



PREREQUISITE and COREQUISITE REQUIREMENTS

IMPORTANT: Students must meet all prerequisite and corequisite requirements to enroll in a course.
Exceptions are not made to these requirements.

COMPUTER AND INFORMATION SCIENCE

HRS	COURSE	PRE-REQ COURSES	At Least Concurrently
4	CIS 150	-----	MATH 115
4	CIS 1501	-----	MATH 115
4	CIS 200	CIS 150 (min 'C-' grade) and MATH 115	-----
4	CIS 2001	CIS 1501 (min 'C-' grade) and MATH 115	-----
3	CIS 205 = IMSE 255	MATH 105 or ENGR 100 (No credit for CIS majors or minors)	-----
4	CIS 275	MATH 115	CIS 200 or CIS 2001
3	CIS 285	-----	CIS 200
3	CIS 296	CIS 200 or CIS 2001	-----
3	CIS 297	CIS 200 or CIS 2001	-----
3	CIS 298	CIS 200 or equivalent	-----
4	CIS 306	CIS 275	-----
4	CIS 310	MATH 115, CIS 200 or CIS 2001 and CIS 275	-----
3	CIS 316	CIS 200 (min 'C-' grade)	-----
4	CIS 3200	CIS 2001 or CIS 200 (min 'C-' grade) and ECE 3100 or STAT 305	-----
4	CIS 350 = IMSE 350	MATH 115, CIS 200 or CIS 2001 (min 'C-' grade), and CIS 275	-----
4	CIS 3501	MATH 115, CIS 200 (min 'C-' grade), and CIS 275	
4	CIS 375	COMP 270 [or equivalent] and <i>either</i> a) CIS/IMSE 350 or CIS 3501 <i>or</i> b) both ECE 370 and ECE/MATH 276	-----

	Course	Pre-requisite Courses	At least Concurrently
4	CIS 376	CIS 375	-----
4	CIS 381 = IMSE 381	MATH 115, and Junior or Senior Standing	-----
4	CIS 387 XL: ECE 387	CIS 200 or ECE 270	CIS 310, or ECE 370, or ECE 372
4	CIS 400	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 351 or b) both ECE 370 and ECE/MATH 276	-----
3	CIS 405	CIS 350 or CIS 3501	-----
3	CIS 411	CIS 350 or CIS 3501	-----
3	CIS 412	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 or b) both ECE 370 and ECE/MATH 276	IMSE 317 or STAT 325
4	CIS 421*	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 or b) both ECE 370 and ECE/MATH 276	-----
4	CIS 422*	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 or b) both ECE 370 and ECE/MATH 276	-----
* Credit cannot be earned for both CIS 421 and CIS 422			
4	CIS 425	CIS 375	CIS 421 or CIS 422
4	CIS 427	IMSE 317 and <i>Either</i> a) CIS 350 or CIS 3501 or IMSE 350 or b) both ECE 370 and ECE/MATH 276	-----
3	CIS 435	-----	CIS 375
3	CIS 436	-----	CIS 375
3	CIS 437	CIS 427	-----
3	CIS 439	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 or b) both ECE 370 and ECE/MATH 276	-----
3	CIS 446	CIS 200 or CIS 2001	-----
3	CIS 447	-----	CIS 450
3	CIS 449	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 or b) both ECE 370 and ECE/MATH 276	-----

	Course	Pre-requisite Courses	At least Concurrently
4	CIS 450 = IMSE 450 = ECE 478	CIS 310 and <i>Either</i> a) CIS 350 or CIS 3501 or IMSE 350 <i>or b)</i> ECE 370 and ECE/MATH 276	IMSE 317
3	CIS 451 = IMSE/CCM 451	MATH 217 or 227 or MATH 228, and <i>either</i> a) CIS 350 or CIS 3501 or IMSE 350 <i>or b)</i> both ECE 370 and ECE/MATH 276	-----
3	CIS 452	CIS 451, or CIS 487, or CIS 450	-----
4	CIS 467 XList ECE 467	CIS 387 or ECE 387	CIS 427 or ECE 471
3	CIS 474 = IMSE 457 = ECE 474	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 <i>or b)</i> both ECE 370 and ECE/MATH 276	-----
3	CIS 476	CIS 375	-----
3	CIS 479 = ECE 479	<i>Either</i> a) CIS 350, or CIS 3501, or IMSE 350 <i>or b)</i> both ECE 370 and ECE/MATH 276 And IMSE 317 or STAT 325	-----
3	CIS 481	CIS 306	MATH 217 or 227 and (IMSE 317 or MATH 425 or BENG 364 or STAT 325)
3	CIS 482	<i>Either</i> a) CIS 350 or CIS 3501, or IMSE 350 <i>or b)</i> both ECE 370 and ECE/MATH 276	
3	CIS 483	<i>Either</i> a) CIS 350 or CIS 3501, or IMSE 350 or ECE 270 <u>and</u> ECE 276 <i>or b)</i> both ECE 370 and ECE/MATH 276	
3	CIS 487	-----	CIS 375
3	CIS 488	CIS 487	-----
3	CIS 489	<i>Either</i> a) CIS 350 or CIS 3501, or IMSE 350 or ECE 270 <u>and</u> ECE 276 <i>or b)</i> both ECE 370 and ECE/MATH 276	
2	CIS 4951	CIS 375, CIS 427 and CIS 450	-----
2	CIS 4952	CIS 4951	-----
2	CIS 4961	CIS 376	-----
2	CIS 4962	CIS 4961	CIS 476

	Course	Pre-requisite Courses	At least Concurrently
2	CIS 4971	CIS 3200 and (STAT 325 or IMSE 317)	-----
2	CIS 4972	CIS 4971	STAT 430
2	CIS 4981	CIS 375, CIS 3200, CIS 427, CIS 450 and (STAT 325 or IMSE 317)	-----
2	CIS 4982	CIS 4981	STAT 430

BIOENGINEERING

3	BENG 325	ENGR 216, ME 230, and <i>either</i> ME 265 or ME 345	MATH 228
4	BENG 351 XL ECE 351	MATH 216 or 228, BIO 103, BIO 140, ECE 305, and <i>either</i> ENGR 216 or ECE 270	-----
3	BENG 364 XL IMSE 317	MATH 116	-----
4	BENG 370	ME 265 or ME 345, and MATH 216 or 228	-----
4	BENG 375	BIOL 140 and ENGR 250	-----
4	BENG 381	BENG 325 or ME 325, and BIOL 140 and CHEM 136 [or equivalent]	
3	BENG 425	BENG 325 or ME 375	-----
4	BENG 426	BENG 325 or ME 325	-----
3	BENG 450	PHYS 150 and PHYS 151 and Junior/senior standing	-----
3	BENG 451	BENG 325 or ME 325, and <i>Either</i> BENG 375 or BENG 381	-----
3	BENG 460	BENG 375, and <i>either</i> ME 325 or BENG 325, and <i>either</i> ME 349 or BENG 351	-----
4	BENG 4671	BENG 325, BENG 351, BENG 370 BENG 375, and BENG 364	-----
3	BENG 470	BENG 370	-----
3	BENG 475	ME 265 or ME 260, and BENG 375	-----

	Course	Pre-requisite Courses	At least Concurrently
3	BENG 480	ME 265 or ME 345, and BIOL 140	
3	BENG 481	ME 325 or BENG 325 and <i>Either</i> BENG 370 or ME 345	-----
1-3	BENG 490 or 492	Permission of ME Dept.	

ENGINEERING CORE

2	ENGR 100	-----	-----
2	ENGR 126	-----	-----
2	ENGR 216	ENGR 100	ENGR 126 MATH 216 and (217 or 227) Or MATH 228
3	ENGR 250	CHEM 144 [or equivalent]	MATH 115 and CHEM 146 [or equivalent]
3	ENGR 345	-----	-----
4	ENGR 350	CHEM 144 [or equivalent] and PHYS 151 [or equivalent]	
4	ENGR 360	-----	-----
3	ENGR 400	Senior standing	

ELECTRICAL AND COMPUTER ENGINEERING

4	ECE 210	MATH 116	PHYS 151
4	ECE 237	MATH 216 and (217 or 227); or MATH 228 all with min 'C-' grade	-----
4	ECE 270	ENGR 100	MATH 115
4	ECE 273	-----	MATH 115
4	ECE 276 = Math 276	MATH 116	-----
4	ECE 305	PHYSICS 151 and (MATH 205 or 215) [Not for ECE majors]	MATH 217 or 227 or 228

	Course	Pre-requisite Courses	At least Concurrently
4	ECE 3100	CIS 1501 (or CIS 150 or ECE 270) and (MATH 217 or 227) or MATH 228	STAT 325 or IMSE 317 or BENG 364
4	ECE 311	ECE 210 and CHEM 144 [or equivalent]	COMP 270 [or equivalent]
4	ECE 3171	MATH 216 or MATH 228	MATH 217 or 227
4	ECE 319	ECE 311	-----
4	ECE 347	(MATH 216 and 217) or MATH 228	-----
4	ECE 3641	ECE 3731 (or ECE 372)	
4	ECE 370	ECE 270	ECE 273
4	ECE 3731	<i>Either</i> ECE 270 and ECE 273, <i>or</i> CIS 310 alone	-----
4	ECE 375	ECE 270 and ECE 273	ECE/MATH 276 and ECE 372 (or ECE 3731)
3	ECE 385	CHEM 144 [or equivalent]	ECE 311
4	ECE 3851	ECE 311 & junior or senior standing	
4	ECE 387 XList CIS 387	ECE 270 or CIS 200	ECE 370, or ECE 372 (ECE 3731), or CIS 310
3	ECE 413	ECE 273 and ECE 311	-----
4	ECE 414	ECE 311	ECE 270
3	ECE 415	ECE 385 (or 3851) and ECE 3171 (or 317)	-----
4	ECE 426	(ECE 387 or CIS 387) or CIS 447 or ECE 317 & junior/senior standing	-----
4	ECE 427	(ECE 387 or CIS 387) or CIS 447 or ECE 317 & junior/senior standing	-----
3	ECE 428	ECE 270	-----
4	ECE 433	ECE 311 and ECE 370	-----
4	ECE 434	-----	-----
4	ECE 435	ECE 372 (or ECE 3731)	-----
3	ECE 4361	ECE 311	-----
4	ECE 437	-----	ECE 3731 (or ECE 372)

	Course	Pre-requisite Courses	At least Concurrently
4	ECE 438	ECE 311 or ECE 370	-----
3	ECE 439	ECE 311	-----
3	ECE 443	ECE 210	-----
4	ECE 4431	ECE 3171 or 317	-----
4	ECE 4432	ECE 3171 or 317	-----
4	ECE 450	IMSE 317 and either ECE 3171 or 317	-----
3	ECE 454	ECE 450 or ECE 471	-----
4	ECE 460	ECE 3171	-----
4	ECE 464	ECE 3731 and ECE 3171	
4	ECE 4641	ECE 3731 and IMSE 317	-----
4	ECE 465	ECE 460	-----
4	ECE 467 XList CIS 467	ECE 387 or CIS 387	ECE 471 or CIS 427
4	ECE 471	ECE 372 (or ECE 3731) and IMSE 317	-----
4	ECE 473	ECE 372 (or ECE 3731)	-----
3	ECE 474 = CIS 474/IMSE 457	ECE 370	-----
3	ECE 4740	ECE 270	-----
4	ECE 475	ECE 375	-----
4	ECE 478 = IMSE/CIS 450	ECE 370 and MATH/ECE 276	IMSE 317
3	ECE 479 = CIS 479	ECE 370	-----
4	ECE 480	ECE 3171 or 317 and (MATH 217 or 227 or 228)	-----
3	ECE 4881	ECE 270 or equivalent	-----
1-4	ECE 491 or ECE 492	Permission, senior standing	-----
3	ECE 4951	ECE 311 and ECE 372 (or ECE 3731)	-----

	Course	Pre-requisite Courses	At least Concurrently
2	ECE 4981	ECE 372 (or ECE 3731), either ECE 3171 or 317, and senior standing, and one course from ECE 414, 415, 450, 460, 480, 4951	-----
2	ECE 4982	ECE 372 (or ECE 3731), ECE 375, senior standing, and one course from ECE 471, 473, 475, 478	-----
2	ECE 4983	ECE 4981 and senior standing	-----
2	ECE 4984	ECE 4982 and senior standing	-----
2	ECE 4987	ECE 311, ECE 3171, ECE 3731, ECE 3641 and (ECE 460 or ECE 4641)	
2	ECE 4988	ECE 4987	

HUMAN CENTERED ENGINEERING DESIGN

2	HCED 220	COMP 105 (can be concurrent)	
3	HCED 370	ENGR 360	
4	HCED 380	ENGR 360 and (IMSE 255 or CIS 150 or CIS 1501 or ECE 270 or ENGR 216)	HCED 370 and HCED 220
4	HCED 450	HCED 380	ENGR 250 and ECE 210 and (ME 265 or ME 260)
2	HCED 4951	HCED 450	
2	HCED 4952	HCED 4951	IMSE 4425 and IMSE 421 And IMSE 382

INDUSTRIAL & MANUFACTURING SYSTEMS ENGINEERING

3	IMSE 255 = CIS 205	MATH 105	ENGR 100
4	IMSE 3005	MATH 217 or MATH 227 or MATH 228	IMSE 317
3	IMSE 317	MATH 116	-----
4	IMSE 350 = CIS 350	IMSE/CIS 200 and IMSE/CIS 275 MATH 115	-----

	Course	Pre-requisite Courses	At least Concurrently
3	IMSE 351 = CIS 351	IMSE 255 or IMSE/CIS 150	-----
4	IMSE 381 = CIS 381	MATH 115 and Junior or Senior Standing	-----
4	IMSE 382 = ME 381	ENGR 250 and either ME 265 or ME 260	-----
3	IMSE 421	Junior Standing & knowledge of prob & stats	-----
3	IMSE 440	IMSE 317 or BENG 364 or ME 364, With minimum 'D' grade	-----
4	IMSE 4425	IMSE 317	-----
3	IMSE 451 = CIS 451	MATH 205 or MATH 215, and MATH 217, MATH 227 or MATH 228 and CIS 350 or IMSE 351	-----
4	IMSE 4545	IMSE 255 or CIS 205	-----
4	IMSE 4555	IMSE 3005	IMSE 4425 and IMSE 4585
4	IMSE 4585	IMSE 317 and IMSE 255	IMSE 3005
4	IMSE 4675	IMSE 317	-----
4	IMSE 4745	-----	IMSE 3005
4	IMSE 4795	IMSE 317 or BENG 364 or ME 364	-----
4	IMSE 4815	IMSE 382 or ME 381	-----
4	IMSE 4825	ME 265	ECE 305
4	IMSE 4835	IMSE 382 or ME 381	-----
3	IMSE 486	IMSE 382	-----
3	IMSE 488	IMSE 382	-----
2	IMSE 4951	-----	IMSE 421 and IMSE 4795 or IMSE 4585 or IMSE 4835, and COMP 270 or equivalent
2	IMSE 4952	IMSE 4951	IMSE 4425 and IMSE 440 And IMSE 4675

	Course	Pre-requisite Courses	At least Concurrently
1	IMSE 4953	-----	ME 4671 and IMSE 4795 <u>or</u> IMSE 4835 <u>or</u> IMSE 4425 <u>or</u> IMSE 4675
1-3	IMSE 498	Permission of instructor	-----
<u>MECHANICAL ENGINEERING</u>			
4	ME 230	MATH 116, PHYS 150, CHEM 144 [or equivalent]	-----
4	ME 260	PHYSICS 150	ENGR 250 or ECE 385, and either MATH 205 or 215
4	ME 265 <i>(No credit for ME, BEME Students)</i>	PHYSICS 150	MATH 205 or 215
4	ME 325	ME 230 (min grade 'C'), ME 260 and ENGR 216	-----
4	ME 345	MATH 216 or MATH 228, and ME 260 (min C grade)	ENGR 216
3	ME 349	ECE 305 and <i>either</i> ME 345 or ME 265	-----
4	ME 3601	ME 260 or ME 265 and ENGR 216	-----
3	ME 364	ENGR 216 and ME 260 and <i>either</i> (MATH 217 or 227) or MATH 228	-----
4	ME 375	ME 325	ECE 305
3	ME 379	ME 325 and COMP 270 [or equivalent] and <i>either</i> ME 349 or BENG 351	ME 375
4	ME 381 = IMSE 382	ENGR 250 (min grade 'C') and <i>either</i> ME 260 or ME 265	-----
3	ME 410	<i>ME Students:</i> ME 345 and <i>either</i> ME 3601 or ME 360	ME 375
		<i>BENG Students:</i> BENG 370	BENG 325
4	ME 4191	ME 345 and ME 3601	-----
4	ME 4202	ME 375	-----
4	ME 423	-----	ME 375
3	ME 4301	ME 325	ME 375

	Course	Pre-requisite Courses	At least Concurrently
4	ME 4361	ME 325	ME 375
4	ME 442	ECE 305 and ME 345	-----
3	ME 440*	ME 345 and ME 349	
4	ME 445*	ME 265 and BENG 351 or both ME 345 and ME 349	
4	ME 4461*	ME 345 or ME 265	ME 349 or BENG 351
	<i>* Students cannot receive credit for both ME 445 and ME 4461, or both ME 440 and ME 4461.</i>		
4	ME 4471	ME 325 and senior standing	ME 375
3	ME 4500	ME 260 and ME 345	
3	ME 4550	ME 364 or BENG 364 or IMSE 317	
4	ME 452	ME 325	ME 375
3	ME 460	ME 3601 and ME 381	-----
3	ME 4640	ME 442	
4	ME 4671	ME 345 and ME 3601 and ME 375	ME 379
4	ME 4681 = ME/BENG 4671	BENG 351, BENG 370, ME 3601, ME 375, and (BENG 375 or 381)	
1-4	ME 469	ME 4671 and Permission of ME Dept.	
4	ME 472	ME 265 or ME 345 or ECE 347	ECE 305 or ECE 311
3	ME 481	ME 381	-----
3	ME 483	ME 3601 or ME 360	-----
3	ME 4910	ENGR 250 and ME 381	
1-3	ME 490, 491 or 492	Permission of ME Dept.	
3	ME 493	ME 325 and ECE 305	-----
3	ME 4950	(ME 349 or BENG 351 or IMSE 4825 Or ME 442) and (ME 364 or BENG 364) And ME 230	ME 381 or 382 or BENG 381
3	ME 496	ME 325	-----
4	ME 4981	ME 345 and ME 3601	-----