UNSW Science:

In Comparison: Undergraduate Science, Engineering and Business program offerings in Data Science, Computer Science and Information Systems.

	Bachelor of Science (Computer Science)	Bachelor of Data Science & Decisions	Bachelor of Information Systems
Focus	Computer Science focuses on the design and construction of computer systems. You'll learn the basic principles behind computing tools and operating systems across both hardware and software. You'll study the representation of data and data structures and the design of algorithms for programming languages and machine systems. *This degree sits within the Engineering faculty.*	This degree combines training in mathematical, statistics, computing and business decision-making with communication skills. You'll gain the theoretical and practical skills required to enter the field of data analysis, where networking, decision-making, strategic thinking and attention to detail are essential. You'll study the methods for organising, modelling and analysing large and complex data for businesses, governments, or other organisations. *This degree sits within the Science faculty.*	Information Systems teaches students how to manage and process data, safeguard a business's digital infrastructure and drive innovation. You'll learn how to craft digital solutions that inspire innovation, improve user experiences and help businesses achieve their goals. You'll gain expertise across key focus areas, such as digital transformation, agile product management and the application of artificial intelligence to business analytics. *This degree sits within Business School.*
Customer	Looking for as education that focused on a computing degree but gives them the flexibility and broadness of a Science degree. Ie they may not want	Someone who loves data and has a passion for solving complex programs, uncovering new insights and predicting trends. They enjoy mathematics, computing & making	Someone who is looking to blend business with technical skills. They are someone who

	to be an accredited Engineer making the shorter, 3yr duration attractive.	strategic business decisions from the outputs.	wants to combine technology, people and processes.
Degree and Duration	Bachelor of Science (Computer Science) 3 Years	Bachelor of Data Science and Decisions 3 Years	Bachelor of Information Systems 3 Years
Study areas	7 Majors available: - Artificial Intelligence - Security Engineering - Computer Networks - Computer Science - Database Systems - Embedded Systems - Programming Languages	3 Majors to choose from: - Business Data Science - Quantitative Data Science - Computational Data Science	You can choose the electives that interest you, or you can focus your studies in one of 3 different elective streams: - Information Systems in Data Analytics - Information Systems in Cybersecurity Management - Information Systems in Organisations
Program Structure	• Core courses including Mathematics, Programming, Computer Systems, Software Engineering, Data Structures, Computer Networks, Ethics, Object Oriented Design, Algorithms and Programming techniques. • One major from the above • Possible Minor in Accounting, Finance, Information Systems, Marketing, Maths, Psychology • Final year includes a computer science project	• Core courses including Programming, Data Structures, Data Science and Decisions, Microeconomics, Mathematics, Game Theory, Algebra, Statistics, Database Systems, Econometric Theory. • One major from the above • General Education Courses. • Free Elective courses	• Core courses including Business Decision Making, Evidence-based Problem Solving, Data, Insights and Decisions, Financial management or Global Business Environments, Collaboration and Innovation in Business or Value Creation. Information Systems Core Courses. • Prescribed Information Systems Electives, Work Integrated Learning. • General Education Courses. • Free Elective courses
Accreditation	This degree is accredited by Australian Computer Society	This degree is accredited by the Statistical Society of Australia	This degree is accredited by Australian Computer Society

Career Opportunities	**THE CODER** Specialists in Computer Science are increasingly sought-after across many different industries from finance to consulting, government to healthcare. Potential roles upon graduation include: • Information Systems Manager • Database Administrator • Data Engineer • Systems Analyst • Games Developer	**THE ANALSYT** Data science is a multidisciplinary field that blends mathematics, statistics, computing and business. The potential industries and roles upon graduation include: **Business Data Science** • Business Reporting and Analytics Manager • Data Migration Specialist • Market Intelligence Manager • Pricing Analyst • Technical Business Analyst **Quantitative Data Science** • Data Consultant • Data Mining Engineer • E-Commerce Analytics Specialist • Statistician • Predictive Model Data Scientist • Quantitative Researcher • Data Scientist **Computational Data Science** • Big Data Developer • Business Information Analyst • Computational Scientist • Data Warehouse Architect	**THE CONSULTANT** Information systems encompass all the technology that enables a business to run. They impact people, processes and technology – making the applications endless. The potential roles upon graduation include: • Business analyst • Chief information officer • Information systems manager • IS/IT architect • IT infrastructure developer • IT project manager • Management consultant • Network developer • Systems analyst • Technical manager • User experience (UX) designer • Cybersecurity Consultant