

B.S. in Computer Engineering -- Quarter to Semester Translation Table
Quarter Requirements (AY 2017-18)

		Quarter Courses	Semester Course Equivalencies (Course is the same as the quarter course. This can be 1:1; 1:many; many:1; or many:many courses. Anywhere (for any program) which the quarter course was required or listed, this (these) semester course(s) can be used. This information will also be displayed in the course conversion guide. Repeat rules apply.)	Quarter Units (Current number of units which are required for each requirement area.)	Semester Units (Number of semester units which will be required for each requirement area.)	Notes
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COEN

Lower Division Requirements	Required courses	CSE 201	CSE 2010	4	4	
		CSE 202	CSE 2010	4		
		CSE 208	CSE 5208	2	4	CSE 208+308+408->CSE 5208 + 5408
		MATH 211	MATH 2210	4	4	
		MATH 212	MATH 2210	4		
		MATH 213	MATH 2220	4	4	
		MATH 251	Math 2310	4	0	Replaced with Math 2310
		MATH 262	MATH 2265	4	3	
		MATH 272	MATH 2720	4	3	
		PHYS 150	CSE 4030	5	4	Topics in PHYS 150 are covered in CSE 4030
		PHYS 221	PHYS 2500 + 2500L	5	5	
		PHYS 222	PHYS 2500 + 2500L	5		
		PHYS 223	PHYS 2510 + 2510L	5	5	
Upper Division Requirements	Required courses	CSE 308	CSE 5208	4		CSE 208, 308, 408 are converted 5208, 5408
		CSE 310	CSE 3100	5	4	
		CSE 311	CSE 5210	4	0	CSE 311 + CSE 521 -> CSE 5210
		CSE 313	CSE 2130	4	3	
		CSE 330	CSE 2020	4	4	CSE 201 +202+330->CSE 2010+CSE 2020
		CSE 335	CSE 3350	4	3	
		CSE 401	CSE 4010	5	4	
		CSE 403	CSE 4030	4		
		CSE 408	CSE 5408	4	4	
		CSE 456	CSE 4560	4	4	
		CSE 460	CSE 4600	4	3	
		CSE 521	CSE 5210	4	4	
		CSE 535	CSE 5350 or CSE 4310	4	3	
		CSE 541	CSE 5410	4	4	
		MATH 331	MATH 2310	4		
PHYS 350	CSE 5300 or CSE 4100	4	3	Some topics in PHYS 350 are in CSE 5410		
Electives	Take three courses for a total of 12 units from the following	CSE 431				
		CSE 455				
		CSE 461				
		CSE 500-599	Take three courses chosen from CSE 4000-level and above courses and not previously taken.	12	9	
		PHYS 352				
				132	88	

B.S. in Computer Science -- Quarter to Semester Translation Table
Quarter Requirements (AY 2017-18)

			Semester Course Equivalencies (Course is the same as the quarter course. This can be 1:1; 1:many; many:1; or many:many courses. Anywhere (for any program) which the quarter course was required or listed, this (these) semester course(s) can be used. This information will also be displayed in the course conversion guide. Repeat rules apply.)	Quarter Units (Current number of units which are required for each requirement area.)	Semester Units (Number of semester units which will be required for each requirement area.)	Notes
		Quarter Courses				

CSCI

Lower Division Requirements	Required courses	CSE 201	CSE 2010	4	4		
		CSE 202	CSE 2010	4			
		MATH 211	MATH 2210	4	4		
		MATH 212	MATH 2210	4			
		MATH 213	MATH 2220	4	4		
		MATH 262	MATH 2265	4	3		
		MATH 272	MATH 2071	4	3		
		PHYS 221	PHYS 2500 + 2500L	5	5		
		PHYS 222	PHYS 2500 + 2500L	5			
		PHYS 223	PHYS 2510 + 2510L	5	5		
One Biology course chosen from	BIOL 100	BIOL 1000 + 1000L	5	4			
	BIOL 200	BIOL 1000 + 1000L					
One additional science course (with lab component), not previously taken, from the following areas	Astronomy, Biology, Chemistry, Geological Sciences, Physics (excluding PHYS 100, PHYS 121, PHYS 122, and PHYS 123)	Science Course with Lab	5	0	This requirement will be waived		
Upper Division Requirements	Required courses	CSE 310	CSE 3100	5	4		
		CSE 313	CSE 2130	4	3		
		CSE 320	CSE 5720	4	3		
		CSE 330	CSE 2020	4	4		
		CSE 401	CSE 4010	5	4		
		CSE 431	CSE 4310	4	3		
		CSE 460	CSE 4600	4	3		
		CSE 461	CSE 4610 or CSE 4100 or CSE 5300	4	3		
		CSE 488	CSE 4880	2	3		
		CSE 489	CSE 4880	2			
		CSE 500	CSE 5000	4	3		
		CSE 570	CSE 5700	4	3		
		MATH 372	MATH 2310	4	3		
		One course chosen from	CSE 455	CSE 4550	4	3	
			CSE 555	CSE 4550			
		Sixteen units chosen from CSE 400-level and above courses and not previously taken	CSE 400-599	Take four courses chosen from CSE 4000-5990 not already taken	16	12	
					123	86	

B.S. in Bioinformatics -- Quarter to Semester Translation Table
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		Quarter Courses	Semester Course Equivalencies (Course is the same as the quarter course. This can be 1:1; 1:many; many:1; or many:many courses. Anywhere (for any program) which the quarter course was required or listed, this (these) semester course(s) can be used. This information will also be displayed in the course conversion guide. Repeat rules apply.)	Acceptable Semester Course Substitutions (Course is NOT the same as the semester course, but it is acceptable for this particular program requirement area for all students. This information WILL NOT be displayed in the course conversion guide, but will be reflected on the PAWS as a choice for the student. Repeat rules DO NOT apply.)	Acceptable Semester Course Repeats (If there is no semester course equivalency, this is the alternative course to allow for grade forgiveness/grade discounting.)	Quarter Units (Current number of units which are required for each requirement area.)	Semester Units (Number of semester units which will be required for each requirement area.)	Notes
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Lower Division Requirements	Required courses	BIOL 200	BIOL 2010			5	5		
		BIOL 201	BIOL 2010			5			
		BIOL 202	BIOL 2020			5	5		
		CHEM 215	CHEM 2100 + CHEM 2100L			6	5		
		CHEM 216	CHEM 2200 + CHEM 2200L			6	5		
		CHEM 221A	CHEM 2300			3	3		
		CHEM 222A	CHEM #OrganicChemistryLecture			3			
		CHEM 223A	CHEM #OrganicChemistryLecture			3			
		CSE 122	CSE 1220			2	3	not required in Semester System	
		CSE 201	CSE 2010			4	4		
		CSE 202	CSE 2010			4			
		MATH 211	Math 2210			4	4		
		MATH 212	Math 2220			4	4		
		MATH 262	Math 2265			4	3		
		MATH 272	Math 2720			4	3		
		PHIL 191	PHIL #191			4		not required in Semester	
		Upper Division Requirements	Required courses	BIOL 300	BIOL 3120			5	4
BIOL 400	BIOL #Molecular Lecture					5			
A minimum of 5 units chosen from	BIOL 423								
	BIOL 424								
	BIOL 431								
	BIOL 440		BIOL 4000-level				5	5	not required in Semester
	BIOL 450								
BIOL 455									
Required courses	CHEM 436A		CHEM 4100				4	3	
	CHEM 436B		CHEM 4100				1		
	CSE 330		CSE 2020				4	4	
	CSE 431		CSE 4310				4	3	
	CSE 500		CSE 5000				4	0	not required in Semester System
	CSE 535		CSE 5350	CSE 4310			4	3	
	CSE 550		CSE 5500				4	3	
	CSE 516 or CSE 551		CSE 5160 or CSE 5510				4	3	
	CSE 572		CSE 5720				4	3	
	MATH 372	Math 2310				4	4		
Total						118	79		

B.A. in Computer Systems -- Quarter to Semester Translation Table
Quarter Requirements (AY 2017-18)

	Quarter Courses	Semester Course Equivalencies (Course is the same as the quarter course. This can be 1:1; 1:many; many:1; or many:many courses. Anywhere (for any program) which the quarter course was required or listed, this (these) semester course(s) can be used. This information will also be displayed in the course conversion guide. Repeat rules apply.)	Acceptable Semester Course Substitutions (Course is NOT the same as the semester course, but it is acceptable for this particular program requirement area for all students. This information WILL NOT be displayed in the course conversion guide, but will be reflected on the PAWS as a choice for the student. Repeat rules DO NOT apply.)	Acceptable Semester Course Repeats (If there is no semester course equivalency, this is the alternative course to allow for grade forgiveness/grade discounting.)	Quarter Units (Current number of units which are required for each requirement area.)	Semester Units (Number of semester units which will be required for each requirement area.)	Notes		
Computer Systems Core									
Lower Division Requirements	Required courses	CSE 201	CSE 2010	CSE 2010	4	3			
		CSE 202	CSE 2020	CSE 2020	4	3			
		MATH 211	MATH 2110	MATH 2110	4	4			
		MATH 262	MATH #262	MATH #262	4	3			
Upper Division Requirements	Required courses	MATH 272	MATH 2071	MATH 2071	4	3			
		CSE 313	CSE 2130	CSE 2130	4	3			
		CSE 322	CSE 4050	CSE 4050	4	3			
		CSE 330	CSE 2020	CSE 2020	4	3			
		CSE 455	CSE 4550	CSE 4550	4	3			
		CSE 482	CSE 4820	CSE 4820	4	3			
		CSE 488	CSE 4880	CSE 4880	2	3			
		COMM 311	COMM #311	COMM #311	4	3			
		Total					46	37	
		General Interdisciplinary Option (CSGI)							
General Interdisciplinary Option (CSGI)	Twenty-four units chosen from CSE courses numbered 300 and above	CSE 300-599	CSE 3000-5999	CSE 3000-5990	24	15			
	Twenty-four units of coursework in another discipline such as a minor or other cohesive program of study; subject to approval by the School of Computer Science and Engineering	Fifteen units of coursework in another discipline such as a minor or other cohesive program of study; subject to approval by the School of Computer Science and Engineering	Fifteen units of coursework in another discipline such as a minor or other cohesive program of study; subject to approval by the School of Computer Science and Engineering	Fifteen units of coursework in another discipline such as a minor or other cohesive program of study; subject to approval by the School of Computer Science and Engineering	24	15			
Total					48	30			
Game Development Option (CSGD)									
Game Development Option (CSGD)	Required courses	CSE 420	CSE 4200		4	3			
		CSE 440	CSE 4400		4	3			
		CSE 441	CSE 4410		4	3			
		CSE 520	CSE 4200		4	3			
		MATH 212	MATH #212		4	4			
		MATH 251	MATH #251		4	3			
	Four units chosen from CSE courses number 300 and above	One course chosen from	CSE 300-599	Nine units chosen from CSE courses number 3000 and above	CSE 3000-5999	4	9		
			PHYS 121	PHYS #121	PHYS #121	5	5		
	Twelve units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development.	Six units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development.	Six units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development.	Six units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development.	Six units of supporting coursework such as 3D modeling, animation, level design, image editing, and other coursework related to game development.	12	6		
								Total	
Graphics Programming Option (CSGP)									
Graphics Programming Option (CSGP)	Required courses	ART 120	ART #120		4	3			
		ART 232	ART #232		4	3			
		CSE 420	CSE 4200		4	3			
		CSE 440	CSE 4400		4	3			
		CSE 441	CSE 4410		4	3			
		CSE 520	CSE 4200		4	3			
		MATH 212	MATH #212		4	3			
		MATH 251	MATH #251		4	3			
	Twelve units of additional art courses.	ART	ART	ART	ART	12	8		
								Total	
Web Programming Option (CSWP)									
Web Programming Option (CSWP)	Required courses	CSE 292	CSE 4500	CSE 4500	4	3			
		CSE 360	CSE 3650	CSE 3650	4	3			
		CSE 365	CSE 3650	CSE 3650	4	3			
		CSE 366	CSE 3660	CSE 3660	4	3			
		CSE 405	CSE 4050	CSE 4050	4	3			
		CSE 572	CSE 5720	CSE 5720	4	3			
	Twelve units chosen from CSE courses numbered 300 and above	Eight units of art courses (subject to approval by the Schools of Computer Science and Engineering).	CSE 300-599	CSE 3000-5999	CSE 3000-5999	12	8		
			ART	ART	ART	8	6		
	Total					48	35		
	System Administration Option (CSSA)								
System Administration Option (CSSA)	Required courses	CSE 292	CSE 4500	CSE 4500	4	3			
		CSE 310	CSE 3100	CSE 3100	5	4			
		CSE 360	CSE 3650	CSE 3650	4	3			
		CSE 365	CSE 3650	CSE 3650	4	3			
		CSE 366	CSE 3660	CSE 3660	4	3			
		CSE 401	CSE 4010	CSE 4010	4	4			
		CSE 405	CSE 4050	CSE 4050	4	3			
		CSE 460	CSE 4600	CSE 4600	4	3			
	Eight units chosen from CSE courses numbered 300 and above	CSE 300-599	CSE 3000-5999	CSE 3000-5999	CSE 3000-5999	8	6		
								Total	