

Student's Name: _____

5-Year Curriculum for BS/MS Degree: Bachelor of Science in Software Engineering (132 credits – 1st 4 yrs) and M.S. in Engineering with Computer Science Emphasis (30 or 32 credits - 5th year graduate studies)

FRESHMAN YEAR		F	S	SOPHOMORE YEAR		F	S
CSc 150 Computer Sc I	___3			CSc 300 Data Structures	___3		
CSc 250 Computer Sc II			___3	CSc 314 Assembly	___3		
Engl 101* Composition I (SGR Goal 1)	___3			Math 215 Matrix Algebra	___2		
GE 101 Intro to Engineering	___1			Math 316 TP Discrete Math			___3
Math 123* Calculus I (SGR Goal 5 ≥ 3cr)	___4			Phys 211* (SGR Goal 6)	___4		
Math 125 Calculus II			___4	Phys 213* (SGR Goal 6)			___4
Math 253 Logic & Set Theory			___3	SE 305 Foundation of Software Engr	___3		
SpCm101* Speech (SGR Goal 2)			___3	SE 320 Software Reqt & Formal Specs(AW)			___3
Social Science/Diversity* (SGR Goal 3)	___3		___3	Humanities/Diversity* (SGR Goal 4)	___3		___3
Land & Natural Res*** (IGR Goal 1)	___3			Social Resp/Cultural Aware*** (IGR Goal 3)	___3		___3
	[17]		[16]		[18]		[16]

JUNIOR YEAR		F	S	SENIOR YEAR		F	S
CSc 354 Systems Programming	___3			CSc 456 Operating Systems	___3		
EE 245/245L Digital Systems	___4			CSc 461 Programming Lang			___3
EE 300/300L Basic Elec Engr I	___3			CSc 484 Database Mgmt Sys			___3
EE 302/302L Basic Elec Engr II			___3	Math 321 Differential Equations			___3
EE 347/347L Microprocessor			___4	SE 410 Software Test & Quality Assur	___3		
Engl 277* Tech Writing (SGR Goal 1)	___3			SE 440 Embedded Sys Prog			___3
SE 330 Human Factor (Globalization)			___3	SE 464 Senior Design I	___2		
SE 340 Software Architecture	___3			SE 465 Senior Design II			___2
SE 420 Software Project Mgmt			___3	Stat 381 Intro to Stat & Problems	___3		
Personal Wellness** (IGR Goal 2)			___2	Applied or Technical Electives ⁺⁺	___6		___3
	[16]		[15]		[17]		[17]

SOCIAL SCIENCE/Diversity: (6) CR GR
¹SGR Goal 3

¹from at least 2 disciplines

HUMANITIES/Diversity: (6) CR GR
²SGR Goal 4

²from at least two disciplines or approved Foreign Language sequence

NATURAL SCIENCE: (6) CR GR
 SGR Goal 6
 Phys 211 _____ 4 _____
 Phys 213 _____ 4 _____

APPLIED ELECTIVES: (9) CR GR

INFORMATION LITERACY : 0 credits
 SGR Goal 7
 Demonstrate Competency through an assessment

LAND AND NATURAL RESOURCES: 3 credits
 IGR Goal 1

PERSONAL WELLNESS: 2-3 credits
 IGR Goal 2

Social Resp/Cultural Aware: 3 credit
 IGR Goal 3

* General Education System requirements (30 credits)
 ** SDSU Institutional Graduation requirements (8-9 credits)
 ++ Courses numbered 300 or above. Suggested courses:
 CSc 303, 325, 422, 446, 474, EE 440/440L or Math 471

5th 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
Option A	19	30	5-7	
Option B	19	32		2-3

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 5th year.