

Dual Degree Program Agreement
between
Tickle College of Engineering
University of Tennessee, Knoxville
and
King University

BS in Biomedical Engineering

Tickle College of Engineering, UTK King University Equivalencies

Term 1	Hours		Hours
CHEM 120 or CHEM 128 honors	4	CHEM 1110	4
<u>EF 105</u>	1	PHYS 3500	4
EF 151 or EF 157 honors	4	PHYS 2210	4
ENGL 101 or ENGL 118 honors	3	ENGL 1110	4
MATH 141 or MATH 147 honors	4	MATH 2350	4
Term 2			
CHEM 130 or CHEM 138 honors	4	CHEM 1120	4
EF 152 or EF 158 honors	4	PHYS 2220	4
<u>ENGL 102</u>	3	ENGL 2010 or 1180 honors	4
MATH 142 or MATH 148 honors	4	MATH 2360	4
<u>ME 202 (Statics)</u>	2		
Term 3			
<u>BCMB 230</u>	5	BIOL 1010 and BIOL 1020	8
MATH 200 or Math 251	5	MATH 2450 petition in department	4
MATH 231 or Math 237 honors	3	MATH 3430 petition in department	4
<u>ME 231</u>	3		
<u>STATISTICS 251</u>	3		
Term 4			
<u>BME 271</u>	3		
MATH 241 or MATH 247	4	MATH 2370	4
<u>ME 321</u>	3		
MSE 201 or MSE 207	3		
<u>PHYS 231*</u>	3	PHYS 3030 petition in department	4
Term 5			
AE 341 or AE 347	3		
<u>Arts and Humanities Elective*</u>	3	Choose one Arts & Humanities	

BME 363 or BME 367; BME 474	6		
<u>ECE 301</u>	3		
Term 6			
<u>Arts and Humanities Elective*</u>	3	Choose one Arts & Humanities	
BME 315, BME 345, BME 409	9		
<u>PHYS 232*</u>	4	PHYS 3052 or 3060 petition in department	4
Term 7			
BME 410*, BME 430*, BME 455, BME 473 or BME 477	11		
ECON 201* or ECON 207*	4		
<u>Social Sciences Elective*</u>	3	Choose one Social Science	
Term 8			
Biomedical Engineering Elective	3		
<u>BME 469</u>	3		
<u>Cultures and Civilizations Electives*</u>	6	Choose two Cultures & Civilizations	
Technical Elective	3		
TOTAL	129		

Choose 2 Courses in Arts & Humanities: ENGL 2161, 2162, 2181, 2182, 2450

Choose 1 course in Social Sciences: PSYC 1520, 2000

Choose 2 courses in Cultures & Civilizations: HIST 1110, 1120 (Note: international VISA students take US History 221-222.)

Technical Elective: Must be pre-approved in department.

Biomedical Engineering Elective: Restricted to any 300-500 biomedical engineering course not required for the degree or CHEM 350 (King University CHEM 2110) CHEM 360 (King University 2120) .

TRANSFER STUDENT ADMISSION CRITERIA **University of Tennessee Tickle College of Engineering**

Transfer students, including internal University of Tennessee, Knoxville, transfers, must meet the minimum requirements stated below to be considered for admission to a major within the college. These minimum standards for consideration do not guarantee being admitted to the major. The final admission decision for the major resides with the department head or designee.

- Must have earned a minimum 2.8 cumulative average and a C or better in each of these specific courses, or their equivalent: ENGL 101*, CHEM 120* (for Computer Science students: COSC 102 and COSC 130 or equivalents), and MATH 141* (and subsequent courses in the three sequences, if taken).
- If the student has completed any physics course, he/she must have earned a grade of C or better.
- The overall record will be evaluated for quality and seriousness of purpose. An excessive number of withdrawals, incompletes, repeated courses, or failures may result in denial.

BS in Chemical Engineering

Tickle College of Engineering, UTK King University Equivalencies

Term 1	Hours		Hours
CHEM 120 or CHEM 128 honors	4	CHEM 1110	4
<u>EF 105</u>	1	PHYS 3500	4
EF 151 or EF 157 honors	4	PHYS 2210	4
ENGL 101 or ENGL 118 honors	3	ENGL 1110	4
MATH 141 or MATH 147 honors	4	MATH 2350	4
Term 2			
EF 152 or EF 158 honors	4	PHYS 2220	4
<u>ENGL 102</u>	3	ENGL 2010 or 1180 honors	4
CHEM 130 or CHEM 138 honors	4	CHEM 1120	4
MATH 142 or MATH 148 honors	4	MATH 2360	4
Term 3			
Biol 160 or 168 honors	3	BIOL 3300 petition in department	
CBE 201, CBE 235	7		
EF 230	2	ITEC 2010 petition in department (matlab?)	4
MATH 231 or Math 237 honors	3	MATH 3430 petition in department	4
Term 4			
CBE 240, CBE 250	8		
CHEM 310, CHEM 319	4	CHEM 3000 and CHEM 3200 petition in department	
MATH 241 or MATH 247	4	MATH 2370	4
Social Science Elective	3	Choose one Social Science	3
Term 5			
Arts & Humanities Elective	3	Choose one Arts & Humanities	3
CBE 301, CBE 350	6		
CHEM 350 or 358 honors	3	CHEM 2110	4
PHYS 231	3	PHYS 3030 petition in department	4
Term 6			
Arts and Humanities Elective	3	Choose one Arts & Humanities	3
Bio Option One	3	BIOL UD petition in department?	
CBE 340, CBE 360, CBE 380	7		
Technical Elective	3		3
Term 7			
CBE 415, CBE 445, CBE 480	10		
Cultures & Civilizations	6	Choose two Culture & Civilizations	6
Term 8			
CBE 401	1		
CBE 488 or CBE 490	3		

CHEM Option One	3	CHEM 2120	4
Social Science Elective	3	Choose one Social Science	3
Technical Elective	6		
TOTAL	128		

Choose 2 Courses in Arts & Humanities: ENGL 2161, 2162, 2181, 2182, 2450

Choose 2 course in Social Sciences: PSYC 1520, 2000

Choose 2 courses in Cultures & Civilizations: HIST 1110, 1120 (Note: international VISA students take US History 221-222.)

Chem Option I: Any 200-level or above BCMB courses; any 200-level or above CHEM courses; Environmental Engineering 554, 562; MSE 340 or MSE 347, MSE 360 or MSE 367, any 200-level or above MICR courses.

Bio Option I: BCMB 230, BCMB 311, BCMB 321, BCMB 401, BCMB 402, BCMB 412; BIOL 220-BIOL 229, BIOL 240, BIOL 260-BIOL 269; CBE 455; MICR 210*.

Technical Elective: One technical elective must be a chemical and biomolecular engineering course. CBE 457 may not count as the one CBE course. MSE 201 or MSE 207 can be used as technical elective.

CE Concentration Electives: Select two of the following concentration sequences: construction sequence (CE 441 or CE 448, and CE 432 or CE 463), environmental sequence (CE 481 or CE 487, and CE 482), geotechnical sequence (CE 430 or CE 437, and CE 432), structural sequence (CE 461 or CE 467, and CE 463), transportation sequence (CE 455 or CE 458, and CE 456), water resources sequence (CE 494 or CE 497, and CE 496).

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- If the student has completed any physics course, he/she must have earned a grade of C or better.
- The overall record will be evaluated for quality and seriousness of purpose. An excessive number of withdrawals, incompletes, repeated courses, or failures may result in denial.

BS in Civil Engineering

Tickle College of Engineering, UTK

King University Equivalencies

Term 1	Hours		Hours
CHEM 120 or CHEM 128 honors	4	CHEM 1110	4
<u>EF 105</u>	1	PHYS 3500	4
EF 151 or EF 157 honors	4	PHYS 2210	4
ENGL 101 or ENGL 118 honors	3	ENGL 1110	4
MATH 141 or MATH 147 honors	4	MATH 2350	4
Term 2			
EF 152 or EF 158 honors	4	PHYS 2220	4
<u>ENGL 102</u>	3	ENGL 2010 or 1180 honors	4
CHEM 130 or CHEM 138 honors	4	CHEM 1120	4
MATH 142 or MATH 148 honors	4	MATH 2360	4
Term 3			
CE 210	4		
ECON 201* or ECON 207*	4		
MATH 231 or Math 237 honors	3	MATH 3430 petition in department	4
ME 202 (Statics)	2		
STATS 251	3		
Term 4			
CE 205, CE 262, CE 391	8		
MATH 241 or MATH 247	4	MATH 2370	4
Science Elective	4	King University BIOL 1110, 2110 or 2120	4
Term 5			
CE 310, CE 331, CE 355, CE 371, CE 381	13		
<u>Cultures and Civilizations Electives</u>	3	Choose one Cultures & Civilizations	3
Term 6			
<u>Arts and Humanities Elective</u>	3	Choose one Arts & Humanities	3
CE 300, CE 305, CE 321, CE 340	11		
<u>Cultures and Civilizations Electives</u>	3	Choose one Cultures & Civilizations	3
Term 7			
CE 440 or 447 honors	3		
CE Concentration Elective	3		
CE Concentration Lab	1		
Social Science Elective	3	Choose one Social Science	3
Technical Elective	6		

Term 8			
Arts and Humanities Elective	3	Choose one Arts & Humanities	3
CE Concentration Elective	3		
CE Concentration Lab	1		
CE 400, CE 401	5		
Technical Elective	3		
TOTAL	127		

Choose 2 Courses in Arts & Humanities: ENGL 2161, 2162, 2181, 2182, 2450

Choose 1 course in Social Sciences: PSYC 1520, 2000

Choose 2 courses in Cultures & Civilizations: HIST 1110, 1120 (Note: international VISA students take US History 221-222.)

Select from BIOL 101*, BIOL 102*, BIOL 150*, BIOL 158*, BIOL 160*, BIOL 168*; Environmental Engineering 513; ESS 462; GEOG 131*; GEOL 101*, GEOL 103*, GEOL 107*.

Technical Elective: Must be approved by advisor.

CE Concentration Electives: Select two of the following concentration sequences: construction sequence (CE 441 or CE 448, and CE 432 or CE 463), environmental sequence (CE 481 or CE 487, and CE 482), geotechnical sequence (CE 430 or CE 437, and CE 432), structural sequence (CE 461 or CE 467, and CE 463), transportation sequence (CE 455 or CE 458, and CE 456), water resources sequence (CE 494 or CE 497, and CE 496).

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- Must have earned a minimum 2.8 cumulative average and a C or better in each of these specific courses, or their equivalent: ENGL 101*, CHEM 120* (for Computer Science students: COSC 102 and COSC 130 or equivalents), and MATH 141* (and subsequent courses in the three sequences, if taken).
- If the student has completed any physics course, he/she must have earned a grade of C or better.
- The overall record will be evaluated for quality and seriousness of purpose. An excessive number of withdrawals, incompletes, repeated courses, or failures may result in denial.

BS in Industrial Engineering

Tickle College of Engineering, UTK

King University Equivalencies

Term 1	Hours		Hours
CHEM 120 or CHEM 128 honors	4	CHEM 1110	4
<u>EF 105</u>	1	PHYS 3500	4
EF 151 or EF 157 honors	4	PHYS 2210	4
ENGL 101 or ENGL 118 honors	3	ENGL 1110	4
MATH 141 or MATH 147 honors	4	MATH 2350	4
Term 2			
Social Sciences Elective	3	Choose one Social Science	3
EF 152 or EF 158 honors	4	PHYS 2220	4
<u>ENGL 102</u>	3	ENGL 2010 or 1180 honors	4
MATH 142 or MATH 148 honors	4	MATH 2360	4
<u>ME 202 (Statics)</u>	2		
Term 3			
<u>IE 200, IE 250, IE 405</u>	7		
MATH 241 or MATH 247	4	MATH 2370	4
MSE 201 or MSE 207	3		
<u>PHYS 231*</u>	3	PHYS 3030 petition in department	4
Term 4			
ECON 201* or ECON 207*	4		
EF 230	2	ITEC 2010 (matlab?)	4
IE 202	3		
MATH 200 or Math 251	3	MATH 2450 petition in department	4
MATH 231 or Math 237 honors	3	MATH 3430 petition in department	4
<u>ME 331</u>	3		
Term 5			
IE 300, 301, 304, 350, 401 or 407 honors, 402	16		
Term 6			
<u>Arts and Humanities Elective</u>	3	Choose one Arts & Humanities	3
IE 301 or 317 honors, 340, 421 or 428 honors	9		
<u>ECE 301</u>	3		
Term 7			
Arts and Humanities Elective	3	Choose one Arts & Humanities	3
<u>Cultures and Civilizations Electives</u>	3	Choose one Cultures & Civilizations	3
IE 404, IE 450	3		
Industrial Engineering Elective	3		
Technical Elective	3		

Term 8			
Industrial Engineering Elective	3		
<u>IE 406 or 408 honors, IE 422, IE 427</u>	8		
<u>Cultures and Civilizations Electives</u>	3	Choose one Cultures & Civilizations	3
Technical Elective	3		
TOTAL	129		

Choose 2 Courses in Arts & Humanities: ENGL 2161, 2162, 2181, 2182, 2450

Choose 1 course in Social Sciences: PSYC 1520, 2000

Choose 2 courses in Cultures & Civilizations: HIST 1110, 1120 (Note: international VISA students take US History 221-222.)

Technical Elective: Chosen from AE 341 or AE 347; BUAD 361, BUAD 410; BULW 301; COSC 102; ECE 255, ECE 302; ECON 311, ECON 312, ECON 313, ECON 322, ECON 331, ECON 333, ECON 351, ECON 361; 3 hours of EF 333; FINC 300, FINC 425, FINC 455; IE 423, IE 430, IE 457, IE 483, IE 484; INSC 310, INSC 451; MARK 300; MGT 300; MSE 302, MSE 340 or MSE 347, MSE 360 or MSE 367, MSE 390 or MSE 397, MSE 405*; ME 321, ME 363 or ME 367, ME 365, ME 366, ME 405; NE 342 or NE 347. Some courses may require a prerequisite or corequisite that is not part of the IE program.

Industrial Engineering Elective: Chosen from IE 423, IE 430, IE 457, IE 483, IE 484, IE 493, IE 494, IE 495. The same course may not be used to count for both the IE technical elective and the IE elective.

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