

Bachelor of Computer Science (General)*

Learning Outcomes

Last Updated: June 12, 2015

(Sa150612-5.5.5)

**Including BCS (General) degree completion and articulation agreement pathways.*

<p>Program Learning Outcomes <i>This is a sentence completion exercise. Please provide a minimum of 1 learning outcome for each of the boxes associated with a graduate attribute.</i></p> <p><u>At the end of this program, the successful student will know and be able to:</u></p>	<p>Characteristics of a University of Windsor Graduate</p> <p><u>A U of Windsor graduate will have the ability to demonstrate:</u></p>	<p>COU-approved Undergraduate Degree Level Expectations</p>
<p>A. Design algorithms and create software systems using a number of programming languages, data structures, operating systems, database management systems, computer networks and software development techniques.</p> <p>Distinguish between details of hardware system components.</p> <p>Define and explain the time and space complexity of an algorithm.</p> <p>Explain, use, demonstrate, test, validate, and report on existing software systems.</p>	<p>A. the acquisition, application and integration of knowledge</p>	<p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p>
<p>B. Search for suitable information to compare and classify algorithms and tools for solving a wide range of problems.</p>	<p>B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)</p>	<p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits Knowledge</p>
<p>C. Analyze the strengths and weaknesses of techniques used to solve problems, formulate strategies, use algorithms and choose appropriate tools to solve real-life problems.</p> <p>Apply concepts and choose appropriate techniques to solve problems in specific domains.</p>	<p>C. critical thinking and problem-solving skills</p>	<p>1. Depth and Breadth of Knowledge 2. Knowledge of Methodologies 3. Application of Knowledge 5. Awareness of Limits of Knowledge</p>
<p>D. Assess interaction with computers with regards to use of editors, compilers and runtime debugging of software systems and programming.</p>	<p>D. literacy and numeracy skills</p>	<p>4. Communication Skills 5. Awareness of Limits of Knowledge</p>

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E. Prepare programming solutions to real life problems following professional principles of protection of intellectual property.	E. responsible behaviour to self, others and society	5. Awareness of Limits of Knowledge 6. Autonomy and Professional Capacity
F. Prepare and explain effective documentation of software systems. Formulate and state logical, programmable solutions and algorithms for real life problems, to desired audiences. (Also relevant to H)	F. interpersonal and communications skills	4. Communication Skills 6. Autonomy and Professional Capacity
G. Employ solving software development problems in a team as done in our mandatory laboratories.	G. teamwork, and personal and group leadership skills	4. Communication Skills 6. Autonomy and Professional Capacity
H. Devise solution to software development problems.	H. creativity and aesthetic appreciation	2. Knowledge of Methodologies 3. Application of Knowledge 6. Autonomy and Professional Capacity
I. Demonstrate ability for advanced study in foundations of computer science and in methodologies of application development (e.g. learning new programming language).	I. the ability and desire for continuous learning	6. Autonomy and Professional Capacity