

# Data Science & Decisions

Program / Degree: 3959 Data Science & Decisions (**Business Data Science**)

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1 <sup>st</sup>	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A	6	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B	6	Free Elective	6
	COMP1511 Introduction to Programming	6	COMP2521 Data Structures and Algorithms	6	Free Elective	6
	ECON1101 Microeconomics 1	6	DATA1001 Introduction to Data Science and Decisions	6	General Education Option	6
	Total UOC	18	Total UOC	18	Total UOC	18
2 <sup>nd</sup>	<b>DATA1099 Co-op Industry Training 1</b>	<b>12</b>	MATH2501 Linear Algebra <b>OR</b> MATH2601 Higher Linear Algebra	6	Data Science Elective	6
			MATH2801 Theory of Statistics	6	Free Elective	6
			General Education Option	6		
	Total UOC (nominal)	12	Total UOC	18	Total UOC	12
3 <sup>rd</sup>	<b>DATA2099 Co-op Industry Training 2A</b>	<b>6</b>	<b>DATA2199 Co-op Industry Training 2B</b>	<b>6</b>	<b>DATA3199 Co-op Industry Training 3B</b>	<b>12</b>
	ECON2209 Financial Econometrics	6	<b>DATA3099 Co-op Industry Training 3A</b>	<b>6</b>		
	Total UOC + (nominal)	6(12)	Total UOC (nominal)	12	Total UOC (nominal)	12
4 <sup>th</sup>	ECON2206 Introductory Econometrics	6	Data Science Elective	6	DATA3001 Data Science & Decisions in Practice	6
	ECON2112 Game Theory and Business Strategy	6	Data Science Elective	6	<i>ECON3203 Econometric Theory and Methods</i>	6
	COMP3311 Database Systems	6	Data Science Elective	6	ECON3208 Econometric Methods	6
	Total UOC	18	Total UOC	18	Total UOC	18

**NB:** Some ECON course pre-requisites are waived for scholars in the DSD degree, please check with the School if unsure

**Notes:**

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below).
- Any course taught by the Business School, Faculty of Science or the Faculty of Engineering cannot be taken as General Education for this program. Additionally, GENS, GENC and GENE courses will not be counted.
- Students must complete 30 UoC of Electives to qualify for the Business Data Science major. For the full list of electives, please see the Handbook page for this major.
- **Free Electives** may be from any Faculty at UNSW.

Students cannot complete more than 72 UoC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.

- UNSW Handbook: <https://www.handbook.unsw.edu.au/undergraduate/programs/2021/3959>
- School: <https://www.science.unsw.edu.au/current-students/enrolment-guide/data-science>
- Co-op: <https://www.coop.unsw.edu.au/programs/data-science-and-decisions>

**Co-op Academic Coordinator**

For enrolment related questions please always contact your Co-op Academic Coordinator in the first instance:

Dr Pavel Krivitsky

02 9385 7022

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**When would I be on Industry Training (IT)?**



# Data Science & Decisions

Program / Degree: 3959 Data Science & Decisions (**Computational Data Science**)

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1st	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A COMP1511 Introduction to Programming ECON1011 Microeconomics 1	6 6 6	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B COMP2521 Data Structures and Algorithms DATA1001 Introduction to Data Science and Decisions	6 6 6	Free Elective Free Elective General Education Option	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18
2nd	<b>DATA1099 Co-op Industry Training 1</b>	<b>12</b>	MATH2501 Linear Algebra OR MATH2601 Higher Linear Algebra COMP3121 Algorithms and Programming Techniques COMP2041 Software Construction	6 6 6	Data Science Elective Data Science Elective General Education Option	6 6 6
	Total UOC (nominal)	12	Total UOC	18	Total UOC	18
3rd	<b>DATA2099 Co-op Industry Training 2A</b>	<b>12</b>	<b>DATA2199 Co-op Industry Training 2B</b> <b>DATA3099 Co-op Industry Training 3A</b>	<b>6</b> <b>6</b>	<b>DATA3199 Co-op Industry Training 3B</b>	<b>12</b>
	Total UOC (nominal)	12	Total UOC (nominal)	12	Total UOC (nominal)	12
4th	COMP 3311 Database Systems COMP9417 Machine Learning and Data Mining ECON2112 Game Theory and Business Strategy	6 6 6	MATH2801 Theory & Statistics <b>OR</b> MATH2901 Higher Theory of Statistics Data Science Elective Data Science Elective	6 6 6 6	COMP9313 Big Data Management DATA3001 Data Science & Decisions in Practice ECON3203 Econometric Theory and Methods	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18

**NB:** Some pre-requisite courses have been waived for scholars in the DSD degree, please check with the School if unsure

**Notes:**

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below). Any course taught by the Business School, Faculty of Science or the Faculty of Engineering cannot be taken as General Education for this program.
- Additionally, GENS, GENC and GENE courses will not be counted. Students must complete 18 UoC of Electives to qualify for the Computational Data Science major.
- For the full list of electives, please see the Handbook page for this major. If you are looking to do ECON courses for your electives, keep in mind that some may have prerequisites.
- **Free Electives** may be from any Faculty at UNSW.
- Students cannot complete more than 72 UoC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.

**Resources:**

- UNSW Handbook: <https://www.handbook.unsw.edu.au/undergraduate/programs/2021/3959>
- School: <https://www.science.unsw.edu.au/current-students/enrolment-guide/data-science>
- Co-op: <https://www.coop.unsw.edu.au/programs/data-science-and-decisions>

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**When would I be on Industry Training (IT)?**



Sample Study Outline

# Data Science & Decisions

Program / Degree: 3959 Data Science & Decisions (**Quantitative Data Science**)

Year	Term 1	UOC	Term 2	UOC	Term 3	UOC
1st	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A COMP1511 Introduction to Programming ECON1011 Microeconomics 1	6 6 6	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B COMP2521 Data Structures and Algorithms DATA1001 Introduction to Data Science and Decisions	6 6 6	Free Elective Free Elective General Education Option	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18
2nd	<b>DATA1099 Co-op Industry Training 1</b>	<b>12</b>	MATH2501 Linear Algebra OR MATH2601 Higher Linear Algebra Data Science Elective MATH2801 Theory of Statistics OR MATH2901 Higher Theory of Statistics	6 6 6	MATH2831 Linear Models OR MATH2931 Higher Linear Models Data Science Elective General Education Option	6 6 6
	Total UOC (nominal)	12	Total UOC	18	Total UOC	18
3rd	<b>DATA2099 Co-op Industry Training 2A</b>	<b>12</b>	<b>DATA2199 Co-op Industry Training 2B</b> <b>DATA3099 Co-op Industry Training 3A</b>	<b>6</b> <b>6</b>	<b>DATA3199 Co-op Industry Training 3B</b>	<b>12</b>
	Total UOC (nominal)	12	Total UOC (nominal)	12	Total UOC (nominal)	12
4th	MATH2871 Data Management for Statistical Analysis COMP 3311 Database Systems ECON2112 Game Theory and Business Strategy	6 6 6	MATH3821 Statistical Modelling & Computing Data Science Elective Data Science Elective	6 6 6	MATH3871 Bayesian Inference and Computation DATA3001 Data Science & Decisions in Practice ECON3203 Econometric Theory & Methods	6 6 6
	Total UOC	18	Total UOC	18	Total UOC	18

**Notes:**

- This is a SAMPLE study outline only and can be subject to change.
- You must always take your Industry Training schedule into consideration when planning your course enrolment or other commitments (see diagram below).
- Any course taught by the Business School, Faculty of Science or the Faculty of Engineering cannot be taken as General Education for this program.
- Additionally, GENS, GENC and GENE courses will not be counted.
- Students must complete 24 UoC of Electives to qualify for the Quantitative Data Science major.
- For the full list of electives, please see the Handbook page for this major.
- If you are looking to do ECON courses for your electives, keep in mind that some may have prerequisites.
- **Free Electives** may be from any Faculty at UNSW.

Students cannot complete more than 72 UoC of Level 1 courses including any GEN courses and Level 1 courses taken for General Education.

**Resources:**

- UNSW Handbook: <https://www.handbook.unsw.edu.au/undergraduate/programs/2021/3959>
- School: <https://www.science.unsw.edu.au/current-students/enrolment-guide/data-science>
- Co-op: <https://www.coop.unsw.edu.au/programs>

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