



Erik Jonsson School of Engineering and Computer Science
2006-2008 Transfer Guide for
Texas Common Course Numbering System

Major: **COMPUTER ENGINEERING**Degree: **Bachelor of Science (B.S.)****UTD Courses****TCCNS Courses**

I. UTD CORE CURRICULUM REQUIREMENTS (42 Semester Hours)			
A. Communication (6 Hours)			
RHET 1302	Composition & Rhetoric	ENGL 1302*	010 Core Code
	*(ENGL 1301 is prerequisite to ENGL 1302 and must be completed prior to taking ENGL 1302. ENGL 1301 can be used for elective hours.)		
ECS 3390	Professional and Technical Communication	N/A	
B. Social and Behavioral Sciences (15 Hours)			
6 Hours of Government (Texas Legislative Mandate):		Choose one two-course series:	070 Core Code
GOVT 2301* and	Const Found & Pol Beh in the U.S. and Texas	GOVT 2301 and	
GOVT 2302*	Political Institutions in the U.S. and Texas	GOVT 2302	
		or	
N/A	American Federal Government	GOVT 2305 and	
N/A	Texas Government	GOVT 2306	
	*(Consult your academic advisor for course descriptions. The six hour government requirement must include study of the Constitution of the United States and the Constitution of Texas.)		
6 Hours of American History (Texas Legislative Mandate):		Two of the following:	060 Core Code
HIST 1301	American History I	HIST 1301	
HIST 1302	American History II	HIST 1302	
HIST 2301	Texas History	HIST 2301	
N/A	Mexican-American History I	HIST 2327	
N/A	Mexican-American History II	HIST 2328	
3 Hours of Social and Behavioral Sciences Elective:			080 Core Code
ECS 3361	Social Issues and Ethics in CS & EE	N/A	
C. Humanities and Fine Arts (6 Hours)			
HUMA 1301	Exploration of the Humanities	HUMA 1301	040 Core Code
<i>or other core options:</i>			
ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, FREN 2303, FREN 2304, HIST 2311, HIST 2312, HIST 2321, HIST 2322, PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2306, PHIL 2307, PHIL 2316, PHIL 2317.			
ARTS 1301	Exploration of the Arts	ARTS 1301	050 Core Code
<i>or other core options:</i>			
ARCH 1205, ARCH 1301, ARCH 1302, ARTS 1303, ARTS 1304, DANC 2303, DANC 2304, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2363, HUMA 1315, MUSI 1306, MUSI 1308, MUSI 1309.			
D. Mathematics and Quantitative Reasoning (6 Hours)			
MATH 2417*	Calculus I (Accelerated)	MATH 2314 or 2414 or 2417^	020 Core Code
MATH 2419*	Calculus II (Accelerated)	MATH 2315 or 2415 or 2419^	
	*(MATH 2417 and MATH 2419 are lower-division major requirements that will also satisfy the six hour Mathematics and Quantitative Reasoning core curriculum requirement.)		
	^(Students may need to take additional Mathematics courses so that the total number of hours in Mathematics credited to them is at least that specified in the degree requirements. Consult with an advisor.)		
<p>*Note: UTD's accelerated two-semester calculus sequence, MATH 2417 and MATH 2419, is equivalent to the three-semester calculus sequence offered at community colleges. Students must take Calculus I, Calculus II, and Calculus III in order to be equivalent to UTD MATH 2417 and MATH 2419. Students are strongly urged to start and complete the entire sequence either at the community college, or at UTD. If students choose to take Calculus I, II, and III, there may be prerequisite courses required. These courses would not be applicable towards the degree plan.</p>			

UTD Courses	TCCNS Courses
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E. Science (9 Hours)			
PHYS 2325/2125*	Mechanics and Heat w/lab	PHYS 2325/2125 or 2425	030 Core Code
PHYS 2326/2126*	Electromagnetism and Waves w/lab	PHYS 2326/2126 or 2426	
<i>or</i>			
PHYS 2421*	Honors Physics I-Mechanics and Heat	N/A	
PHYS 2422*	Honors Physics II-Electromagnetism and Waves	N/A	
CE/EE/TE 1102	Introduction to Experimental Techniques	ENGR 1172	
<i>*(PHYS 2325/2125 and PHYS 2326/2126 or PHYS 2421 and PHYS 2422 are major requirements that will also satisfy eight hours of the science core curriculum requirement.)</i>			
II. UTD MAJOR REQUIREMENTS (75 Hours)			
Major Preparatory Courses (19 hours beyond core curriculum):			
CS 1337	Computer Science I	COSC 1337 or 1437 (JAVA)	
CS 2336	Computer Science II	COSC 2336 or 2436 (JAVA)	
<i>Students who complete the C++ sequence should contact the ECS Academic Advisor for more information.</i>			
CE 2110	Introduction to Digital Systems Laboratory	ENGR 2110	
CE 2300	Applied Linear Algebra	ENGR 2300	
CE 2310	Introduction to Digital Systems	ENGR 2310	
CE 1102	Introduction to Experimental Techniques	ENGR 1172	
MATH 2420	Differential Equations with Applications	MATH 2320 or 2420[^]	
MATH 2417	Calculus I (Accelerated)	MATH 2314 or 2414 or 2417[^]	
MATH 2419	Calculus II (Accelerated)	MATH 2315 or 2415 or 2419[^]	
<i>^(Students may need to take additional Mathematics courses so that the total number of hours in Mathematics credited to them is at least that specified in the degree requirements. Consult with an advisor.)</i>			
PHYS 2325/2125	Mechanics and Heat w/lab	PHYS 2325/2125 or 2425	
PHYS 2326/2126	Electromagnetism and Waves w/lab	PHYS 2326/2126 or 2426	
Advanced Upper-Division Major Requirements (56 Hours): B118 B48 B35			
(See Departmental Advisor)			

III. UTD ELECTIVE REQUIREMENTS (9 Hours)**Advanced Electives (6 hours):**

All students are required to complete at least 6 hours of advanced electives outside their major field of study. These electives must be either upper-division courses, or lower-division courses that have prerequisites.

Free Electives (3 hours):

Both lower-division and upper-division courses may be used as free electives, but students must complete at least 51 upper-division hours to qualify for graduation. Consult with an advisor.

A MINIMUM OF 126 SEMESTER HOURS IS REQUIRED FOR GRADUATION WITH AT LEAST 51 UPPER-DIVISION HOURS.

Note: Core options listed reflect the TCCNS courses. Other courses that may potentially qualify for core requirements must be petitioned through an academic advisor or the department housing the student's major.

UTD does not accept vocational or technical courses in certificate or applied science programs, nor courses offered through the Workforce Education Course Manual (WECM), nor developmental courses. Consult the current online UTD catalog for complete degree plan requirements.

<http://www.utdallas.edu/student/catalog/ugcurrent/undergradprograms.html>