

DATA SCIENCE (BS)



School of Natural Sciences and Mathematics *and*
 Erik Jonsson School of Engineering and Computer Science

2021-2022 Two-Year Transfer PATHWAY using the Texas Common Course Numbering System

This transfer pathway 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/2021/undergraduate/programs>

*This is an **example** only. Please see advisor to develop individual plan.*

FRESHMAN YEAR							
FALL SEMESTER		Core Area	SCH	SPRING SEMESTER		Core Area	SCH
ENGL 1301	Composition I	010 Core	3	ENGL 1302	Composition II	010 Core	3
COSC 1336 or COSC 1436	Programming Fundamentals I		3	COSC 1337 or COSC 1437	Programming Fundamentals II		3
HIST 1301	U.S. History I	060 Core	3	HIST 1302	U.S. History II	060 Core	3
MATH 2413 or MATH 2313	Calculus I	020 Core	4	MATH 2414 or MATH 2314	Calculus II	020/090 Core	4
SPCH 1311 or SPCH 1315	Intro to Speech Communication Public Speaking	010/090 Core	3	PHYS 2325/2125 or PHYS 2425	University Physics I w/lab	030/090 Core	4
Total Semester Credit Hours			16	Total Semester Credit Hours			17

SOPHOMORE YEAR							
FALL SEMESTER		Core Area	SCH	SPRING SEMESTER		Core Area	SCH
040 Core Course	See UTD Transfer Plan	040 Core	3	050 Core Course	See UTD Transfer Plan	050 Core	3
GOVT 2305	Federal Government	070 Core	3	GOVT 2306	Texas Government	070 Core	3
MATH 2305	Discrete Mathematics		3	COSC 2336 or COSC 2436	Programming Fundamentals III		3
MATH 2415 or MATH 2315	Calculus III	020/090 Core	4	MATH 2418 or MATH 2318	Linear Algebra		4
PHYS 2326/2126 or PHYS 2426	University Physics II w/lab	030/090 Core	4	080 Core Course	See UTD Transfer Plan	080 Core	3
Total Semester Credit Hours			17	Total Semester Credit Hours			16

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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		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.)
And choose one course from the following:		
COMM 1311 Survey of Oral & Technology-based Communication		SPCH 1311
COMM 1315 Public Speaking		SPCH 1315
Mathematics: 3 semester credit hours		020 Core Code
MATH 2417* Calculus I (Accelerated)		N/A
or MATH 2413* Differential Calculus		or MATH 2413 or 2313
*(MATH 2417 or MATH 2413 is a required major preparatory course - noted in Section II below - that also fulfills the three-semester-credit-hour Mathematics Core Curriculum requirement. Semester credit hours are counted in Core Curriculum.)		
Life and Physical Sciences: 6 semester credit hours		030 Core Code
PHYS 2325* Mechanics		PHYS 2325 or 2425
PHYS 2326* Electromagnetism and Waves		PHYS 2326 or 2426
*(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.)		
Language, Philosophy, and Culture: 3 semester credit hours		040 Core Code
Choose one course from the following:		
HUMA 1301 Exploration of the Humanities		HUMA 1301
LIT 2331 Introduction to World Literature		ENGL 2331
PHIL 1301 Introduction to Philosophy		PHIL 1301
PHIL 1305 Introduction to Philosophy of Religion		PHIL 2321
PHIL 1306 Introduction to Ethics		PHIL 2306
PHIL 2316 History of Philosophy I		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		ARTS 1303
AHST 1304 Survey/Western Art History: Renaissance-Modern		ARTS 1304
ARTS 1301 Exploration of the Arts		ARTS 1301
DANC 1305 Introduction to World Dance Forms		DANC 1305
DANC 1310 Understanding Dance		DANC 2303
FILM 2332 Understanding Film		DRAM 2366
MUSI 1306 Understanding Music		MUSI 1306
THEA 1310 Understanding Theatre		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 1301
HIST 1302 US History Survey from Civil War		HIST 1302
HIST 2301 History of Texas		HIST 2301
HIST 2381 African-American History		HIST 2381

UT DALLAS REQUIREMENT	TCCNS COURSE EQUIVALENT**
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Government/Political Science: 6 semester credit hours	070 Core Code
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Texas Legislative Mandate* GOVT 2305 American National Government GOVT 2306 State and Local Government <i>*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)</i>	GOVT 2305 GOVT 2306
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Social and Behavioral Sciences: 3 semester credit hours	080 Core Code
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Choose one course from the following: CRIM 1301 Introduction to Criminal Justice CRIM 1307 Introduction to Crime and Criminology ECON 2301 Principles of Macroeconomics ECON 2302 Principles of Microeconomics PSY 2301 Introduction to Psychology PSY 2314 Lifespan Development SOC 1301 Introduction to Sociology	<div style="text-align: center;"> CRIJ 1301 CRIJ 1307 ECON 2301 ECON 2302 PSYC 2301 PSYC 2314 SOCI 1301 </div> <p><i>Or: select 3 semester credit hours from other TCCNS core options:</i> ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, GEOG 1302, GEOG 1303, PSYC 2307, PSYC 2308, PSYC 2316, PSYC 2319, SOCI 1306, SOCI 2301, SOCI 2326, SOCI 2336.</p>
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Component Area Option: 6 semester credit hours	090 Core Code
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MATH 2417* and Calculus I (Accelerated) MATH 2419* Calculus II (Accelerated) or MATH 2413* and Differential Calculus MATH 2414* and Integral Calculus MATH 2415* Calculus of Several Variables PHYS 2125* Physics Lab I <i>*(MATH 2417 and 2419, or MATH 2413, 2414, and 2415, 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. Semester credit hours are counted in Core Curriculum.)</i>	<div style="text-align: center;"> N/A N/A or MATH 2413 or 2313 and MATH 2414 or 2314 and MATH 2415 or 2315 PHYS 2125 or lab of 2425 </div>
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II. UT DALLAS MAJOR REQUIREMENTS: 64-65 semester credit hours
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Major Preparatory Courses: 18-19 semester credit hours beyond Core Curriculum CS 1136 Computer Science Lab CS 1336 Programming Fundamentals CS 1337 Computer Science I CS 2336 Computer Science II CS 2305 Discrete Mathematics for Computing I or MATH 3315 Discrete Mathematics and Combinatorics MATH 2417 and Calculus I (Accelerated) MATH 2419 Calculus II (Accelerated) or MATH 2413 and Differential Calculus MATH 2414 and Integral Calculus MATH 2415 Calculus of Severable Variables MATH 2418 Linear Algebra PHYS 2325/2125 Mechanics and Physics Lab I PHYS 2326/2126 Electromagnetism and Waves and Physics Lab II (See UT DALLAS Departmental Advisor for upper-division course requirements)	<div style="text-align: center;"> N/A COSC 1336 or 1436 COSC 1337 or 1437 COSC 2336 or 2436 MATH 2305 N/A N/A N/A or MATH 2413 or 2313 and MATH 2414 or 2314 and MATH 2415 or 2315 MATH 2418 or 2318 PHYS 2325/2125 or 2425 PHYS 2326/2126 or 2426 </div>
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III. UT DALLAS ELECTIVE REQUIREMENTS: 13-14 semester credit hours
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Guided Electives: 13-14 semester credit hours Although both lower-division and upper-division courses may count as guided electives, they must be approved by the advisor, and the student must complete at least 51 semester credit hours of upper-division courses to qualify for graduation. NOTE: Students transferring into this program at the upper-division level are expected to have completed all of the 1000- and 2000- level Mathematics and Computer Science core course requirements. (See UT DALLAS Departmental Advisor)
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A MINIMUM OF 120 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.
