



The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

**COMPUTER ENGINEERING
COURSE EQUIVALENTS
1998 Edition**

University of Alberta

University of Calgary

98-Comp-A1 Electronics

EE 340 Electronics: Active Devices
&
EE 350 Electronics: Analog Circuits
&
EE 570 Large Signal and Pulse
Circuits

ENEL 463 Electronic Devices and
Circuits
&
ENEL 465 Analog Integrated Electronics
&
ENEL 565 Digital Integrated Electronics

98-Comp-A2 Digital Systems Design

EE 280 Introduction to Digital
Electronics
&
EE 380 Introduction to
Microprocessors
&
EE 480 Advanced Digital Logic
Design

ENEL 353 Digital Circuit Design
&
ENEL 453 Digital Systems Design

98-Comp-A3 Computer Architecture

EE 380 Introduction to
Microprocessors

ENEL 515 Processor Architecture

98-Comp-A4 Program Design and Data Structures

CMPUT 201 Practical Programming
Methodology
&
CMPUT 204 Algorithms I

ENGG 335 Computing for Engineers II
&
ENEL 495 Data Structures for Engineers

98-Comp-A5 Operating Systems

CMPUT 379 Operating System Concepts I

ENEL 597 Operating Systems for
Engineers

98-Comp-A6 Software Engineering

CMPE 313 Software Engineering

ENEL 553 Engineering Software
Engineering

98-Comp-B1 Advanced Computer Architecture

CMPE 382	Computer Organization and Architectures		No Course Equivalent
----------	---	--	----------------------

98-Comp-B2 Principles of VLSI

EE 653	Integrated Circuit Design	ENEL 567	CMOS VLSI Engineering
--------	---------------------------	----------	-----------------------

98-Comp-B3 Data Bases and File Systems

CMPUT 291	Introduction to File and Database Management	CPSC 461	File Processing
& CMPUT 391	Database Management Systems	& CPSC 471	Data Base Management Systems

98-Comp-B4 Computer Graphics

CMPUT 301	User Interfaces and Software Design	ENEL 555	Visualization Methods for Engineers
& CMPUT 431	Introduction to Computer Graphics		

98-Comp-B5 Computer Communications

CMPUT 313	Telecommunications and Computers	CPSC 441	Computer Communications
-----------	----------------------------------	----------	-------------------------

98-Comp-B6 Computer Control and Robotics

EE 462	Control Systems for Comp. Eng.	ENEL 541	Control Systems II
& EE 565	Introduction to Robotics	& ENMF 505	Robotics

98-Comp-B7 Digital Signal Processing

EE 438	Introduction to Signal Theory and Processing	ENEL 593	Digital Filters
& EE 539	Digital Filter Design and Implementation		

98-Comp-B8 Computer Integrated Manufacturing

No Course Equivalent		ENMF 415	Integrated Manufacturing Systems I
		& ENMF 509	Integrated Manufacturing Systems II

University of Alberta**University of Calgary**

98-Comp-B9 Artificial Intelligence and Expert SystemsCMPUT 366 Artificial Intelligence
Applications

CPSC 533 Artificial Intelligence

98-Comp-B10 Distributed Systems

No Course Equivalent

No Course Equivalent

98-Comp-B11 Advanced Software DesignCMPE 313 Software Eng.
&
CMPUT 560 Software Eng.CPSC 550 System Software Design and
Development**Revised April 2005**