MacEwan UNIVERSITY

BACHELOR OF SCIENCE
COMPUTER SCIENCE MINOR

2014/15 Academic Year

REQUIRED JUNIOR LEVEL COURSES[1,3] — 3 - 6 CREDITS

- ☐ **CMPT 101: Introduction to Computing I**
- ☐ **CMPT 103: Introduction to Computing II[2]**
- ☐ *Students who have previously completed CMPT 114 and CMPT 115 may use those courses to fulfill this requirement.*[4]

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[4]**

3 CREDITS

- ☐ **CMPT 201: Programming Methodology**
- ☐ **CMPT 204: Algorithms I**
- ☐ **CMPT 291: Introduction to Relational Databases**

GENERAL REQUIREMENTS[5,6] — 12 CREDITS

- ☐ **CMPT 201: Programming Methodology**
- ☐ **CMPT 204: Algorithms I**
- ☐ **CMPT 220: Unix, Scripting and Other Tools**
- ☐ **CMPT 229: Computer Organization and Architecture**
- ☐ **CMPT 230: Introduction to Computer Games**
- ☐ **CMPT 250: Human-Computer Interaction I**
- ☐ **CMPT 272: Formal Systems and Logic**
- ☐ **CMPT 280: Introduction to Computer Security**
- ☐ **CMPT 291: Introduction to Relational Databases**
- ☐ **CMPT 305: Object-Oriented Programming**
- ☐ **CMPT 306: Non-Procedural Programming**
- ☐ **CMPT 315: Web-Centric Computing and 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: Introduction to Operating Systems**
- ☐ **CMPT 361: Introduction to Networks**
- ☐ **CMPT 370: Introduction to Computer Graphics**
- ☐ **CMPT 385: Introduction to Database Concepts**
- ☐ **CMPT 395: Introduction to Software Engineering**
- ☐ **CMPT 399: Special Topics[7]**
- ☐ **CMPT 430: 3D Game Development & Artificial Intelligence**
- ☐ **CMPT 491: Datamining and Advanced Databases**
- ☐ **CMPT 496: Individual Project[7]**
- ☐ **CMPT 498: Team Project[7]**
- ☐ **CMPT 499: Topics in Computer Science[7]**

IMPORTANT PLANNING NOTES

1. These courses can be used to satisfy core requirements in the Bachelor of Science or Bachelor of Arts 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 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.
5. 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 300- or 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.

*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 or Bachelor of Arts 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.*