG3301R DCP Project	6	NOC	
PF3104 Project Execution	4		
PF3105 Research Methods	4		
CDE2000 Creating Narratives	4		
GE *	4		
<b>Sub-total</b>	<b>22</b>	<b>Sub-total</b>	<b>20</b>

Semester 7	MCs	Semester 8	MCs
EG4301 DCP Dissertation	6	EG4301 DCP Dissertation	6
PF4102 Contract and Procurement Management	4	PFM Elective 2	4
PFM Elective 1	4	PFM Elective 3	4
GE *	4	PFM Elective 4	4
<b>Sub-total</b>	<b>18</b>	<b>Sub-total</b>	<b>18</b>

\* Students in UTCP and RVRC will need to overload in Semesters 2 to 4 in order to clear these modules earlier.

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