

 MARKHAM CAMPUS 	DEGREE CHECKLIST 2026-2027			BACHELOR OF APPLIED SCIENCE (BASc) COMPUTER SCIENCE FOR SOFTWARE DEVELOPMENT			
NAME: STUDENT #: Transfer Credit (if applicable):							
Students are strongly advised to refer to online Academic Calendars before enrolling into courses: http://calendars.registrar.yorku.ca/							
SUBJECT	COURSES			NOTES & PREREQUISITES ¹	TERM	ENROLLED	COMPLETED
First Year Courses							
Core	LE/CSSD 1101	3.00	Coding through Biology (CS1 A) ²				
Core	LE/CSSD 1102	3.00	Coding through Chemistry (CS1 B) ³				
Core	LE/CSSD 1201	4.00	Coding with Objects (CS2)	Prerequisite ¹ : LE/CSSD1101 3.00, or LE/CSSD1102 3.00, or LE/CSSD 1050 3.00			
Core	LE/CSSD 1202	4.00	Web-Centric Programming	Prerequisite ¹ : LE/CSSD 1101 3.00, or LE/CSSD 1102 3.00, or LE/CSSD 1050 3.00			
General Education: Digital Citizenship <i>Choose 1 from each set:</i> Being a Digital Citizen, choose one: • FA/CRTE 1900 3.00 (formerly offered as FA/CRTE 2000 3.00) • AP/CMDS 1001 3.00 • LE/DIGT 1172 3.00 Mobilizing Digital Citizenship, choose one: • FA/CRTE 1901 3.00 (formerly offered as FA/CRTE 2001 3.00) • AP/CMDS 1002 3.00 • LE/DIGT 1272 3.00		3.00	Being a Digital Citizen				
		3.00	Mobilizing Digital Citizenship	Prerequisite ¹ : Being a Digital Citizen			
General Education	LE/CSSD 1161	2.00	Teamwork and Communication in Software Development				
	LE/CSSD 1203	4.00	Logic and Computing	Prerequisites ¹ : SC/MATH 1516 3.00 AND LE/CSSD 1101 3.00, or LE/CSSD 1102 3.00, or LE/CSSD 1050 3.00			
	SC/MATH 1516	3.00	General Mathematics for Software Development				
Second Year Courses							
Core	LE/CSSD 2061	1.00	Preparation for the Workplace	<i>May also appear as LE/CSSD 2100A 1.00 & LE/CSSD 2100B 1.00</i>			
Core	LE/CSSD 2101	4.00	Object-Oriented Programming	Prerequisite ¹ : LE/CSSD 1201 4.00			
Core	LE/CSSD 2102	4.00	Data Structures & Algorithms	Prerequisite ¹ : LE/CSSD 1201 4.00			
Core	LE/CSSD 2103	0.50	Shell Scripting	Prerequisite ¹ : LE/CSSD 1201 4.00			
Core	LE/CSSD 2104	2.00	Programming in C	Prerequisite ¹ : LE/CSSD 1201 4.00			
Core	LE/CSSD 2105	1.00	Programming in Assembly	Prerequisite ¹ : LE/CSSD 1201 4.00			
Core	LE/CSSD 2106	0.50	Testing, Debugging & Profiling C Code	Prerequisite ¹ : LE/CSSD 1201 4.00 Corequisite ¹ : LE/CSSD 2104 2.00			
Core	LE/CSSD 2202	4.00	Design and Analysis of Algorithms	Prerequisite ¹ : LE/CSSD 2102 4.00			
Core	LE/CSSD 2203	4.00	Software Design	Prerequisite ¹ : LE/CSSD 2101 4.00			
General Education	LE/CSSD 2261	3.00	Professionalism, Systems Thinking, and Meaningful Impact in Tech				
Elective^D 6.00 credits of elective courses in any combination, e.g.: 3.00 + 3.00 OR 3.00 + 2.00 + 1.00 etc.		3.00					
		3.00					
NOTES							
Stream courses available for Electives^D (please check prerequisites¹ before enrolling)							
Cloud Computing LE/CSSD 2211 3.00 Introduction to Cloud Computing, LE/CSSD 3111 3.00 Software Development for Cloud Computing, LE/CSSD 3211 3.00 Distributed Computing & Cloud Systems, LE/CSSD 4211 3.00 Orchestration and DevOps for Cloud Computing							
Cyber Security LE/CSSD 2221 3.00 Introduction to Security, LE/CSSD 3121 3.00 Information Systems Forensics, LE/CSSD 3221 3.00 Network Security, LE/DIGT 3121 3.00 Network Security (can be taken instead of CSSD 3221 3.00), LE/DIGT 4221 3.00 Digital Forensics (can be taken instead of CSSD 3121 3.00), LE/CSSD 4221 3.00 Vulnerability Detection							
Data Science LE/CSSD 2231 3.00 Introduction to Data Science and Application, LE/CSSD 3131 3.00 Machine Learning, LE/CSSD 3231 3.00 Responsible AI, LE/DIGT 4132 3.00 Applied Machine Learning: Projects, Evaluation & Responsible AI (can be taken instead of CSSD 3231 3.00), LE/CSSD 4231 3.00 Advanced Topic in Data Science - Computer Vision and NLP							

SUBJECT	COURSES		NOTES & PREREQUISITES ¹	TERM	ENROLLED	COMPLETED
Third Year Courses						
Core	LE/CSSD 3101	3.00	Software Requirements & Analysis	Prerequisite ¹ : LE/CSSD 2203 4.00		
Core 2 credits from:		2.00		CSSD 3102 2.00 Prerequisite ¹ : LE/CSSD 2101 4.00		
• CSSD 3102 2.00 Introduction to Functional & Logic Programming • CSSD 3104 2.00 Programming for Multicore CPUs & GPUs				CSSD 3104 2.00 Prerequisite ¹ : LE/CSSD 2104 2.00		
Core	LE/CSSD 3201	4.00	Introduction to Databases	Prerequisite ¹ : LE/CSSD 2101 4.00		
Core	LE/CSSD 3203	3.00	Software Testing and Quality	Prerequisite ¹ : LE/CSSD 2203 4.00		
Core: Showcasing Credits						
Undergraduate Research/Programming Challenges 2 credits from:						
Computing Challenges: Projects 1 to 5 LE/CSSD 3071 1.00 LE/CSSD 3072 1.00 LE/CSSD 3073 1.00 LE/CSSD 3074 1.00 LE/CSSD 3075 1.00 LE/CSSD 3079 2.00 Computing Challenges: Showcase		2.00		Prerequisites ¹ for CSSD 3071-75: LE/CSSD 2202 4.00 and LE/CSSD 2203 4.00, AND permission by course instructor and coordinator Prerequisite ¹ for CSSD 3079: LE/CSSD 2102 4.00		
Elective ^D 17.00 credits of elective courses in any combination, e.g.: 3.00 + 3.00 + 3.00 + 3.00 + 3.00 + 2.00 OR 3.00 + 4.00 +4.00 +4.00 + 1.00 + 1.00 etc. Upper Level Requirement ^C : A minimum of 18 credits at the 3000-level or higher including 12 credits in the major.		3.00				
		3.00				
		3.00				
		3.00				
		3.00				
		2.00				
90 Credits with accompanying CGPA (minimum cumulative GPA of 5.00 (C+) required to graduate with a BASc degree)						
Program Requirements						
A. General Education Requirement: 18.00 credits completed early in academic journey, prior to degree completion: LE/CSSD 1161 2.00, LE/CSSD 1203 4.00, SC/MATH 1516 3.00, LE/CSSD 2261 3.00, Being a Digital Citizen 3.00, and Mobilizing Digital Citizenship 3.00 B. Core (Major Requirement) Options: 2 credits chosen from CSSD 3102 2.00, CSSD 3104 2.00 Undergraduate Research/Programming Challenges "Showcasing Credits": 2.00 credits chosen from LE/CSSD 3071 1.00, LE/CSSD 3072 1.00, LE/CSSD 3073 1.00, LE/CSSD 3074 1.00, LE/CSSD 3075 1.00, LE/CSSD 3079 2.00 (Students can take up to 5.00 "Showcasing Credits") C. Upper Level Requirement: A minimum of 18 credits at the 3000-level or higher including 12 credits in the major. D. Elective Requirement: A minimum of 23.00 credits chosen from additional courses within the major (including stream courses, workplace courses, or up to 3 more credits from Undergraduate Research/Programming Challenges 'showcasing credits'), or from outside the major						
Notes						
1: A fulsome list of prerequisites and/or corequisites for each course is available at: https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm						
2: LE/CSSD 1101 3.00 will take place during the first 6 weeks of the Fall term. 3: LE/CSSD 1102 3.00 will take place during the second 6 weeks of the Fall term.						
PLEASE NOTE: This manual Advising Worksheet is a guide designed to help students understand their degree requirements and to assist with course selection. It does not serve as an official confirmation of a student’s eligibility to graduate. The Registrar's Office will officially determine satisfaction of all degree requirements upon the submission of a graduation application.						
Academic Advising – for assistance understanding degree requirements Metropia Student Success Welcome Desk, Room MK 1010 1 University Blvd, Markham, ON 416-736-5008 advise.markham@yorku.ca						
Advising notes						