

Student's Name: \_\_\_\_\_

Revised Catalog: 2008-2009

**5-Year Curriculum for BS/MS Degree: Bachelor of Science in Computer Science (128 credits – 1<sup>st</sup> 4 yrs) and M.S. in Engineering with Computer Science Emphasis (30 or 32 credits - 5<sup>th</sup> year graduate studies)**

<b>FRESHMAN YEAR</b>	F	S
CSc 150 Computer Sc I	___3	
CSc 250 Computer Sc II		___3
Engl 101* Comp I (SGR Goal 1)	___3	
GE 101 Intro to Engineering		___1
Math 123* Calculus I (SGR Goal 5 ≥3 cr.)	___4	
Math 125 Calculus II		___4
Math 253 Elementary Logic & Sets		___3
SpCm101* Speech (SGR Goal 2)		___3
Social Science/Diversity* (SGR Goal 3)		___6
Social Resp/Culture Aware** (IGR Goal 3)		___3
	[16]	[17]

<b>SOPHOMORE YEAR</b>	F	S
CSc 300 Data Structures	___3	
CSc 314 Assembly Language	___3	
CSc 317 Computer Org & Arch		___3
CSc 346 Object Orientated Prog		___3
EE 245/245L Digital Systems	___4	
Math 215 Matrix Algebra	___2	
Math 316 Discrete Math		___3
Humanities/Fine Arts* (SGR Goal 4)		___3
Natural Science Seq*+++ (SGR Goal 6)	___4	___4
	[16]	[16]

<b>JUNIOR YEAR</b>	F	S
CSc 303 Ethical & Security Issues (Globalization)	___3	
CSc 354 Systems Programming	___3	
CSc 445 Intro to Theory of Computation	___3	
CSc 446 Compiler Construction		___3
Engl 277 Technical Writing (SGR Goal 1)		___3
Math 373 Numerical Analysis	___3	
Stat 281 Stat Methods I <sup>+</sup>		___3
Natural Science <sup>+++</sup>	___4	
Land & Natural Resour (IGR Goal 1)	___3	
Applied Electives <sup>++</sup>		___3
	[16]	[15]

<b>SENIOR YEAR</b>	F	S
CSc 456 Operating Systems	___3	
CSc 461 Programming Lang		___3
CSc 470 Software Engineering I	___3	
CSc 484 Database Mgmt		___3
CSc 485 Software Engineering II (AW)		___3
Personal Wellness** (IGR Goal 2)	___2	
Humanities/Fine Arts* (SGR Goal 4)	___3	
Applied Electives <sup>++</sup>	___3	___6
Electives	___3	
	[17]	[15]

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**SOCIAL SCIENCE/Diversity:** (6) CR GR  
 SGR Goal 3 from at least 2 disciplines

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**ELECTIVES:** 3 Credits CR GR

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**INFORMATION LITERACY:** 0 CREDITS  
 SGR Goal 7 (by an assessment)

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**HUMANITIES/Diversity:** (6) CR GR  
<sup>1</sup>SGR Goal 4

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**LAND AND NATURAL RESOURCES**  
 IGR Goal 1 (3 credits) CR GR

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<sup>1</sup>from at least two disciplines or approved Foreign Language sequence

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**PERSONAL WELLNESS**  
 IGR Goal 2 (2-3 Credits) CR GR

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**NATURAL SCIENCE:** (12) CR GR  
 SGR Goal 6

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**SOCIAL RESPONSIBILITY/CULTURAL AWARENESS**  
 IGR Goal 3 (3 credits) CR GR

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**APPLIED ELECTIVES:** (12) CR GR

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- + **May substitute Math 381**
  - ++ **Courses numbered 300 or above** - at least 9 of the credits from CSc courses, the rest may be from a support discipline
  - +++ **Natural Science Dept approved list:**  
 Biol 151/151L, 153/153L; or Chem 112/112L, 114/114L;  
 or Phys 111/111L, 113/113L; or 211/211L, 213/213L
  - \* **System General Education** requirements (30 credits)
  - \*\* **Institutional Graduation** requirements (8 credits)

**5<sup>th</sup> Year GRDUATE STUDENT YEAR – 30 credit hours for option A and 32 credit hours for option B.**

**CORE COURSES (Student must take two core courses each semester.)**

	Su		F	S
CSc 705 Design and Analysis of Computer Algorithm				___3
CSc 710 Structure and Design of Programming Language			___3	
CSc 770 Software Engineering Management				___3
CSc 720 Theory of Computation			___3	

**Student normally takes 3 courses for each semester.**

	Summer			
CSc 522 GUI Programming			___3	
CSc 572 Artificial Intelligence	___3			
CSc 574 Computer Networks				___3
CSc 576 Computer Graphics			___3	
CSc 581 Systems Analysis	___3			
CSc 630 Principles Database System Design	___3			
CSc 740 Management Information Systems	___3			
CSc 750 Recent Advances in Parallel Processing	___3			
CSc 792 Independent Study			___3	___3
CSc 790 Seminar			___3	___3
CSc 791 Independent Study			___3	___3

**Thesis for option A students and Research/Design Paper for option B students**

CSc 688 Research Report/Design Paper	___ 2-3 ___ 2-3	___ 2-3, Maximum 2 credits counted
CSc 698 Thesis	___ 5-10 ___ 5-10	___ 5-10, Maximum 7 counted

	Minimum Major	Minimum Total	Thesis	Design Paper
<b>Option A</b>	<b>19</b>	<b>30</b>	<b>5-7</b>	
<b>Option B</b>	<b>19</b>	<b>32</b>		<b>2-3</b>

**Note:** 5 years candidates are encouraged to take option A. However, if student desires to take option B, the student may need to take more courses during the summer before or after the 5<sup>th</sup> year.