Bachelor of Computer and Information Sciences BCIS 2026

		Digital Services (DiS)	Networks and Cybersecurity (NC)	Software Development (SD)	Data Science (DaS)	Computer Science (CS)	
Year 1	CORE	**COMP500** Programming Concepts and Techniques (S1, S2) **COMP501** Computing Technology in Society (S1, S2) **DIGD507** Mahi Tahi: Collaborative Practices (S1, S2) ***Choose* ONE : MATH503** Mathematics for Computing (S1, S2) **COMP507** IT Project Management (S1, S2) **COMP508** Database System Design (S1, S2)					**Artifical Intelligence (AI) Minor Only** Students doing Data Science major cannot do AI minor
	MAJOR	**INFS502** Digital Services in IT (S2)	**COMP504** Networks and Internet (S1, S2)	**COMP503 Object Oriented Programming** Programming (S1, S2) *co-req: COMP500*	**COMP517** Data Analysis (S1, S2)	**COMP503** Object Oriented Programming (S1, S2) *co-req: COMP500*	**COMP517** Data Analysis (S1, S2)
Year 2	MAJOR	**INFS603** Needs Analysis, Acquisition and Training (S1)	**COMP604** Operating Systems (S1, S2) *Pre-req: COMP500 or COMP503*	**COMP603** Program Design and Construction (S1, S2) *Pre-req: COMP503 or COMP610 or ENSE502*	**COMP615** Foundations of Data Science (S1) *Pre-req: COMP517*	**COMP610** Data Structures and Algorithms (S1, S2) *Pre-req: COMP503 or ENSE502 or ENSE602*	**COMP610** Data Structures and Algorithms (S1, S2) *Pre-req: COMP503 or ENSE502 or ENSE602*
		INFS604 Service Modelling (S1)	**COMP607** Information Security Technologies (S2) *Pre-req: COMP501*	**COMP610** Data Structures and Algorithms (S1, S2) *Pre-req: COMP503 or ENSE502 or ENSE602*	**COMP616** Statistics for Data Science (S1) *Pre-req: MATH502 or MATH503*	**COMP611** Algorithm Design and Analysis (S2) *Pre-req: COMP610*	(or) **COMP613** Combinatorics and Graph Theory (S1) *Pre-req: COMP500 and [MATH502 or MATH503]*
		INFS605 Microservices (S2)	**COMP609** Network and System Administration (S1, S2) *Pre-req: COMP504*	**COMP602** Software Development Practice (S1, S2) *Pre-req: COMP603 or COMP610*	**STAT603** Forecasting (S2) *Pre-req: MATH502 or MATH503*	**COMP613** Combinatorics and Graph Theory (S1) *Pre-req: COMP500 and [MATH502 or MATH503]*	
		COMP603 Program Design and Construction (S1, S2) *Pre-req: COMP503 or COMP610 or ENSE502* (or) **COMP607** Information Security Technologies (S2) *Pre-req: COMP501*	**ENEL611** Computer Network Applications (S1) *Pre-req: COMP504 or ENEL504*	**COMP604** Operating Systems (S1, S2) *Pre-req: COMP500 or COMP503* *(or)* **COMP611** Algorithm Design and Analysis (S2) *Pre-req: COMP610*	**COMP610** Data Structures and Algorithms (S1, S2) *Pre-req: COMP503 or ENSE502 or ENSE602* *(or)* ***COMP613** Combinatorics and Graph Theory (S1)* *Pre-req: COMP500 and [MATH502 or MATH503]*	**COMP612** Computer Graphics Programming (S1, S2) *[MATH503 or MATH502] and [COMP603 or COMP610]*	(or) **COMP615** Foundations of Data Science (S1) *Pre-req: COMP517*
Year 3	CORE	**COMP702** Research and Development Project (Part 1) (S1, S2) **COMP703** Research and Development Project (Part 2) (S1, S2)					
	MAJOR	**Choose THREE** **INFS704** Service Innovation and Design (S1) (or) **COMP718** Information Security Management (S1) (or) **COMP726** Blockchains and Cryptocurrencies (S2) (or) **COMP728** IoT and Applications (S2)	**COMP715** Network Security (S2) *Pre-req: ENEL611*	**COMP719** Applied Human Computer Interaction (S1, S2)	**COMP717** Artificial Intelligence (S1) *Pre-req: COMP500 or equivalent; 60 points at level 6 major*	**COMP711** Theory of Computation (S2) *Pre-req: COMP610 or COMP613*	**COMP700** Text and Vision Intelligence (S2) (or) **COMP701** Nature Inspired Computing *Pre-req: COMP500* (S1)
			COMP714 Advanced Network Technologies (S2) *Pre-req: COMP609* (or) **COMP729** Enterprise Networks (S2) *Pre-req: COMP504 or ENEL504*	**COMP705** Special Topic: AI-Powered Software Development (S1) *Pre-req: COMP603* (or) **ENSE707** Software Quality Assurance (S2) *Pre-req: COMP603* **Note: Replaces ENSE701**	**COMP723** Data Mining and Knowledge Engineering (S2)	**COMP712** Programming Languages (S2) *Pre-req: COMP503*	
			COMP716 Highly Secure Systems (S1) *Pre-req: COMP611 or [ENGE501 and COMP610]* (or) **COMP718** Information Security Management (S1)	**COMP713** Distributed and Mobile Systems (S2) *Pre-req: COMP611* (or) **COMP721** Web Development (S1) *Pre-req: COMP603 or ENSE600*	**COMP700** Text and Vision Intelligence (S2) (or) **COMP701** Nature Inspired Computing (S1)	**COMP713** Distributed and Mobile Systems (S2) *Pre-req: COMP611* (or) **COMP719** Applied Human Computer Interaction (S1, S2)	**COMP717** Artificial Intelligence (S1) Pre-req: COMP500 or equivalent; 60 points at level 6 major

S1: Offered in Semester 1

S2: Offered in Semester 2

SS: Offered in Summer Semester

Pre-req: Prerequisite paper(s)

Note:

All courses are 15 points

MATH502 is highly recommended for Computer Science major as a replacement for MATH503 (core)

Software Development Major (Game programming pathway)
(COMP612 and COMP710) can replace (COMP602 and COMP713/COMP721) only if **BOTH (COMP612 and COMP710)** are taken
COMP612 Computer Graphics Programming (S1, S2) Pre-req: [MATH503 or MATH502] and [COMP603 or COMP610]
COMP710 Game Programming (S1) Pre-req: COMP612

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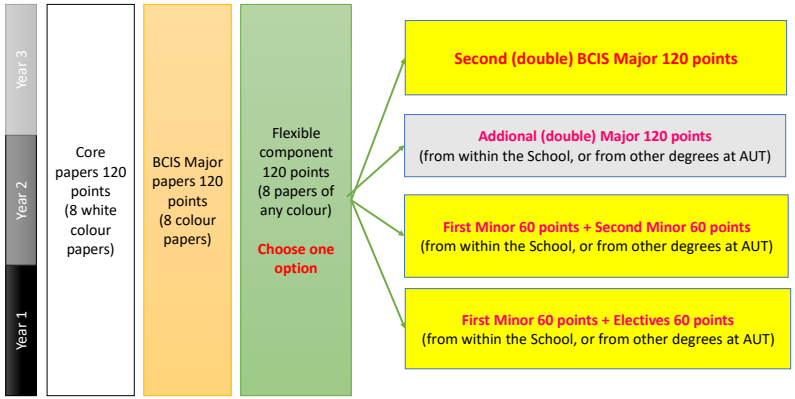

Notes:

• **Additional Major:** Subject to the conditions set out on the Additional Major requirements, students can take up an additional major (120 points) from either within the School or from other degrees at AUT https://www.aut.ac.nz/study/study-options/Additional-majors-and-minors-for-bachelors-degrees

• **Minors:** Students can choose at least one (up to two) additional minor (60 points each) within the School or from other degrees in AUT but subject to the conditions set out on the Minor requirements https://www.aut.ac.nz/study/study-options/Additional-majors-and-minors-for-bachelors-degrees

• **Electives:** Students who are doing a single major and single minor can choose 4 elective papers (60 points) at any level (5, 6 or 7) to make up the 120 points in the flexible component. They can be from within the School or from other degrees in AUT as long as the content doesn't overlap with any of the completed papers.

• **Artificial intelligence minor** is not available to students taking the Data Science major.

• **Double major** student, your two majors can have up to 30 points in common to meet the major requirement (i.e., COMP503 count toward Softwar e Development and Computer Science Major). **You still need 360 points in total from different courses to complete your degree.**

• **Software Development Major and Computer Science Minor** students cannot count COMP503 towards both major/minor, they must take an additional level 6/7 course in their CS minor, andvice versa.

• **COMP702 and COMP703**: Students can enrol in the Research and Development Project courses once they have completed all level 5 and 6 core and major courses.

• **Course level** is the first digit of the numeric part of the alphanumerical paper code (E.g., COMP607 is a level 6 course). Generally you can take the courses during any year of study as long as you met the pre-prerequisite

Please contact the CMS Undergrad Team (program administrators): cmsundergrad@aut.ac.nz for further details and help with enrolment.