

MECHANICAL ENGINEERING (BS)

Erik Jonsson School of Engineering and Computer Science



2019-2020 Transfer Plan using the Texas Common Course Numbering System

This transfer plan is intended as a *general* guide for UT DALLAS' lower-division major requirements and Core Curriculum requirements.

Please consult the current online UT DALLAS catalog for complete degree plan requirements.

<http://catalog.utdallas.edu/2019/undergraduate/programs>

If you believe you have completed a **Field of Study (FOS) program** in this major at a Texas Public Community College, email the UTD Office of the Registrar: records@utdallas.edu.

UT DALLAS REQUIREMENT	TCCNS COURSE EQUIVALENT**
I. UT DALLAS CORE CURRICULUM REQUIREMENTS: 42 semester credit hours	
Communication: 6 semester credit hours 010 Core Code	
RHET 1302 Rhetoric ECS 3390 Professional and Technical Communication (See UT DALLAS Departmental Advisor)	ENGL 1302* *(ENGL 1301 is prerequisite to ENGL 1302 and must be completed prior to taking ENGL 1302. ENGL 1301 can be used to satisfy three semester credit hours of the Communication Core Curriculum requirement.) N/A
Mathematics: 3 semester credit hours 020 Core Code	
MATH 2417* Calculus I (Accelerated) *(MATH 2417 is a required major preparatory course - noted in Section II below - that also fulfills the three-semester-credit-hour Mathematics Core Curriculum requirement.) (See UT DALLAS Departmental Advisor)	MATH 2413 or 2313 and 2414 or 2314
Life and Physical Sciences: 6 semester credit hours 030 Core Code	
PHYS 2325* Mechanics PHYS 2326* Electromagnetism and Waves *(PHYS 2325 and PHYS 2326 are required major preparatory courses - noted in Section II below - that also fulfill the six-semester-credit-hour Life and Physical Sciences Core Curriculum requirement.)	PHYS 2325 or 2425 PHYS 2326 or 2426
Language, Philosophy, and Culture: 3 semester credit hours 040 Core Code	
Choose one course from the following: HUMA 1301 Exploration of the Humanities LIT 2331 Introduction to World Literature PHIL 1301 Introduction to Philosophy PHIL 1305 Introduction to Philosophy of Religion PHIL 1306 Introduction to Ethics PHIL 2316 History of Philosophy I	HUMA 1301 ENGL 2331 PHIL 1301 PHIL 2321 PHIL 2306 PHIL 2316 Or: select 3 semester credit hours from other TCCNS core options: ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, HIST 2311, HIST 2312, HIST 2321, HIST 2322, PHIL 1304, PHIL 2307.
Creative Arts: 3 semester credit hours 050 Core Code	
Choose one course from the following: AHST 1303 Survey/Western Art History: Ancient-Medieval AHST 1304 Survey/Western Art History: Renaissance-Modern ARTS 1301 Exploration of the Arts DANC 1305 Introduction to World Dance Forms DANC 1310 Understanding Dance FILM 2332 Understanding Film MUSI 1306 Understanding Music THEA 1310 Understanding Theatre	ARTS 1303 ARTS 1304 ARTS 1301 DANC 1305 DANC 2303 DRAM 2366 MUSI 1306 DRAM 1310 Or: select 3 semester credit hours from other TCCNS core options: ARCH 1301, ARCH 1302, DRAM 2361, DRAM 2362, HUMA 1315, MUSI 1308, MUSI 1309.
American History: 6 semester credit hours 060 Core Code	
Texas Legislative Mandate Choose two courses from the following: HIST 1301 US History Survey to Civil War HIST 1302 US History Survey from Civil War HIST 2301 History of Texas HIST 2381 African-American History	HIST 1301 HIST 1302 HIST 2301 HIST 2381
Government/Political Science: 6 semester credit hours 070 Core Code	
Texas Legislative Mandate* GOVT 2305 American National Government GOVT 2306 State and Local Government *The six-semester-credit-hour government course mandate requires study of the Constitution of the United States and the Constitution of Texas. (See UT DALLAS Departmental Advisor if you have questions)	GOVT 2305 GOVT 2306

UT DALLAS REQUIREMENT	TCCNS COURSE EQUIVALENT**
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Social and Behavioral Sciences: 3 semester credit hours		080 Core Code
ECS 2361*	Social Issues and Ethics in Science and Technology <i>*(ECS 2361 is a required major core course - noted in Section II below - that also fulfills the three-semester-credit hour Social and Behavioral Sciences Core Curriculum requirement.)</i> (See UT DALLAS Departmental Advisor)	N/A
Component Area Option: 6 semester credit hours		090 Core Code
MATH 2417*	Calculus I (Accelerated)	MATH 2413 or 2313 and 2414 or 2314
MATH 2419*	Calculus II (Accelerated)	MATH 2415 or 2315
PHYS 2125*	Physics Laboratory I	PHYS 2125 or lab of 2425
<i>*(MATH 2417 and MATH 2419 and PHYS 2125 are required major preparatory courses - noted in Section II below - that also fulfill the six-semester-credit-hour Component Area Option Core Curriculum requirement.)</i> (See UT DALLAS Departmental Advisor)		

II. UT DALLAS MAJOR REQUIREMENTS: 79 semester credit hours		
Major Preparatory Courses:		
CHEM 1311/1111	General Chemistry I w/lab	CHEM 1311/1111 or 1411, or CHEM 1309/1109 or 1409
CS 1325	Introduction to Programming	N/A - but may be satisfied by COSC 1337 or 1437 (Java)
ECS 1100*	Introduction to Engineering and Computer Science	*ENGR 1201
MECH 1100*	Introduction to Mechanical Engineering I	*ENGR 1201 <i>*(both ECS 1100 and MECH 1100 requirements may be satisfied by ENGR 1201)</i> (See UT DALLAS Departmental Advisor for equivalent course)
ENGR 2300	Linear Algebra for Engineers	MATH 2413 or 2313 and 2414 or 2314
MATH 2417	Calculus I (Accelerated)	MATH 2415 or 2315
MATH 2419	Calculus II (Accelerated)	MATH 2420 or 2320
MATH 2420	Differential Equations with Applications	(See UT DALLAS Departmental Advisor to clarify Math requirements)
MECH 1208	Introduction to Mechanical Engineering II	(See UT DALLAS Departmental Advisor for equivalent course)
MECH 2120	Mechanics of Materials Laboratory	N/A
MECH 2310	Statics	ENGR 2301 or 2401
MECH 2320	Mechanics of Materials	ENGR 2332
MECH 2330	Dynamics	ENGR 2302 or 2402
PHYS 2325/2125	Mechanics w/lab	PHYS 2325/2125 or 2425
PHYS 2326/2126	Electromagnetism and Waves w/lab	PHYS 2326/2126 or 2426
Prescribed Electives (lower-division):		
MECH 2340	Circuits and Applied Electronics	ENGR 2305/2105 or 2405
Major Core Courses (lower-division):		
ECS 2361	Social Issues and Ethics in Science and Technology	N/A
(See UT DALLAS Departmental Advisor for upper-division course requirements)		

III. UT DALLAS ELECTIVE REQUIREMENTS: 6 semester credit hours	
Free Electives: 6 semester credit hours	
<p>Both lower-division and upper-division courses may count as electives. But students must complete at least 51 semester credit hours of upper-division courses to qualify for graduation.</p> <p>Degree programs in the Erik Jonsson School of Engineering and Computer Science are governed by various accreditation boards that place restrictions on courses used to meet the curricular requirements of degrees they certify. For this reason, not all courses offered by the University can be used to meet elective requirements. Please check with your academic advisor before enrolling in courses you hope to use as free electives. (See UT DALLAS Departmental Advisor)</p>	

A MINIMUM OF 127 SEMESTER CREDIT HOURS IS REQUIRED FOR GRADUATION WITH AT LEAST 51 UPPER-DIVISION SEMESTER CREDIT HOURS.

****PLEASE NOTE:**

Transfer Core options listed reflect the TCCNS courses only, as approved at UT DALLAS. Other Texas public colleges or universities may individually interpret some TCCNS courses in a different core category, which UT DALLAS will honor. Check with a UT DALLAS academic advisor to verify this. Other courses that may potentially qualify for core requirements must be approved by a UT DALLAS academic advisor or the department housing the student's major.

Completion of the entire Core Curriculum at another Texas public college or university will substitute for completion of UT DALLAS' Core Curriculum.

TCCNS courses in Field of Study (FOS) programs will transfer to UT DALLAS.

UT DALLAS does not accept vocational or technical courses in certificate or applied science programs, nor Workforce Education (WECM) courses, nor developmental courses.