

Texas State University
College of Science & Engineering
Ingram School of Engineering
2014-2016 Catalog

****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.

For current or previous flowcharts, please visit
www.engineering.txstate.edu/degrees-programs/undergraduate

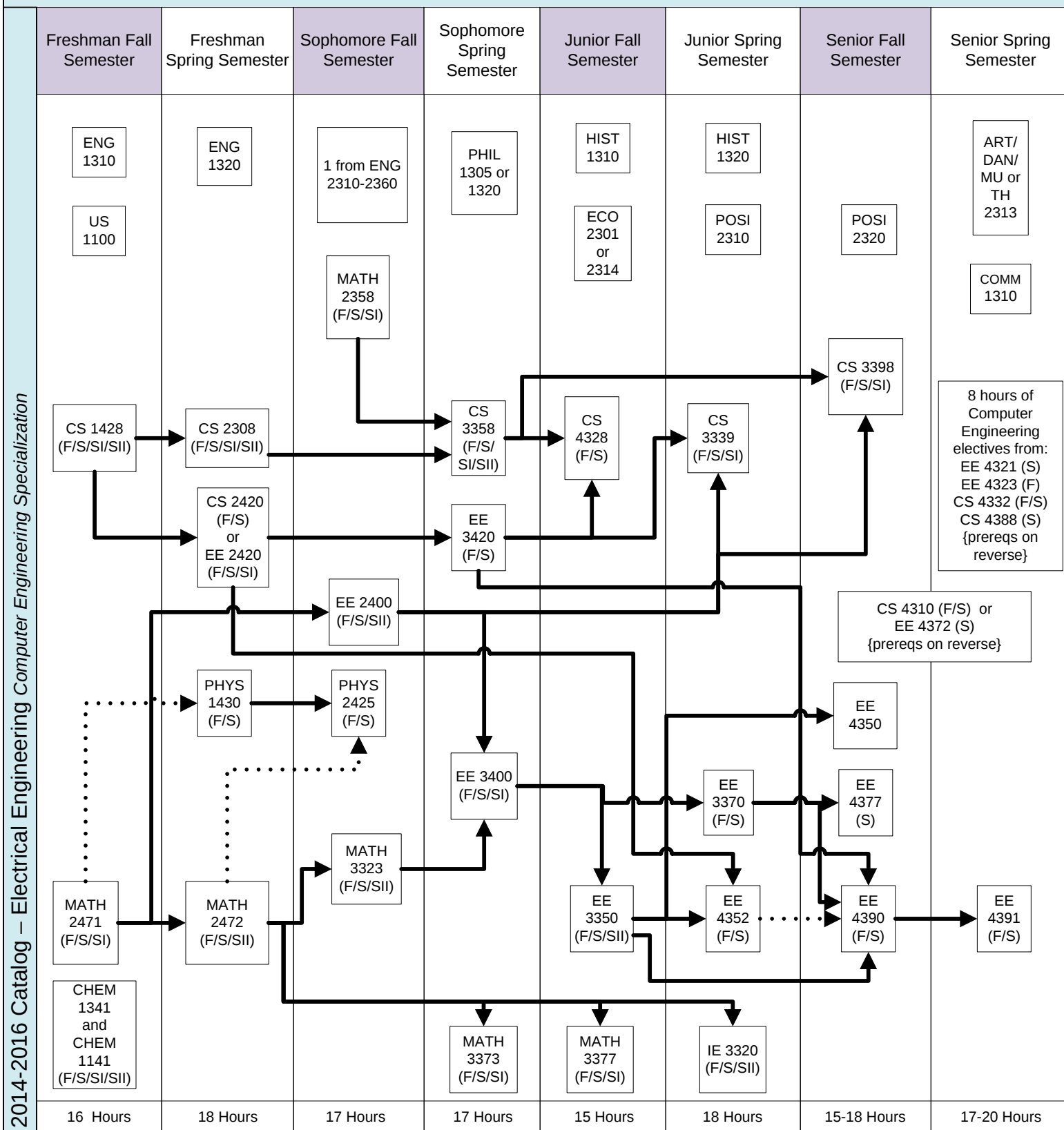
Please contact the Science Advising Center, Centennial Hall, room 202, Phone 512-245-1315
or the Ingram School of Engineering, Roy F. Mitte Building, Phone 512-245-1826 for advising.

KEY:

- Arrows indicate prerequisites.
- Arrows with dotted lines indicate co-requisites.
- Courses taught specific semesters are indicated with the following codes:
F-Fall, S-Spring, SI-Summer Session I, SII-Summer Session II (Please note that semester offerings are subject to change at any time. This flowchart does NOT guarantee when courses will or will not be offered.)



F L P S



General Education Core Requirements

Communication
English 1310, 1320
Speech Communications 1310
Mathematics
Math 2471
Natural Science
Chemistry 1341, 1141
Physics 1430
Humanities and Visual and Performing Arts
Art, Dance, Music, or Theatre Arts 2313
Philosophy 1305 or 1320
English Literature (3 hours)
Social and Behavioral Sciences
History 1310, 1320
Political Science 2310, 2320
Economics 2301 or 2314
Texas State Component
University Seminar 1100

Electrical Engineering- Computer Engineering Requirements

Computer Sci 1428 Foundations of Computer Science
Computer Sci 2308 Foundations of Computer Science II
Computer Sci 3339 Computer Architecture
Computer Sci 3358 Data Structures
Computer Sci 3398 Software Engineering
Computer Sci 4328 Operating Systems**

Electrical Engr 2400 Circuits I
Electrical Engr 3350 Electronics I
Electrical Engr 3370 Signals & Systems
Electrical Engr 3400 Circuits II
Electrical Engr 3420 Microprocessors
Electrical Engr 4350 Electronics II
Electrical Engr 4352 Intro to VLSI Design
Electrical Engr 4377 Introduction to Digital Signal Processing
Electrical Engr 4390 Electrical Engineering Design I
Electrical Engr 4391 Electrical Engineering Design II

Industrial Engr 3320 Engineering Statistics

Mathematics 2358 Discrete Math I
Mathematics 2472 Calculus II
Mathematics 3323 Differential Equations
Mathematics 3373 Calculus III
Mathematics 3377 Linear Algebra

Physics 2425 Electricity & Magnetism

Choose 4 hours from:
Computer Sci 2420 Digital Logic OR
Electrical Engr 2420 Digital Logic

Choose one:

Computer Sci 4310 Computers Networks (CS 3358)
Electrical Engr 4372 Communications Networks
(EE 2400 & EE 3420)

Choose two:

Electrical Engr 4321 Digital System Design Using HDL
(EE 3420)
Electrical Engr 4323 Digital Image Processing
(CS 2308 & EE 3420)
Computer Sci 4332 Introduction to Database Systems
(CS 3358)
Computer Sci 4388 Computer Graphics (CS 3358)

Course Outline

FRESHMAN YEAR

English 1310, 1320
University Seminar 1100
Chemistry 1341, 1141
Computer Science 1428, 2308
Electrical Engr 2420 or Computer Science 2420
Mathematics 2471, 2472
Physics 1430

SOPHOMORE YEAR

English Literature (1 course)
Computer Science 3358
Electrical Engr 2400, 3400, 3420
Mathematics 2358, 3323, 3373
Philosophy 1305 or 1320
Physics 2425

JUNIOR YEAR

Economics 2301 or 2314
History 1310, 1320
Political Science 2310
Computer Science 3339, 4328
Electrical Engr 3350, 3370, 4352
Industrial Engineering 3320
Math 3377

SENIOR YEAR

Art, Dance, Music, or Theatre Arts 2313
Communications 1310
Political Science 2320
Computer Science 3398
Electrical Engr 4372 or Computer Science 4310
Electrical Engr 4350, 4377, 4390, 4391
Choose 8 hours from:
Electrical Engr 4321, 4323
Computer Science 4332, 4388

Legend:

() – Prerequisite

** - This class is offered in Round Rock during the fall semesters
and on the main campus during the spring semesters.