

## BACHELOR OF SCIENCE COMPUTER SCIENCE MINOR

2015/16 Academic Year

REQUIRED JUNIOR LEVEL COURSES <sup>1,3</sup>		3 - 6 CREDITS
<ul> <li>□ CMPT 101: Introduction to Computing I</li> <li>□ CMPT 103: Introduction to Computing II<sup>2</sup></li> <li>□ Students who have previously completed CMPT 114 and CMPT 115 may use those courses to fulfill this requirement.<sup>4</sup></li> </ul>		
To meet the requirements of this minor, students must complete a minimum of six credits at the 300- or 400-level.		
REQUIRED SENIOR LEVEL COURSES		6 CREDITS
3 CREDITS ☐ CMPT 200: Data Structures and their Algorithms <sup>4</sup>		
3 CREDITS ☐ CMPT 201: Practical Programming Methodology ☐ CMPT 204: Algorithms I ☐ CMPT 291: Introduction to Relational Databases		
GENERAL REQUIREMENTS <sup>5,6</sup>		12 CREDITS
<ul> <li>CMPT 201: Practical Programming Methodology</li> <li>CMPT 204: Algorithms I</li> <li>CMPT 220: Unix, Scripting and Other Tools</li> <li>CMPT 229: Computer Organization and Architecture</li> <li>CMPT 230: Introduction to Computer Games</li> <li>CMPT 250: Introduction to Human Computer Interaction</li> <li>CMPT 272: Formal Systems and Logic</li> <li>CMPT 280: Introduction to Computer Security</li> <li>CMPT 291: Introduction to Relational Databases</li> <li>CMPT 305: Object-Oriented Programming</li> <li>CMPT 306: Non-Procedural Programming Languages</li> <li>CMPT 315: Web-Centric Computing and eCommerce</li> <li>CMPT 330: Introduction to Real Time Gaming</li> <li>CMPT 340: Introduction to Numerical Methods</li> </ul>	Systems  CMPT 351: Human  CMPT 355: Introdu  CMPT 360: Introdu  CMPT 361: Introdu  CMPT 370: Introdu  CMPT 385: Introdu  CMPT 395: Introdu  CMPT 399: Specia  CMPT 430: 3D Ga  CMPT 464: Wirele  CMPT 491: Datam  CMPT 496: Individ	uction to Computer Graphics uction to Database Concepts Using access uction to Software Engineering al Topics <sup>7</sup> ume Development & Artificial Intelligence uss Networks and Embedded Systems unining and Advanced Database Topics lual Project <sup>7</sup>

## **IMPORTANT PLANNING NOTES**

- 1. These courses can be used to satisfy core requirements in the Bachelor of Science or Bachelor of Arts 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 are required to consult with the MacEwan University Academic Calendar to ensure they meet the prerequisite for all Computer Science courses they enrol in.
- 4. 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.
- 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 University credits, including a minimum of three credits at the 300or 400-level.
- 6. Students may see CMPT 310: Computers & Society and CMPT 311: Phenomenon Technology listed in myStudentSystem. These courses cannot be taken toward a Computer Science minor. Students minoring in Computer Science may take these course toward their Options. CMPT 310 and CMPT 311 do count toward a student's 6CR senior-level maximum in their major or minor discipline.
- 7. Students may take CMPT 399 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. Students may take CMPT 496 and CMPT 498 for credit a maximum of two times.