

Montana Tech of the University of Montana
Bachelor of Science in COMPUTER SCIENCE
with
Control Systems Emphasis
Business Applications Emphasis

2002-2003 CATALOG

Fall Semester

FRESHMAN YEAR

		Credits	
C.S. 1006	C.S./S.E. Freshman Seminar	1	_____
C.S. 2106	Intro to Computer Sci. I	3	_____
Math 1520	Calculus I OR		
Math 1516	Calculus I w/ Alg. Enhanc.	3/4	_____
Engl. 1046	English Comp.	3	_____
*	Humanities Elective		
		3	_____
*	Social Science Elective		
		3	_____
Total Credits		16/17	

Spring Semester

		Credits	
C.S. 2116	Intro to Computer Sci. II	3	_____
Math 1530	Calculus II	3	_____
HSS 1216	Principles of Speaking OR		
HSS 1226	Public Speaking	2	_____
*	Social Science Elective		
		3	_____
**	Science Elective		
		3	_____
	Free Elective		
		1	_____
Total Credits		15	

SOPHOMORE YEAR

C.S. 3166	Discrete Structures	3	_____
C.S. 3546	UNIX, C, & C++	3	_____
Math 2510	Calculus III	4	_____
Math 3256	Matrices & Lin. Algebra	3	_____
**	Science Elective		
		3	_____
Total Credits		16	

C.S. 2156	Assembly Language	3	_____
C.S. 3316	Data Struct & Algo. I	3	_____
Math 2236	Elem. Diff. Equations	3	_____
C.S. 3656	Database Management	3	_____
**	Science Elective		
		3	_____
Total Credits		15	

JUNIOR YEAR

C.S. 3326	Data Struct. & Algo. II	3	_____
C.S. 3256	Software Engineering I	3	_____
Math 3316	Intro. Statistical Methods	3	_____
**	Science Elective		
		3	_____
***	Professional Elective		
		3	_____
Total Credits		15	

C.S. 3266W	Software Engineering II	3	_____
C.S. 3406	Operating Systems	3	_____
Math 4106	Numerical Computing	3	_____
*	Humanities Elective		
		3	_____
***	Professional Elective		
		3	_____
Total Credits		15	

SENIOR YEAR

C.S. 4386	Theory of Computation	3	_____
C.S. 4526	Networking Principles	3	_____
C.S. 4606	Senior Design Project OR		
C.S. 4916	Internship	2	_____
Engr 3210W	Sci. & Tech. Writing OR		
PTC 3896W	Bus. & Prof. Writing	3	_____
***	Professional Elective		
		3	_____
Total Credits		14	

C.S. 4016	Programming Lang.	3	_____
C.S. 4406	Computer Architecture	3	_____
C.S. 4556	Artificial Intelligence	3	_____
C.S. 4606	Senior Design Project OR		
C.S. 4916	Internship	2	_____
***	Professional Elective		
		3	_____
Total Credits		14	

Minimum credits for B.S. degree in Computer Science = 120

* Electives must be chosen so that the General Education Requirements are met (6 credits in Social Sciences & 6 credits in Humanities).

** Science electives must include a two-semester sequence of laboratory science (min. of 12 credits total). Either (1) BIOL 1116, 1216, or 1326 and BIOL 2106 & 3106; (2) Chem 1056 w/ lab 1136, Chem 1066 w/lab 1166 plus 4 more science credits; (3) GeoE 1010, Geol 2020 plus 5 more science credits; (4) Phys 1046, 2076 w/ lab 2096, & Phys 2086 w/ lab 2106 plus 1 more science credit (**Take Phys sequence for CONTROL SYSTEMS OPTION.**)

*** Professional electives are the classes that meet the Computer Science degree options. (Professional electives on other side.)

COMPUTER SCIENCE DEGREE OPTIONS

Professional Electives --- Junior and Senior Years

2002-2003 CATALOG

Control Systems

Junior Year

PHYS 3036

Electronics

Fall Spring

3

ENGR 2530

Intro. to Electric Circuits

3

Senior Year

* ENGR 4450

Design Concepts for Instrumentation & Control Systems

4

* ENGR 4400

Introduction to Control Systems

3

* ENGR 4270

Digital Systems Design

3

* PHYS 4806

Microprocessors

3

* *select 2 courses out of 4*

Business Applications

Junior Year

BUS 2146

Accounting I

Fall Spring

3

BUS 2156

Accounting II

3

Senior Year

* BUS 3416

Business Law I

3

* BUS 3616W

Management

3

* BUS 3316W

Marketing

3

* BUS 3516

Business Finance

3

* *select 2 courses out of 4*

