

CSEN-BS, Computational Science and Engineering Track: 2014/2015

First Year			First Year		
Fall			Spring		
CSCI 1000	Computer Science as a Field of Work and Study	1	CSCI 2270	Computer Science 2: Data Structures	4
CSCI 1300	Computer Science 1: Programming	4	APPM 1360	Calculus 2 for Engineers	4
APPM 1350	Calculus 1 for Engineers	4		Natural Science	5
	Natural Science	4		Humanities and Social Science	3
	Humanities and Social Sciences	3			
	Semester credit hours:	16		Semester credit hours:	16
Second Year			Second Year		
Fall			Spring		
CSCI 2400	Computer Systems	4	CSCI 3104	Algorithms	4
CSCI 2824	Discrete Structures	3	CSCI 3656	Numerical Computation	3
CSCI 2830	Linear Algebra	3		CSE Core (2 of 3)	4
CSCI 3308	Software Dev Mthds/TIs (CSE Core 1 of 3)	3		Humanities or Social Sciences	3
	Free elective	3		Probability or Statistics	3
	Semester credit hours:	16		Semester credit hours:	17
Third Year			Third Year		
Fall			Spring		
CSCI 3155	Principles of Programming Languages	4		CSE Core (3 of 3)	3
CSCI 4576	High-Performance Scientific Computing 1	4		Computer Science elective (3 of 10)	3
	Humanities and Social Sciences	3		Natural Science	4
	Free elective	3		WRTG 3030, 3035, HUEN 3100 or PHYS 3050	3
	CSE Core (3 of 3)	3		Free elective	3
	Semester credit hours:	17		Semester credit hours:	16
Fourth Year			Fourth Year		
Fall			Spring		
CSCI 4308	Senior Projects I	4	CSCI 4318	Senior Projects II	4
CSCI 4448	Object Oriented Programming and Design	3		Computer Science elective (10 of 10)	4
	Computer Science elective (6 of 10)	3		Upper division Humanities and Social Science	3
	Upper division Natural Science	3		Upper division Humanities and Social Science	3
	Free Elective	3			
	Semester credit hours:	16		Semester credit hours:	14

CSE Foundation courses:

- Fall: 3308-3-Software Engineering Methods and Tools (complete either Fall or Spring of 2nd year), 4576-4-High-Performance Scientific Computing
- Spring: 3656-3-Numerical Computation

CSE Core courses:

- Fall: 3287-3-Database and Information Systems, 4229-Computer Graphics, 4809-3-Computer Animation
- Spring: 3753-4-Operating Systems, 4830 (4332-3)-Game Programming, 4446-3-Choatic Dynamics, 4448-3-Object Oriented Programming and Design, 4753-3-Computer Performance Modeling
- Summer: 4229-Computer Graphics, 4809-Computer Animation

CSEN-BS, Computational Science and Engineering Track: 2014/2015 (Starting with Pre-Calculus)

First Year			First Year		
Fall			Spring		
CSCI 1000	Computer Science as a Field of Work and Study	1	CSCI 2270	Computer Science 2: Data Structures	4
CSCI 1300	Computer Science 1: Programming	4	APPM 1350	Calculus 1 for Engineers	4
APPM 1235	Pre-Calculus for Engineers	4		Natural Science	5
	Natural Science	4		Humanities and Social Science	3
	Humanities and Social Sciences	3			
	Semester credit hours:	16		Semester credit hours:	16
Second Year			Second Year		
Fall			Spring		
CSCI 2400	Computer Systems	4	CSCI 3104	Algorithms	4
CSCI 2824	Discrete Structures	3	CSCI 3656	Numerical Computation	3
APPM 1360	Calculus 2 for Engineers	4		CSE Core (2 of 3)	4
CSCI 3308	Software Dev Mthds/TIs (CSE Core 1 of 3)	3		Humanities or Social Sciences	3
	Free elective	3	MATH 3130	Linear Algebra	3
	Semester credit hours:	17		Semester credit hours:	17
Third Year			Third Year		
Fall			Spring		
CSCI 3155	Principles of Programming Languages	4		CSE Core (3 of 3)	3
CSCI 4576	High-Performance Scientific Computing 1	4		Computer Science elective (3 of 10)	3
	Humanities and Social Sciences	3		Natural Science	4
	Approved Prob/Stats	3		WRTG 3030, 3035, HUEN 3100 or PHYS 3050	3
	CSE Core (3 of 3)	3		Free elective	3
	Semester credit hours:	17		Semester credit hours:	16
Fourth Year			Fourth Year		
Fall			Spring		
CSCI 4308	Senior Projects I	4	CSCI 4318	Senior Projects II	4
CSCI 4448	Object Oriented Programming and Design	3		Computer Science elective (10 of 10)	4
	Computer Science elective (6 of 10)	3		Upper division Humanities and Social Science	3
	Upper division Natural Science	3		Upper division Humanities and Social Science	3
	Free Elective	2			
	Semester credit hours:	15		Semester credit hours:	14

CSE Foundation courses:

- Fall: 3308-3-Software Engineering Methods and Tools (complete either Fall or Spring of 2nd year), 4576-4-High-Performance Scientific Computing
- Spring: 3656-3-Numerical Computation

CSE Core courses:

- Fall: 3287-3-Database and Information Systems, 4229-Computer Graphics, 4809-3-Computer Animation
- Spring: 3753-4-Operating Systems, 4830 (4332-3)-Game Programming, 4446-3-Choatic Dynamics, 4448-3-Object Oriented Programming and Design, 4753-3-Computer Performance Modeling
- Summer: 4229-Computer Graphics, 4809-Computer Animation