UNIVERSITY OF WINDSOR

PROGRAM DEVELOPMENT COMMITTEE
COURSE LEARNING OUTCOMES FORM

COURSE NUMBER AND TITLE: COMP-2650. Computer Architecture I: Digital Design

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows.

Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course might not touch on each of the Characteristics. Each University of Windsor program should produce graduates that are able to demonstrate each of the nine characteristics approved in To Greater Heights.

Information on learning outcomes is appended to this form (Appendix A). Proposers are also strongly encouraged to contact the Office of the Vice-Provost, Teaching and Learning or the Centre for Teaching and Learning, for assistance with the articulation of learning outcomes.

Course Learning Outcomes *(see **Appendix A** for more on learning outcomes)* At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:
• Analyze and design combinatorial & sequential circuits. • Explain how a computer system works. • Explain methods of Boolean algebra and how they relate to circuit design. • Express minimal combinational and synchronous circuits. • Describe memory, counters, and registers.	A. the acquisition, application and integration of knowledge
• Define and realize different digital logic circuits and evaluate their performances such as speed or size.	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
• Analyze and design combinatorial & sequential circuits. • Design arithmetic circuits, logic circuits and shifting circuits, according to specifications. • Design Arithmetic Logic Unit for processors.	C. critical thinking and problem-solving skills
• Explain how a computer system works.	D. literacy and numeracy skills
	E. responsible behaviour to self, others and society
	F. interpersonal and communications skills

Course Learning Outcomes *(see **Appendix A** for more on learning outcomes)* <u>At the end of the course, the successful student will know and be able to:</u>	Characteristics of a University of Windsor Graduate <u>A U of Windsor graduate will have the ability to demonstrate:</u>
	G. teamwork, and personal and group leadership skills
	H. creativity and aesthetic appreciation
	I. the ability and desire for continuous learning

Verbs to Write Learning Outcomes

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define	describe	apply	analyze	arrange	appraise
list	discuss	demonstrate	appraise	assemble	assess
name	explain	dramatize	calculate	collect	choose
recall	express	employ	categorize	compose	compare
record	depict	illustrate	criticize	construct	estimate
relate	locate	interpret	debate	create	evaluate
underline	recognize	operate	diagram	design	judge
label	report	practice	differentiate	formulate	measure
quote	restate	schedule	distinguish	manage	rate
locate	review	sketch	examine	organize	revise
match	translate	use	experiment	plan	score
cite			inspect	prepare	select
reproduce			question	propose	value
identify			relate	combine	defend
state			solve	integrate	justify
			test		
			classify		