CHECKLIST Bachelor of Computer Science – Completion of pre-2021 program (2425)

IMPORTANT Notes:

- The information contained in this document is intended as general advice only. Students must follow the program rules & requirements listed on the <u>Programs and Courses Website</u> relevant to the year they commence. This planner must be used in conjunction with your program duration course list and program rules.
- Students need to check future course offerings, prerequisites, incompatibilities and restrictions for all courses as these are subject to change.
- Students cannot take courses that are incompatible with courses already counted towards their program, and cannot count the same course twice.

You are required to complete one of the following:

- 1. BCompSc with no major, 48 units comprising
 - a. 24 units from Part A; and
 - b. at least 6 units from Part B; and
 - c. at least 6 units from Part C; and
 - d. the balance from electives being courses from Part D or other courses approved by the Executive Dean; or
- 2. BCompSc with a single major, 48 units comprising
 - a. 24 units from Part A; and
 - b. 12 units from Part E under one heading; and
 - c. the balance from electives being courses from the combination of Part B, Part C and Part D or other courses approved by the Executive Dean

Tick the courses you have completed and nominate the alternative course you plan to choose (if required). Discontinued courses are coloured red.

√/X compl.	Pre-2021 Part A list	#	Last offered	If NOT completed you can choose	Sem Offering	#	First offered
	24 units from Part A - Compulsory						
	CSSE1001 Introduction to Software Engineering	2		CSSE1001 Introduction to Software Engineering	1,2	2	
	CSSE2002 Programming in the Large	2		CSSE2002 Programming in the Large	1,2	2	
	CSSE2010 Introduction to Computer Systems	2		CSSE2010 Introduction to Computer Systems	1,2	2	
	CSSE2310 Computers Systems Principles and Programming	2		CSSE2310 Computers Systems Principles and Programming	1,2	2	
	COMP2048 Theory of Computing	2		COMP2048 Theory of Computing	1	2	
	COMP3506 Algorithms & Data Structures	2		COMP3506 Algorithms & Data Structures	2	2	
	COMP4500 Advanced Algorithms & Data Structures	2		COMP4500 Advanced Algorithms & Data Structures	2	2	
	DECO3801 Design Computing Studio 3 - Build	2		DECO3801 Design Computing Studio 3 - Build	2	2	
	INFS1200 Introduction to Information Systems	2		INFS1200 Introduction to Information Systems	1,2	2	
	MATH1051 Calculus & Linear Algebra or MATH1071 Advanced Calculus & Linear Algebra	2		MATH1051 Calculus & Linear Algebra or MATH1071 Advanced Calculus & Linear Algebra	1, 2,5	2	
	MATH1061 Discrete Mathematics	2		MATH1061 Discrete Mathematics	1,2	2	
	STAT2203 Probability Models & Data Analysis for Engineering	2		STAT2203 Probability Models & Data Analysis	2	2	

 ✓/X compl. 	Part B – Introductory Electives	#	Last offered	If NOT completed you can choose	Sem Offering	#	First offered
	6 units comprising at least 2 units from						
	DECO2500 Human-Computer Interaction	2		DECO2500 Human-Computer Interaction	1	2	
	INFS2200 Relational Database Systems	2		INFS2200 Relational Database Systems	2	2	
	and the balance from						
	COSC2500 Numerical Methods in Computational Science	2		COSC2500 Numerical Methods in Computational Science	2	2	
	SCIE2100 Introduction to Bioinformatics	2		SCIE2100 Bioinformatics 1: Introduction	1	2	

Part C – Advanced Electives I.	#	Last offered	If NOT completed you can choose	Sem Offering	#	First offered
6 units from						
COMP3301 Operating Systems Architecture	2		COMP3301 Operating Systems Architecture	2	2	
COMP3320 Vulnerability Assessment and Penetration Testing	2		COMP3320 Vulnerability Assessment and Penetration Testing	1	2	
COMP3400 Functional & Logic Programming	2		COMP3400 Functional & Logic Programming	1	2	
COMP3702 Artificial Intelligence	2		COMP3702 Artificial Intelligence	2	2	
COMP3710 Pattern Recognition and Analysis	2		COMP3710 Pattern Recognition and Analysis	2	2	
COMP4403 Compilers and Interpreters	2		COMP4403 Compilers and Interpreters	1	2	
COMS3000 Information Security (discontinued)	2	2/20	CYBR3000 Information Security	2	2	2/21
COMS3200 Computer Networks 1	2		COMS3200 Computer Networks 1	1	2	
COMS4507 Advanced Topics in Security	2		COMS4507 Advanced Topics in Security	1	2	
COSC3000 Visualization, Computer Graphics & Data Analysis	2		COSC3000 Visualization, Computer Graphics & Data Analysis	1	2	
COSC3500 High-Performance Computing	2		COSC3500 High-Performance Computing	2	2	
CSSE3002 The Software Process (discontinued)	2	1/20	CSSE3012 The Software Process	1	2	1/21
CSSE3006 Special Projects in Computer Systems and Software Engineering (Discontinued)	2		No Substitution			
CSSE3100 Reasoning About Programs	2		CSSE3100 Reasoning About Programs	1	2	
CSSE4630 Principles of Program Analysis	2		CSSE4630 Principles of Program Analysis	2	2	

DECO2800 Design Computing Studio 2 – Testing & Evaluation	2	DECO2850 Design Computing Studio 2 – Testing & Evaluation	2	2	
DECO3500 Social & Mobile Computing	2	DECO3500 Social & Mobile Computing	2	2	
INFS3200 Advanced Database Systems	2	INFS3200 Advanced Database Systems	1,2	2	
INFS3202 Web Information Systems	2	INFS3202 Web Information Systems	1	2	
INFS3208 Cloud Computing	2	INFS3208 Cloud Computing	2	2	
INFS4203 Data Mining	2	INFS4203 Data Mining	2	2	
INFS4205 Advanced Techniques for High Dimensional Data	2	INFS4205 Advanced Techniques for High Dimensional Data	1	2	
MATH3201 Scientific Computing: Advanced Techniques and Applications	2	MATH3201 Scientific Computing: Advanced Techniques and Applications	1	2	
MATH3202 Operations Research & Mathematical Planning	2	MATH3202 Operations Research & Mathematical Planning	1	2	
MATH3302 Coding & Cryptography	2	MATH3302 Coding & Cryptography	1	2	

 ✓/X compl. 	Part D – Other Electives	#	Last offered	If NOT completed you can choose	Sem Offering	#	First offered
	ACCT1101 Accounting for Decision Making	2		ACCT1101 Accounting for Decision Making	1,2	2	
	BIOL1020 Genes, Cells & Evolution	2		BIOL1020 Genes, Cells & Evolution	1,2	2	
	BIOL2202 Genetics	2		BIOL2202 Genetics	2	2	
	BIOL3004 Genomics & Bioinformatics (discontinued)	2	1/20	BIOL3303 Genomics	1	2	1/21
	BIOL3014 Advanced Bioinformatics (discontinued)	2	2/20	BINF3014 Advanced Bioinformatics (discontinued)	2	2	
	BISM3205 Business Information Security	2		BISM3205 Business Information Security	1	2	
	BISM3222 Information Analysis and System Design	2		BISM3222 Information Analysis and System Design	1	2	
	CHEM1100 Chemistry 1	2		CHEM1100 Chemistry 1	1,2	2	
	COMU1130 Connectivity and Culture	2		COMU1130 Data and Society	2	2	
	COMU1140 Multimedia	2		COMU1140 Multimedia	1,2,S	2	
	DECO1100 Design Thinking	2		DECO1100 Design Thinking	1	2	
	DECO1400 Introduction to Web Design	2		DECO1400 Introduction to Web Design	1	2	
	DECO1800 Design Computing Studio 1 – Interactive Technology	2		DECO1800 Design Computing Studio 1 – Interactive Technology	2	2	
	DECO2300 Digital Prototyping	2		DECO2300 Digital Prototyping and Extended Reality	2	2	

DECO3850 Physical Computing & Interaction Design Studio	4		DECO3850 Physical Computing Studio	1	4	
ECON1010 Introductory Microeconomics	2		ECON1010 Introductory Microeconomics	1,2,S	2	
ENGG1300 Introduction to Electrical Systems	2		ENGG1300 Introduction to Electrical Systems	1,2	2	
ENGG1600 Introduction to Research Practices - The Big Issues	2		ENGG1600 Introduction to Research Practices - The Big Issues	2	2	
LAWS1100 Business Law	2		LAWS1100 Business Law	1,2	2	
MATH1050 Mathematical Foundations	2		MATH1050 Mathematical Foundations II	1,2	2	
MATH1052 Multivariate Calculus & Ordinary Differential Equations	2		MATH1052 Multivariate Calculus & Ordinary Differential Equations	1,2	2	
MATH2000 Calculus & Linear Algebra II (discontinued)	2	2/20	MATH2001 Calculus & Linear Algebra II	1,2,5	2	
MATH2301 Linear & Abstract Algebra & Number Theory		2,20	MATH2301 Linear & Abstract Algebra & Number Theory	1,2,5	2	
	2					
MATH2302 Discrete Mathematics II	2		MATH2302 Discrete Mathematics II	2	2	
MATH3104 Mathematical Biology	2		MATH3104 Mathematical Biology	1	2	
MGTS1301 Introduction to Management	2		MGTS1301 Introduction to Management	1,2	2	
MKTG1501 Foundations of Marketing	2		MKTG1501 Foundations of Marketing	1,2	2	
PHYS1002 Electromagnetism & Modern Physics	2		PHYS1002 Electromagnetism & Modern Physics (semester 2 only from 2022)	1,2	2	
SCIE1000 Theory & Practice in Science	2		SCIE1000 Theory & Practice in Science	1,2,S	2	
STAT2003 Mathematical Probability	2		STAT2003 Mathematical Probability	1	2	
STAT2004 Statistical Modelling & Analysis	2		STAT2004 Statistical Modelling & Analysis	2	2	
TIMS3309 Fundamentals of Technology and Innovation Management	2		TIMS3309 Fundamentals of Technology and Innovation Management	2	2	
Courses offered on an occasional basis						
COMP2000 Special Topics in Computer Science 2A	2		COMP2000 Special Topics in Computer Science 2A		2	
COMP2001 Special Topics in Computer Science 2B	2		COMP2001 Special Topics in Computer Science 2B		2	
COMP3000 Special Topics in Computer Science 3A	2		COMP3000 Special Topics in Computer Science 3A		2	
COMP3001 Special Topics in Computer Science 3B	2		COMP3001 Special Topics in Computer Science 3B		2	
COMP3880 International Software Development	2		COMP3880 International Software Development		2	
CSSE3006 Special Projects in Computer Systems and Software Engineering	2		CSSE3006 Special Projects in Computer Systems and Software Engineering		2	
CSSE3080 Special Topics in Computer Systems 3A	2		CSSE3080 Special Topics in Computer Systems 3A		2	
CSSE3081 Special Topics in Computer Systems 3B	2		CSSE3081 Special Topics in Computer Systems 3B		2	

CSSE3090 Special Topics in Software Engineering 3A	2	CSSE3090 Special Topics in Software Engineering 3A	2	
CSSE3091 Special Topics in Software Engineering 3B	2	CSSE3091 Special Topics in Software Engineering 3B	2	
DECO2000 Special Topics in Design Computing 2A	2	DECO2000 Special Topics in Design Computing 2A	2	
DECO2001 Special Topics in Design Computing 2B	2	DECO2001 Special Topics in Design Computing 2B	2	
DECO3000 Special Topics in Design Computing 3A	2	DECO3000 Special Topics in Design Computing 3A	2	
DECO3001 Special Topics in Design Computing 3B	2	DECO3001 Special Topics in Design Computing 3B	2	

✓/X compl.	Part E – Majors	#	Last offered	If NOT completed you can choose	Sem Offering	#	First offered
	Major in DATA SCIENCE (12 units)						
	12 units for:						
	COMP3702 Artificial Intelligence	2		COMP3702 Artificial Intelligence	2	2	
	COMP4702 Machine Learning	2		COMP4702 Machine Learning	1	2	
	INFS2200 Relational Database Systems	2		INFS2200 Relational Database Systems	2	2	
	INFS3200 Advanced Database Systems	2		INFS3200 Advanced Database Systems	1,2	2	
	INFS4203 Data Mining	2		INFS4203 Data Mining	2	2	
	INFS4205 Advanced Techniques for High Dimensional Data	2		INFS4205 Advanced Techniques for High Dimensional Data	1	2	

COMP3301 Operating Systems Architecture	2		COMP3301 Operating Systems Architecture	2	2	
COMP3320 Vulnerability Assessment & Penetrating Testing	2		COMP3320 Vulnerability Assessment & Penetrating Testing	1	2	
COMS3000 Information Security (discontinued)	2	2/20	CYBR3000 Information Security	2	2	2
COMS3200 Computer Networks 1	2		COMS3200 Computer Networks 1	1	2	
COMS4507 Advanced Topics in Security	2		COMS4507 Advanced Topics in Security	1	2	

2 consistent formation					
2 units from:					
DECO2500 Human-Computer Interaction	2	DECO2500 Human-Computer Interaction	1	2	
INFS2200 Relational Database Systems	2	INFS2200 Relational Database Systems	2	2	
and 10 units for:					
COMP3301 Operating Systems Architecture	2	COMP3301 Operating Systems Architecture	2	2	
COMP3400 Functional & Logic Programming	2	COMP3400 Functional & Logic Programming	1	2	
COMP4403 Compilers and Interpreters		COMP4403 Compilers and Interpreters			-

CSSE3100 Reasoning About Programs	2	CSSE3100 Reasoning About Programs	1	2	
CSSE4630 Principles of Program Analysis	2	CSSE4630 Principles of Program Analysis	2	2	

COMP3710 Pattern Recognition and Analysis 2 COMP3710 Pattern Recognition and Analysis COMP3702 Artificial Intelligence 2 COMP3702 Artificial Intelligence COMP4702 Machine Learning 2 COMP4702 Machine Learning DEC02500 Human-Computer Interaction 2 DEC02500 Human-Computer Interaction	2 2 1	2 2 2 2	
COMP4702 Machine Learning 2 COMP4702 Machine Learning	2	2	
	1	2	<u> </u>
DEC02500 Human-Computer Interaction 2 DEC02500 Human-Computer Interaction			
	1	2	+
MATH1052 Multivariate Calculus & Ordinary Differential Equations 2 Ordinary Differential Equations 2 Ordinary Differential Equations 2 MATH1052 Multivariate Calculus & Ordinary Differential Equations 2 Ordinary	_/_	2	

2 units from:					
DECO2500 Human-Computer Interaction	2	DECO2500 Human-Computer Interaction	1	2	
INFS2200 Relational Database Systems	2	INFS2200 Relational Database Systems	2	2	
and 10 units for:			_1	<u> </u>	
COSC2500 Numerical Methods in Computational Science	2	COSC2500 Numerical Methods in Computational Science	2	2	
COSC3000 Visualization, Computer Graphics & Data Analysis	2	COSC3000 Visualization, Computer Graphics & Data Analysis	2	2	
COSC3500 High-Performance Computing	2	COSC3500 High-Performance Computing	2	2	
MATH3201 Scientific Computing: Advanced Techniques and Applications	2	MATH3201 Scientific Computing: Advanced Techniques and Applications	1	2	
SCIE2100 Bioinformatics 1: Introduction	2	SCIE2100 Bioinformatics 1: Introduction	1	2	