MacEwan

BACHELOR OF SCIENCE COMPUTER SCIENCE MINOR 2013/14 Academic Year **REQUIRED JUNIOR LEVEL COURSES¹** 3 - 6 CREDITS □ CMPT 101: Introduction to Computing I \Box 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 minor, students must complete a minimum of six credits at the 300- or 400-level. 6 CREDITS REQUIRED SENIOR LEVEL COURSES **3 CREDITS CMPT 200: Data Structures and their Algorithms³ 3 CREDITS** □ CMPT 201: Programming Methodology CMPT 204: Algorithms I □ CMPT 291: Introduction to Relational Databases **GENERAL REQUIREMENTS⁴ 12 CREDITS** CMPT 201: Programming Methodology CMPT 350: Human-Computer Interaction II CMPT 204: Algorithms I □ CMPT 351: Human-Computer Interaction: Usability **CMPT 220: Unix, Scripting and Other Tools** □ CMPT 355: Introduction to Artificial Intelligence □ CMPT 229: Computer Organization and Architecture □ CMPT 360: Operating Systems and Net Centric Computing I □ CMPT 230: Introduction to Computer Games □ CMPT 362: Operating Systems II CMPT 250: Human-Computer Interaction I □ CMPT 364: Net Centric Computing II □ CMPT 370: Introduction to Computer Graphics □ CMPT 272: Formal Systems and Logic □ CMPT 291: Introduction to Relational Databases □ CMPT 385: Introduction to Database Concepts □ CMPT 395: Introduction to Software Engineering □ CMPT 305: Object-Oriented Programming □ CMPT 399: Special Topics⁵ □ CMPT 306: Non-Procedural Programming □ CMPT 430: 3D Game Development & Artificial Intelligence CMPT 310: Computers and Society □ CMPT 491: Datamining and Advanced Databases **CMPT 311: Phenomenon Technology CMPT 315: Web-Centric Computing and eCommerce** □ CMPT 496: Individual Project⁵ □ CMPT 330: Introduction to Real Time Gaming □ CMPT 498: Team Project⁵ CMPT 340: Numerical Methods □ CMPT 499: Topics in Computer Science⁵

IMPORTANT PLANNING NOTES

- 1. These courses can be used to satisfy core requirements in the Bachelor of Science degree.
- 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** and must complete 15 credits of general requirements, instead of 12 credits.
- 4. Arts students who choose a Computer Science minor must comply with Bachelor of Science minor residency requirements. Science minors must complete a minimum of nine senior level MacEwan credits, including a minimum of three credits at the 300- or 400-level.
- 5. 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.

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.