**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 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.

### ENG 1310
### ENG 1320
### US 1100
### PFW one course
### CS 1428 (F/S/Sl/SII)
### CS 2308 (F/S/Sl/SII)
### CS 2420 (F/S) or EE 2420 (F/S/Sl)
### CS 3358 (F/S/Sl/SII)
### CS 4328 (F/S)
### CS 3339 (F/S/Sl)
### CS 3398 (F/S/Sl)
### CS 4310 (F/S) or EE 4372 (S) (prereqs on reverse)

### MATH 2471 (F/S/Sl)
### MATH 2472 (F/S/Sl)
### PHYS 1430 (F/S)
### PHYS 2425 (F/S)
### MATH 3323 (F/S/Sl)
### MATH 3373 (F/S/Sl)
### MATH 3377 (F/S/Sl)
### MATH 3320 (F/S/Sl/SII)

### CHEM 1341 and CHEM 1141 (F/S/Sl/SII)

**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.

## Texas State University – San Marcos
### College of Science
### Ingram School of Engineering
### 2012-2014 Catalog – (BS – 461.30)

**2012-2014 Catalog – Electrical Engineering Computer Engineering major (BS – 461.30)**

<table>
<thead>
<tr>
<th>Freshman Fall Semester</th>
<th>Freshman Spring Semester</th>
<th>Sophomore Fall Semester</th>
<th>Sophomore Spring Semester</th>
<th>Junior Fall Semester</th>
<th>Junior Spring Semester</th>
<th>Senior Fall Semester</th>
<th>Senior Spring Semester</th>
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<tbody>
<tr>
<td>ENG 1310</td>
<td>ENG 1320</td>
<td>3 hours of ENG 2310-2360</td>
<td>MATH 2358 (F/S/Sl)</td>
<td>HIST 1310</td>
<td>HIST 1320</td>
<td>PHIL 1305 or 1320</td>
<td>COMM 1310</td>
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<td>US 1100</td>
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<td>MATH 3398 (F/S/Sl)</td>
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<tr>
<td>CS 2420 (F/S) or EE 2420 (F/S/Sl)</td>
<td>EE 4200 (F/S/Sl)</td>
<td>EE 4300 (F/S/Sl)</td>
<td>EE 3370 (F/S)</td>
<td>EE 4377 (S)</td>
<td>EE 4390 (F/S)</td>
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<td>PHYS 2425 (F/S)</td>
<td>MATH 3323 (F/S/Sl)</td>
<td>EE 3350 (F/S/Sl)</td>
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**17 Hours** 18 Hours 17 Hours 17 Hours 16 Hours 18 Hours 15-18 Hours 15-18 Hours
### 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
- English Literature (3 hours)

**Social and Behavioral Sciences**
- History 1310, 1320
- Political Science 2310, 2320
- Economics 2301

**Texas State Component**
- University Seminar 1100 (Freshmen only)
- Physical Fitness (2 Courses)

### Electrical Engineering-Computer Engineering Requirements

**Computer Science**
- 1428 Foundations of Computer Science
- 2308 Foundations of Computer Science II
- 3339 Computer Architecture
- 3398 Software Engineering
- 4328 Operating Systems**

**Electrical Engineering**
- 2400 Introduction to Electrical Engineering
- 3350 Electronics I
- 3400 Circuit Analysis
- 3420 Microprocessors
- 4352 Intro to VLSI Design
- 4377 Introduction to Digital Signal Processing
- 4390 Electrical Engineering Design I
- 4391 Electrical Engineering Design II

**Industrial Engineering**
- 3320 Engineering Statistics

**Mathematics**
- 2358 Discrete Math I
- 2472 Calculus II
- 3323 Differential Equations
- 3373 Calculus III
- 3377 Linear Algebra
- 3398 Discrete Math II

**Physics**
- 2425 Electricity & Magnetism

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

### Course Outline

#### FRESHMAN YEAR

- English 1310, 1320
- Physical Fitness (1 course)
- 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, 3398
- Physics 2425

#### JUNIOR YEAR

- Economics 2301
- History 1310, 1320
- Physical Fitness (1 course)
- Political Science 2310
- Computer Science 3339, 4328
- Electrical Engr 3350, 3370, 4352,
  Industrial Engineering 3320
- Mathematics 3377

#### SENIOR YEAR

- Art, Dance, Music, or Theatre Arts 2313
- Communications 1310
- Philosophy 1305 or 1320
- Political Science 2320
- Computer Science 3398
- Electrical Engr 4372 or Computer Science 4310
- Electrical Engr 4377, 4390, 4391
- Choose 6 hours from:
  - Electrical Engr 4321, 4323
  - Computer Science 4332, 4388

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 VHDL
  (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)

### Legend:
- ( ) – Prerequisite
- ** – This class is offered in Round Rock during the fall semesters and on the main campus during the spring semesters.