	Course Unit	Pre-requisite	Credits	Pathway 1	Pathway 2	Pathway 3	Pathway 4	Pathway 5
Year IV	CSCI 43018 Research Project	All compulsory course units	8	C	C	C	C	C
	CSCI 44026 Industrial Training	All compulsory course units	6	C	C	C	C	C
	CSCI 44032 Mobile Computing	CSEC 32012	2	O	O	O	O	O
	CSCI 44042 Theory of Computability and Complexity	CSCI 32012	2			O	O	O
	CSCI 44052 Software Quality and Automation	CSCI 21042	2					O
	CSCI 44062 Software Architecture and Design	CSCI 21042	2					O
	CSCI 44072 Computer Modelling and Simulation	CSCI 32062	2			O	O	O
	CSCI 44082 Emerging Technologies in Computing	All compulsory course units	2	O	O	O	O	O
	CSCI 44092 Enterprise Application Development	CSCI 21042	2	O	O	O	O	O
	CSCI 44103 Advanced Compilers	CSCI 31032	3				O	O
	CSCI 44112 Introduction to Quantum Computing	CSCI 22052	2	O	O	O	O	O
	CSEC 44012 Internet of Things	CSCI 21023	2	C	O	O	O	O
	CSEC 44022 Information Security Management and Auditing	CSCI 22062	2	C				O
	CSEC 44032 Cyber Crime and Forensics	CSCI 22062	2	C	O		O	O
	CSEC 44042 Security Analytics	CSEC 31012	2	C				
	CSEC 44052 Cyber Laws and Standards	CSCI 22062	2	O	O		O	O
	CSEC 44062 Ethical Hacking and Vulnerability Analysis	CSEC 31022, CSEC 32032	2	C				
	CSEC 44072 Secure Software Engineering	CSEC 31022	2	C				O
	CSEC 44082 Information & Coding Theory	CSCI 22062	2	O			O	
	CSEC 44092 Mobile & IOT Security	CSEC 31012	2	O				
	CSEC 44102 Advanced Cryptography	CSEC 31012	2	O				
	DSCI 44012 Python for Data Science	CSCI 31072	2		C	O		O
	DSCI 44022 Data Visualization	CSCI 32092	2		C			
	DSCI 44033 Big Data Analytics	CSCI 32092	3		C			
	DSCI 44042 NoSQL Databases	DSCI 32012	2		O			O
	DSCI 44052 Time Series Analysis for Data Science	CSCI 21013	2		C	O	O	O
	DSCI 44062 Big data Architecture & Management	CSCI 32052	2		O	O		O
	DSCI 44072 Geographical Information Systems	CSCI 31042	2		O			
	AINT 44012 Artificial Neural Networks	CSCI 31022	2	O	O	C	O	O
	AINT 44022 Fuzzy Logic	CSCI 31014	2	O	O	C	O	O
	AINT 44032 Deep Learning	CSCI 31022	2		O	C		O
	AINT 44042 Machine Translation	AINT 31012	2			C		
	AINT 44052 Intelligent Autonomous Robotics	CSCI 32022	2			C	O	O
	AINT 44062 Computational Cognitive Science	AINT 31022	2			O		
	AINT 44072 Introduction to Virtual Reality	CSCI 32062	2			O	O	O
	SCOM 44012 High Performance Computing	SCOM 32012	2	O	O	O	C	O
	SCOM 44022 Advanced Numerical Analysis and Scientific Programming	SCOM 31013	2				C	
	SCOM 44033 Survey of Materials Simulation Methods	CSCI 12042, CSCI 31014	3				O	
	SCOM 44043 Finite Element Methods in Scientific Computing	CSCI 12042, CSCI 31014	3				O	
	SCOM 44052 Graphics Processing Unit programming	CSCI 32062	2				O	