# **CPP - Computer Programming**

# Version 9

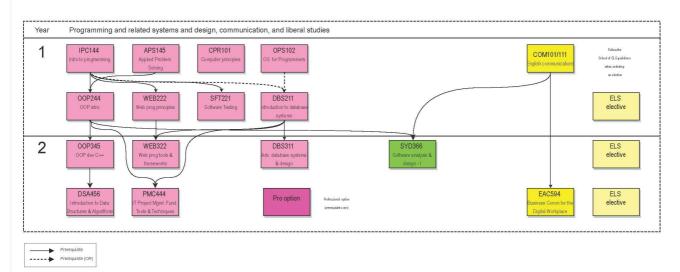
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Program Code:	CPP
Credential Awarded:	Diploma
Campus:	Newnham & Seneca International Academy, Markham
Duration:	2 years (4 academic semesters)
Starts In:	January, and May and September

### Program Map

# Computer Programming (CPP) Curriculum

Entry Date: September 2023 or later



Program Curriculum

Computer Programming - CPP - 24-25				
Semester 1				
Course Code	Course Name	Pre-requisite		
APS145	Writing Strategies	None		
IPC144	Introduction to Programming Using C	None		
OPS102	Operating Systems for Programmers	None		
CPR101	Computer Principles for Programmers	None		
COM101 or	Communicating Across Contexts	None		
COM111	Communicating Across Contexts (Enriched)	Notice		
Semester 2				
Course Code	Course Name	Pre-requisite		
OOP244	Introduction to Object Oriented Programming	IPC144 and APS145		
WEB222	Web Programming Principles	IPC144		
SFT221	Software Testing	IPC144		
DBS211	Introduction to Database Systems	IPC144 or OPS102		
LSO	English and Liberal Studies Option			
Semester 3				
Course Code	Course Name	Pre-requisite		
OOP345	Object-Oriented Software Development Using C++	OOP244		
DBS311	Advanced Database Systems and Design	DBS211		
WEB322	Web Programming Tools and Frameworks	WEB222 and DBS211		
SYD366	Requirements Gathering using OO Models	OOP244 and COM101/111		
LSO	English and Liberal Studies Option	N/A		
Semester 4				
Course Code	Course Name	Pre-requisite		
EAC594	Business Communication for the Digital Workplace	COM101 or COM111		
DSA456	Introduction to Data Structures and Algorithms	OOP345		
PMC444	IT Project Management Fundamentals Tools and Techniques	DBS211 and OOP244		
LSO	English and Liberal Studies Option			
PRO	Professional Option			

	Pro-Options- Fall 2024 Offerings	
Course Code	Course name	Pre-requisites
DBA625	Database Administration	DBS311
DEN502	Digital Entrepreneurship	EAC594
ELA521	Ethics, Law and Application Development	DBS211
MAP523	Mobile App Development - IOS	OOP345 and WEB322

MAP524	Mobile App Development - Android	OOP345
MST300	Introduction to Microsoft Cloud Technologies	WEB322
	Analysis and Design Using OO Models	
SYD466	*will be permitted to take the course as Pro-option after CPA enrolment	SYD366
UNX510	UNIX Bash Shell Scripting	OOP345 and OPS102
	Web Programming for Apps and Services	
WEB422	*will be permitted to take the course as Pro-option after CPA enrolment	WEB322

#### Program Learning Outcome

As a graduate, you will be prepared to reliably demonstrate the ability to:

- Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
- Contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.
- Implement and maintain secure computing environments.
- Implement robust computing system solutions through validation testing that aligns with industry best practices.
- Communicate and collaborate with team members and stakeholders to ensure effective working relationships.
- Select and apply strategies for personal and professional development to enhance work performance.
- Apply project management principles and tools when working on projects within a computing environment.
- Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.

### **Degree Pathway Options:**

Transfer Pathway into BSD: Honours Bachelor of Technology - Software Development

# Further Information About This Program from Seneca's Website

## Student Appeals:

- 1st Informal appeal form
  - Link to Students: INSTRUCTIONS FOR SUBMITTING INFORMAL ACADEMIC APPEALS (sharepoint.com)
- 2nd Formal appeal Seneca forms
  - Formal Appeal Form INSTRUCTIONS FOR SUBMITTING FORMAL ACADEMIC APPEALS

tags: cpp, scpa