



This is not an official degree audit and it is subject to change. This chart is intended to be used by students who start out at Texas State. Please contact the College of Science and Engineering Undergraduate Advising Center for advising.

Note: In addition to major courses, students must also complete all core and minor requirements (if applicable) and any other requirements for graduation.

KEY:

- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Arrows with dash lines are recommended prerequisites.
- Courses taught in specific semesters are indicated with the following codes:
- F-Fall
- S-Spring
- Su-Summer Session I or II

Required WI courses:
 Additional WI courses: MATH 4337A, MATH 4337C, CS 2315, ENG 2310-2360, ENG 3303 – *Discuss with advisor to complete WI requirement.*

Core courses must be completed:

- 6 credits Core 010
- 3 credits Core 020
- 6 credits Core 030
- 3 credits Core 040
- 3 credits Core 050
- 6 credits Core 060
- 6 credits Core 070
- 3 credits Core 080
- 6 credits Core 090, 091, 092, 093, 094, & 095
- TXST options: ENG 1310, ENG 1320, ENG 1321, ENG 3303, COMM 1310
- MATH required course: Satisfied in Major MATH 2471
- TXST options: See catalog for options
- TXST options: ENG 2310, 2320, 2330, 2340, 2359, 2360, 2371, PHIL 1305, 1320
- TXST options: See catalog for options: <http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum>
- TXST options: [HIST 1310/2327/2381] and [HIST 1320/2328/2382]
- TXST options: POSI 2310 & POSI 2320
- TXST options: ANTH 1312, ECO 2301, ECO 2314, GEO 1310, PSY 1300, SOCI 1310, CA 2351, PFW 1301
- MATH required course: Satisfied in Major MATH 2472 (092)
- See catalog for options: <http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/>
- US 1100 may be required for some students. Consult with an advisor regarding course choices.

Prescribed electives:

6-9 hours of electives from:

- MATH 3323 Differential Equations (F,S,Su)
- MATH 3324 Applied Multivariate Statistics (F)
- MATH 3348 Deterministic Operations Research (F)
- MATH 3398 Discrete Mathematics II (F,S,Su)
- MATH 4306 Fourier Series and Boundary Value Problems (S)
- MATH 4315 Analysis II (F,S)
- MATH 4330 General Topology (F)
- MATH 4336 Studies in Applied Mathematics
- MATH 4337A Topological Data Analysis
- MATH 4337C Numerical Methods for Ordinary Differential Equations (F)
- MATH 4337H Undergraduate Research in Topology & Artificial Neural Networks
- MATH 4350 Introduction to Combinatorics (S)

Check prerequisites

0-3 hours of electives from:

- CS 2315 Computer Ethics (F,S)
- CS 2318 Assembly Language (F,S,Su)
- CS 3339 Computer Architecture (F,S,Su)
- CS 3360 Computing Systems Fundamentals (F,S)
- CS 3398 Software Engineering (F,S,Su)
- CS 4315 Introduction to Data Mining and Information Retrieval (S)
- CS 4332 Introduction to Database Systems (F,S)
- CS 4337 Introduction to Computer Vision (F)
- CS 4346 Introduction to Artificial Intelligence (F,S)
- CS 4371 Computer System Security (F,S)
- CS 4373 Introduction to Network Science
- CS 4379F Distributed Data Processing
- CS 4379Q Introduction to Recommender Systems

Check prerequisites

Recommended General Electives:

- IE 3305 Introduction to Data Analysis
- IE 3340 Operations Research
- IE 4330 Reliability Engineering
- IE 4340 Non-linear optimization
- IE 4342 Advanced Linear and Integer Programming
- IE 4320 Integrated Production Systems
- IE 4350 Supply Chain Engineering
- IE 4370 Probabilistic Operations Research
- IE 4381 Introduction to Systems Engineering
- IE 4399D Heuristic Optimization
- MFG 4396 Manufacturing Systems Design

Some students may need to take general electives to reach the 120 minimum hours required to meet graduation requirements. Not all students will need general electives depending on their minor, courses transferred to TXST, and/or AP or dual credit previously earned.

Check prerequisites