

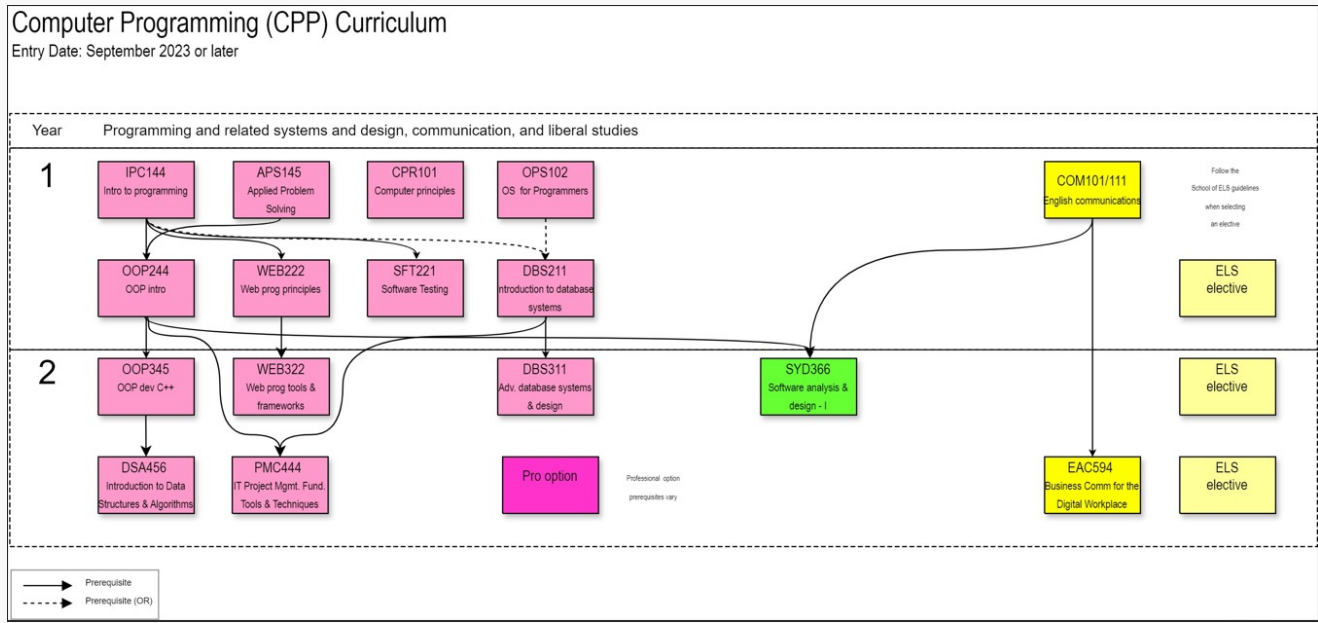
Computer Programming (CPP)

Version 14

Published 4/11/2024 by **Bruna Aparecida Alves de Lima** Last updated 12/2/2024 3:16 PM by **Camille Davis**

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|----------------------------|--------------------------------|
| Program Code: | CPP |
| Credential Awarded: | Diploma |
| Campus: | Newnham |
| Duration: | 2 years (4 academic semesters) |
| Starts In: | January, May, and September |

Program Map



Program Curriculum

Computer Programming (CPP)

| Semester | Course Code | Course Name | Pre-requisite | Delivery Mode |
|----------|-------------|-------------------------------------|---|---------------|
| 1 | APS145 | Applied Problem Solving | None | In Person |
| 1 | IPC144 | Introduction to Programming Using C | None | In Person |
| 1 | OPS102 | Operating Systems for Programmers | None | In Person |
| 1 | CPR101 | Computer Principles for Programmers | None | In Person |
| 1 | COM101 | Communicating Across Contexts | EAC149, EAP500, COM095, ELI Level 8, or placement based on Seneca College English Skills Assessment | In Person |

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|---|--------|---|---------------------------|------------|
| 2 | OOP244 | Introduction to Object Oriented Programming | IPC144 and APS145 | In Person |
| 2 | WEB222 | Web Programming Principles | IPC144 | In Person |
| 2 | SFT221 | Software Testing | IPC144 | In Person |
| 2 | DBS211 | Introduction to Database Systems | IPC144 or ULI101 | In Person |
| 2 | | General Education Option | | |
| 3 | OOP345 | Object-Oriented Software Development Using C++ | OOP244 | FASET Flex |
| 3 | DBS311 | Advanced Database Systems and Design | DBS211 | FASET Flex |
| 3 | WEB322 | Web Programming Tools and Frameworks | WEB222 | FASET Flex |
| 3 | SYD366 | Requirements Gathering Using OO Models | OOP244 and COM101/111 | FASET Flex |
| 3 | | General Education course | None | Online |
| 4 | EAC594 | Business Report Writing | COM101 /111 or equivalent | FASET Flex |
| 4 | DSA456 | Introduction to Data Structures & Algorithms | OOP345 | FASET Flex |
| 4 | PMC444 | IT Project Management Fundamentals Tools and Techniques | DBS211 and OOP244 | FASET Flex |
| 4 | | General Education Option | | |
| 4 | | Professional Option | | Online |

Professional Options - Winter 2025

| Semester | Course Code | Course Name | Pre-requisite | Delivery Mode |
|----------|-------------|--|-------------------|---------------|
| 4 | DBS501 | Stored Procedures Using Oracle's PL/SQL | DBS311 | Online |
| 4 | GAM536 | Game Content Creation | OOP345 | Online |
| 4 | MAP523 | Mobile App Development - iOS | OOP345 and WEB322 | Online |
| 4 | MAP524 | Mobile App Development - Android | OOP345 | Online |
| 4 | DEN502 | Digital Entrepreneurship for Programmers | EAC594 | Online |
| 4 | UNIX511 | UNIX Systems Programming | OOP345 and OPS102 | Online |
| 4 | ELA521 | Ethics, Law and Application Development | DBS211 | Online |
| 4 | WEB422 | Web Programming for Apps and Services | WEB322 and OOP345 | Online |

Program Learning Outcomes

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 Honours Bachelor of Technology - Software Development (BSD)**

Further Information About This Program from Seneca's Website

Student Appeals:

- 1st Informal appeal:
 - **[INSTRUCTIONS FOR SUBMITTING INFORMAL ACADEMIC APPEALS](#)**
- 2nd Formal appeal:
 - **[INSTRUCTIONS FOR SUBMITTING FORMAL ACADEMIC APPEALS](#)**

tags : cpp, scpa