NUS Innovation & Design Programme
College of Design and Engineering

Bachelor of Science (Business Analytics) with Minor in Innovation & Design

Cohort AY2025/2026

Course Requirements	Units
Common Curriculum	
BT1101 Introduction to Business Analytics [1]	4
CS1010A/S Programming Methodology [1]	4
GE: Critique and Expression [2]	4
GE: Communities and Engagement [2]	4
GE: Cultures and Connections [2]	4
GE: Singapore Studies [2]	4
IS1108 Digital and AI Ethics	4
Interdisciplinary Courses [3]	8
Elective 1 for Minor [3] (double-counted as Cross-disciplinary Course)	4
Sub-total for Common Curriculum	**40**
Programme Requirements	
MA1521 Calculus for Computing	4
MA1522 Linear Algebra for Computing	4
BT2101 Econometrics Modeling for Business Analytics	4
BT2102 Data Management and Visualisation	4
CS2030 Programming Methodology II	4
CS2040 Data Structures and Algorithms	4
IS2101 Business and Technical Communication	4
ST2334 Probability and Statistics	4
BT3103 Application Systems Development for Business Analytics	4
IS3103 Information Systems Leadership and Communication	4
BT4103 Business Analytics Capstone Project	8
Programme electives	20
IS4010 Industry Internship Programme or CP3880 Advanced Technology Attachment Programme or BT4101 B.Sc. (Business Analytics) Dissertation	12
Sub-total for Programme Requirements	**80**
Unrestricted Electives	
CDE3301 Ideas to Proof-of-Concept (over 2 consecutive semesters) [3]	12
Elective 2 for Minor [3]	4
Other unrestricted electives	24
Sub-total for Unrestricted Electives	**40**
Total	**160**

Notes:

[1] Data Literacy and Digital Literacy pillars are satisfied by BT1101 and CS1010S, respectively.

[2] Students may read equivalent courses in NUS College (NUSC), University Town College Programme (UTCP), and Ridge View Residential Programme (RVRC).

[3] Students in this Second Major are highly recommended to read DTK1234 Design Thinking or EG1311 Design and Make as an Interdisciplinary Course if they are planning to read CDE2300 Product Design and Innovation or CDE2310 Fundamentals of Systems Design, respectively. DTK1234 should be read before CDE2300 and EG1311 before CDE2310.

Students should clear at least one elective course prior to CDE3301.

(updated 12 July 2025)

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Recommended semester schedule

(for students who may want to upgrade to a Second Major)

Semester 1	Units	Semester 2	Units
BT1101 Introduction to Business Analytics	4	BT2102 Database Management and Visualisation	4
CS1010A Programming Methodology	4	CS2030 Programming Methodology II	4
IS1108 Digital and AI Ethics	4	IS2101 Business and Technical Communication	4
MA1522 Linear Algebra for Computing	4	MA1521 Calculus for Computing	4
Interdisciplinary Course 1 *	4	Elective 1 for Minor	4
Sub-total	**20**	**Sub-total**	**20**

Semester 3	Units	Semester 4	Units
BT2101 Econometrics Modeling for Business Analytics	4	BT3103 Application Systems Development for Business Analytics	4
CS2040 Data Structures and Algorithms	4	IS3103 Information Systems Leadership and Communication	4
ST2334 Probability and Statistics	4	GE	4
GE	4	GE	4
Elective 2 for Minor	4	CDE3301 Ideas to Proof-of-Concept	6
Sub-total	**20**	**Sub-total**	**22**

Semester 5	Units	Semester 6	Units
CDE3301 Ideas to Proof-of-Concept	6	IS4010 Industry Internship Programme or CP3880 Advanced Technology Attachment Programme ^	12
BT4103 Business Analytics Capstone Project	8		
Interdisciplinary Course 2	4		
GE	4		
Sub-total	**22**	**Sub-total**	**12**

Semester 7	Units	Semester 8	Units
Programme Elective 1	4	Programme Elective 4	4
Programme Elective 2	4	Programme Elective 5	4
Programme Elective 3	4	UE	4
UE	4	UE	4
UE	4	UE	4
UE	4		
Sub-total	**24**	**Sub-total**	**20**

* Students are highly recommended to read DTK1234 Design Thinking or EG1311 Design and Make as an Interdisciplinary Course if they are planning to read CDE2300 Product Design and Innovation or CDE2310 Fundamentals of Systems Design as Elective 1 for the Second Major (which can be double-counted as Cross-disciplinary Course).

^ Students with GPA of 4.00 or higher after completing 112 units may opt to replace IS4010/CP3880 with BT4101 in their final year.

(updated 12 July 2025)

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Recommended semester schedule

(for students who are not planning to upgrade to a Second Major)

Semester 1	Units	Semester 2	Units
BT1101 Introduction to Business Analytics	4	BT2102 Database Management and Visualisation	4
CS1010A Programming Methodology	4	CS2030 Programming Methodology II	4
IS1108 Digital and AI Ethics	4	IS2101 Business and Technical Communication	4
MA1522 Linear Algebra for Computing	4	MA1521 Calculus for Computing	4
GE	4	GE	4
Sub-total	**20**	**Sub-total**	**20**

Semester 3	Units	Semester 4	Units
BT2101 Econometrics Modeling for Business Analytics	4	BT3103 Application Systems Development for Business Analytics	4
CS2040 Data Structures and Algorithms	4	IS3103 Information Systems Leadership and Communication	4
ST2334 Probability and Statistics	4	GE	4
GE	4	UE	4
Interdisciplinary Course 1 *	4	Elective 1 for Minor	4
		Elective 2 for Minor	4
Sub-total	**20**	**Sub-total**	**24**

Semester 5	Units	Semester 6	Units
IS4010 Industry Internship Programme or CP3880 Advanced Technology Attachment Programme ^	12	CDE3301 Ideas to Proof-of-Concept	6
		Programme Elective 1	4
		Programme Elective 2	4
		Interdisciplinary Course 2	4
		UE	4
Sub-total	**12**	**Sub-total**	**22**

Semester 7	Units	Semester 8	Units
CDE3301 Ideas to Proof-of-Concept	6	Programme Elective 4	4
BT4103 Business Analytics Capstone Project	8	Programme Elective 5	4
Programme Elective 3	4	UE	4
UE	4	UE	4
		UE	4
Sub-total	**22**	**Sub-total**	**20**

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