Name: _____

ID: _____

NORTH DAKOTA STATE UNIVERSITY

College of Science & Mathematics

B.S. Computer Science

Fall 2011

GENERAL EDUCATION REQUIREMENTS - 40 Credits Required				
Course	**Number**	**Course Title**	**Credits**	**Grade**
First Year Experience (F)			**1 credit**	
UNIV	189[1]	Skills for Academic Success	1	
Communication (C)			**12 credits**	
ENGL	110[2]	College Composition I	3	
ENGL	120[2]	College Composition II	3	
COMM	110	Fundamentals of Public Speaking	3	
ENGL	321 or 324	*(Upper-Division Writing)*	3	
Quantitative Reasoning (R)			**3 credits**	
MATH	165	Calculus I	4	
Science & Technology (S) (One course w/ co-requisite lab)			**10 credits**	
Humanities & Fine Arts (A) (Max of 3 cr in fine arts perform)			**6 credits**	
			3	
			3	
Social & Behavioral Sciences (B)			**6 credits**	
			3	
			3	
Wellness (W)			**2 credits**	
			2	
Cultural Diversity (D)				
Global Perspectives (G)				

COLLEGE REQUIREMENTS for a BS Degree

The College of Science & Mathematics requires an additional 6 credits in Humanities or Social Sciences for the BS degree.

BS Degree Requirements:			
HUM or Soc Sci		3	
HUM or Soc Sci		3	
DEPARTMENT REQUIREMENT			
HUM or Soc Sci		3	

[1]Students transferring in 24 or more credits do not need to take UNIV 189.

[2]ACT score of ≥ 21 will determine English placement and the awarding of credit. Refer to English placement guidelines for additional information.

A grade of C or better is required for all CSCI courses.

ALL COURSES ON THIS CURRICULUM ARE REQUIRED FOR THE MAJOR

MAJOR REQUIREMENTS - 53 credits				
Course	**Number**	**Course Title**	**Credits**	**Grade**
CSCI	160	Computer Science I	4	
CSCI	161	Computer Science II	4	
CSCI	213	Modern Software Development	3	
CSCI	222	Discrete Mathematics	3	
CSCI	313	Software Development for Games	3	
CSCI	336	Theoretical Computer Science II	3	
CSCI	366	Files for Database Systems	3	
CSCI	372	Comparative Programming Languages	3	
CSCI	374	Computer Organization & Architecture	3	
CSCI	415	Networking and Parallel Computation	3	
CSCI	445*	Software Projects: Capstone	3	
CSCI	467	Algorithm Analysis	3	
CSCI	474	Operating Systems Concepts	3	
CSCI	489*	Social Implications of Computers	3	

*CSCI 445 & 489 form the dept capstone. Both courses are usually taken during the last spring semester the student is enrolled.

9 Credits of Computer Science Electives

3 courses from the categories listed below, with no more than two courses from any single category. **No more than 2 courses** may come from any single category.

Software Engineering:				
CSCI	413	Principles of Software Engineering	3	
CSCI	477	Object-Oriented Systems	3	
CSCI	488	Human-Computer Interaction	3	
Large Systems:				
CSCI	426	Introduction to Artificial Intelligence	3	
CSCI	458	Microcomputer Graphics	3	
CSCI	459	Foundations of Computer Networks	3	
Systems Modeling:				
CSCI	418	Simulation Models	3	
CSCI	453	Linear Programming and Network Flows	3	
CSCI	454	Operations Research	3	
Emerging Areas:				
CSCI	345	Topics in Personal Computers	3	
CSCI	469	Network Security	3	
CSCI	473	Foundations of the Digital Enterprise	3	
CSCI	476	Computer Forensics	3	
CSCI	479	Introduction to Data Mining	3	

COMPUTER SCIENCE CURRICULUM - Continued on the back

Advisor: _____

COMPUTER SCIENCE - Fall 2011 CONTINUED

UNIVERSITY GRADUATION REQUIREMENTS		
Residency at NDSU (15 cr. @ NDSU)**:**	**36 Credits**	
Credits at 4-year University:	**60 Credits**	
Courses numbered 300+ (Min. 15 cr @ NDSU):	**37 Credits**	
Total Credits Required:	**122 Credits**	

NOTES/COMMENTS

Course work transferring from another institution with a grade of D will count toward number of credits, but not toward specific major requirements.

Courses taken to fulfill gen ed, college and major requirements may NOT be taken P/F

Related Required Courses - 10 Credits Required (Not counted as part of major credits)

Course	Number	Course Title	Credits	Grade
MATH	166	Calculus II	4	
STAT	367	Probablity	3	
STAT	368	Statistics	3	

One Year Lab Science Sequence - 8 Credits Required

* Fulfills Gen Ed Req. **Fulfills Gen Ed & Global Perspective Req.

*BIOL	126/126L **&** 220/220L	Human Biology/Lab **&** Human Anatomay & Physiology/Lab	3/1 3/1	
*CHEM	121/121L **&** 122/122L	General Chemistry I/Lab **&** General Chemistry II/Lab	3/1 3/1	
*CHEM	150/160 **&** 151/161	Principles of Chemistry I/Lab **&** Principles of Chemistry II/Lab	3/1 3/1	
**GEOL	105/105L **&** 106/106L	Physical Geology/Lab **&** The Earth Through Time/Lab	3/1 3/1	
*PHYS	211/211L **&** 212/212L	College Physics I/Lab **&** College Physics II/Lab	3/1 3/1	
*PHYS	251/251L **&** 252/252L	University Physics I/Lab **&** University Physics II/Lab	4/1 4/1	

3 Credits Required: One additional science course that satisfies general education requirements
