

BACHELOR OF SCIENCE COMPUTER SCIENCE MAJOR

2013/14 Academic Year

REQUIRED JUNIOR LEVEL COURSES¹

3 - 6 CREDITS

- CMPT 101: Introduction to Computing I
- CMPT 103: Introduction to Computing II²
- Students who have previously completed CMPT 114 and CMPT 115 may use those courses to fulfill this requirement.³*

To meet the requirements of this major, students must complete a minimum of 15 credits at the 300- or 400-level.

REQUIRED SENIOR LEVEL COURSES

18 CREDITS

GENERAL COMPUTER SCIENCE MAJOR

- 6 CREDITS
 - CMPT 200: Data Structures & their Algorithms³
 - CMPT 395: Introduction to Software Engineering
- 9 CREDITS
in
CORE
COMPUTING
 - CMPT 201: Programming Methodology
 - CMPT 204: Algorithms I
 - CMPT 229: Computer Organization & Architecture
 - CMPT 250: Human-Computer Interaction I
 - CMPT 291: Introduction to Relational Databases
- 3 CREDITS
 - CMPT 496: Individual Project⁴
 - CMPT 498: Team Project⁴

REQUIRED SENIOR LEVEL COURSES

30 CREDITS

SOFTWARE PROFESSIONAL STREAM

- 21 CREDITS
 - CMPT 200: Data Structures & their Algorithms³
 - CMPT 201: Programming Methodology
 - CMPT 204: Algorithms I
 - CMPT 229: Computer Organization & Architecture
 - CMPT 291: Introduction to Relational Databases
 - CMPT 305: Object-Oriented Programming
 - CMPT 395: Introduction to Software Engineering
- 6 CREDITS
in
PROGRAMMING
 - CMPT 315: Web-Centric Computing & eCommerce
 - CMPT 350: Human-Computer Interaction II
 - CMPT 362: Operating Systems II
 - CMPT 364: Net Centric Computing II
- 3 CREDITS
 - CMPT 496: Individual Project⁴
 - CMPT 498: Team Project⁴

GENERAL REQUIREMENTS⁵

12 - 24 CREDITS

- CMPT 201: Programming Methodology
- CMPT 204: Algorithms I
- CMPT 220: Unix, Scripting & Other Tools
- CMPT 229: Computer Organization & Architecture
- CMPT 230: Introduction to Computer Games
- CMPT 250: Human-Computer Interaction I
- CMPT 272: Formal Systems & Logic
- CMPT 291: Introduction to Relational Databases
- CMPT 305: Object-Oriented Programming
- CMPT 306: Non-Procedural Programming
- CMPT 310: Computers & Society
- CMPT 311: Phenomenon Technology
- CMPT 315: Web-Centric Computing & eCommerce
- CMPT 330: Introduction to Real Time Gaming
- CMPT 340: Numerical Methods
- CMPT 350: Human-Computer Interaction II
- CMPT 351: Human-Computer Interaction: Usability
- CMPT 355: Introduction to Artificial Intelligence
- CMPT 360: Operating Systems & Net Centric Computing I
- CMPT 361: Introduction to Networks
- CMPT 362: Operating Systems II
- CMPT 364: Net Centric Computing II
- CMPT 370: Introduction to Computer Graphics
- CMPT 385: Introduction to Database Concepts
- CMPT 391: Database Management Systems
- CMPT 399: Topics in Computer Science⁴
- CMPT 430: 3D Game Development & Artificial Intelligence
- CMPT 491: Datamining and Advanced Databases
- CMPT 496: Individual Project⁴
- CMPT 498: Team Project⁴
- CMPT 499: Topics in Computer Science⁴

➤ Important! Please see the back of this page for planning notes. ⬅

*This planning sheet should be used only as a **guide** for course planning and it should be used in conjunction with the Bachelor of Science Degree Planner. Remember: not all courses listed are offered each year and course offerings are subject to change. In the event of a discrepancy between the information presented on this sheet and that available on myStudentSystem, the information on myStudentSystem will be considered accurate.*

IMPORTANT PLANNING NOTES

1. These courses can be used to satisfy core requirements in the Bachelor of Science degree.
2. The prerequisites for **CMPT 103** are **CMPT 101** or, at the high school level, three credits of intermediate CSE including CSE 2120. If students possess high school level prerequisites, they are required to complete 3 credits of junior level prerequisites for this major (**CMPT 103**). If students do not possess high school level prerequisites, they must complete 6 credits of junior level prerequisites (**CMPT 101** and **CMPT 103**).
3. Students who completed **CMPT 114** and **CMPT 115** as their prerequisite junior courses cannot take **CMPT 200**. Students in this situation who are taking the *general Computer Science major* will complete 27 credits of general requirements, instead of 24 credits. Students in this situation who are taking the *Software Professional stream* will complete 15 credits of general requirements instead of 12 credits.
4. Students may take **CMPT 399**, **CMPT 496**, **CMPT 498** and **CMPT 499** for credit a maximum of two times, as long as the course topic is different each time they take any of the courses.
5. Students who have chosen the *general Computer Science major* must take 24 credits of general requirements. Students who have chosen the *Software Professional stream* must takes 12 credits of general requirements. Please note the caveat to this requirement, explained above.