

## Bachelor of Computer and Information Sciences BCIS 2024

		Digital Services	Networks and Cybersecurity	Software Development	Data Science	Computer Science
Year 1	CORE	COMP500 Programming Concepts and Techniques (S1, S2, SS)				
		COMP501 Computing Technology in Society (S1, S2)				
		DIGD507 Mahi Tah: Collaborative Practices (S1, S2)				
		Choose <u>one</u> : MATH502 Algebra and Discrete Mathematics (S2), or MATH503 Mathematics for Computing (S1, S2, SS)				
		COMP507 IT Project Management (S1, S2)				
		COMP508 Database System Design (S1, S2)				
Year 2	MAJOR	INF5502 Digital Services in IT (S2)	COMP504 Networks and Internet (S1, S2)			
				COMP503 Object Oriented Programming Programming (S1, S2) Pre-req: COMP500/ENSE501		COMP503 Object Oriented Programming (S1, S2) Pre-req: COMP500/ENSE501
		INF5603 Needs Analysis, Acquisition and Training (S1)	COMP604 Operating Systems (S2) Pre-req: [COMP503/ENSE502/ENSE504] or COMP504	COMP603 Program Design and Construction (S1, S2) Pre-req: COMP503/COMP610/ENSE502	COMP615 Foundations of Data Science (S1) Pre-req: COMP517	COMP610 Data Structures and Algorithms (S1, S2) Pre-req: COMP503/ENSE502/ENSE602
		INF5604 Service Modelling (S1)	COMP607 Information Security Technologies (S2) Pre-req: COMP501	COMP610 Data Structures and Algorithms (S1, S2) Pre-req: COMP503/ENSE502/ENSE602	COMP616 Statistics for Data Science (S1) Pre-req: MATH502 or MATH503	COMP611 Algorithm Design and Analysis (S2) Pre-req: COMP610
		INF5605 Microservices (S2)	COMP609 Network and System Administration (S1) Pre-req: COMP500 and COMP504	COMP602 Software Development Practice (S1, S2) Pre-req: COMP603 or COMP610 (or) COMP612 Computer Graphics Programming (S2) [MATH503 or MATH502] and [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/COMP610/ENSE502 (or) COMP607 Information Security Technologies (S2) Pre-req: COMP501	ENEL611 Computer Network Applications (S1) Pre-req: COMP504 or ENEL504	COMP604 Operating Systems (S2) [COMP503/ENSE502/ENSE504] or COMP504 (or) COMP611 Algorithm Design and Analysis (S2) Pre-req: COMP610	COMP610 Data Structures and Algorithms (S1, S2) Pre-req: COMP503/ENSE502/ENSE602 (or) COMP613 Combinatorics and Graph Theory (S1) Pre-req: COMP500 and [MATH502 or MATH503]	COMP604 Operating Systems (S2) Pre-req: [COMP503/ENSE502/ENSE504] or COMP504 (or) COMP612 Computer Graphics Programming (S2) Pre-req: [MATH503 or MATH502] and [COMP603 or COMP610]
Year 3	CORE	COMP702 Research and Development Project (Part 1) (S1, S2)				
		COMP703 Research and Development Project (Part 2) (S1, S2)				
	MAJOR	INF5704 Service Innovation and Design (S1)	COMP715 Network Security (S2) Pre-req: ENEL611	COMP719 Applied Human Computer Interaction (S1)	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
		COMP718 Information Security Management (S1)	COMP714 Advanced Network Technologies (S2) Pre-req: COMP609 (or) COMP729 Enterprise Networks (S2) Pre-req: COMP504/ENEL504	ENSE701 Contemporary Issues in Software Engineering (S2) Pre-req: COMP603 or [COMP610/ENSE600]	COMP723 Data Mining and Knowledge Engineering (S2)	COMP712 Programming Languages (S2) Pre-req: COMP603/ENSE502
		COMP728 IoT and Applications (S2) (or) COMP726 Blockchains and Cryptocurrencies (S2)	COMP716 Highly Secure Systems (S1) Pre-req: COMP611 or [ENGE501 and COMP610] (or) COMP718 Information Security Management (S1)	COMP713 Distributed and Mobile Systems (not running) Pre-req: COMP611 (or) COMP721 Web Development (S1) Pre-req: COMP603/ENSE600 (or) COMP710 Game Programming (not running) Pre-req: COMP612	COMP700 Text and Vision Intelligence (S2) (or) COMP701 Nature Inspired Computing Pre-req: COMP500 (S1)	COMP713 Distributed and Mobile Systems (not running) (or) COMP719 Applied Human Computer Interaction (S1)

S1: Offered in Semester 1  
S2: Offered in Semester 2  
SS: Offered in Summer Semester  
Pre-req: Prerequisite paper(s)

Note:  
COMP612 can only replace COMP602 if COMP710 is also  
All courses are 15 points  
MATH502 is highly recommended for Computer Science major  
as a replacement for MATH503 (core)

