# Electrical & Computer Engineering Department

## Advising Information (2018 Catalog to present)

A grade of "C" or better is required in all major department (EECE), courses used as EECE electives, and engineering courses that are used toward the degree.

Other courses requiring “C” or better and justification:

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| MATH 270 (Calculus I) | Prerequisite for MATH 301, PHYS 201 |
| MATH 301 (Calculus II) | Prerequisite for MATH 302 , MATH 350 , EECE 355 |
| MATH 302 (Calculus III) | Prerequisite for EECE 344 |
| MATH 350 (Differential Equations) | Prerequisite for EECE 335, 356, 344 |
| CMPS 150 (Intro to Computer Science) | Prerequisite for CMPS 260 |
| CMPS 260 (Intro to Data Structures) | Pre/Corequisite for EECE 340 |
| PHYS 201 (General Physics I) | Prerequisite for PHYS 202 |
| PHYS 202 (General Physics II) | Prerequisite for EECE 335 and EECE 344 |

A minimum of 2.0 cumulative average (major GPA) is required on all hours attempted in the major department (EECE) and engineering courses that apply toward the degree.
Students are responsible for completing all course prerequisites before enrolling in a course.

# Electrical & Computer Engineering Department

## Advising Information **(2018 Catalog to now)**

A grade of "C" or better is required in all major department (EECE) and engineering courses that are used toward the degree.
A minimum of 2.0 cumulative average (major GPA) is required on all hours attempted in the major department (EECE) and engineering courses that apply toward the degree.
Students are responsible for completing all course prerequisites before enrolling in a course.

## APPROVED NON-MAJOR ELECTIVES

These courses fulfill the University of Louisiana General Education requirements.
The courses below apply to students in catalogs from 2022 going forward.
Requirements are similar for most students and students should consult their respective University catalog for lists that satisfy General Education requirements.

Arts Elective (3 credits)

- **DANC** (101, 102, 113, 114)
- **DSGN** (121, 361)
- **MUS** (100, 104, 105, 108, 109, 130, 321, 322, 323, 324, 325, 326, 327, 328, 329, 331, 360, 364)
- **THEA** (161, 261)
- **VIAR** (120, 121, 122, 303)

Biology Elective (3 credits)

- **BIOL** (Recommended: 110, 111, 121, 122)

History Elective (3 credits)

- **HIST** (Recommended: 100, 101, 102, 221, 222, 307, 321, 322, 330, 343, 351, 352, 355)
- **PHIL** (Recommended: 101, 321, 322)

Literature Elective (3 credits)

- **ENGL** (Recommended: 201, 202, 205, 206, 210, 211, 212, 312, 319, 320, 332, 333, 341, 342, 350, 370, 371, 380, 381)
- **FREN** (Recommended: 302, 311, 322, 392)
- **GERM** (Recommended: 311)
- **HUMN** (Recommended: 151, 152, 200)
- **SPAN** (Recommended: 302, 320, 340)
- Or choose any Literature or Literature-centered Humanities (HUMN) course.

Science Lab (1 credits)

- **PHYS (**215 or 216**)** or **CHEM (**112 or 115**)** or **BIOL (**112, 113, 123, or 124**)**

Social/Behavioral Science (3 credits in addition to ECON 430)

- **ANTH** (Recommended: 100, 201, 202, 203)
- **CJUS** (Recommended: 101, 203, 205)
- **ECON** (Recommended: 201, 202, 300)
- **GEOG** (Recommended: 103, 104, 380)
- **POLS** Any course (Recommended: 110, 220, 360, 370,)
- **PSYC** (Recommended: 110, 220, 255, 311, 312, 370)
- **SOCI** (Recommended: 100, 241)
- Or choose any ANTH, CJUS, ECON, GEOG, POLS, PSYC, SOCI, or other social behavioral science course.

# EECE ELECTIVES

**Students must pick (12 credit hours) four 3 credit EECE, CMPS, or MATH elective courses listed.**

EECE 430G - Digital Signal Processing
EECE 431G - Intelligent Cyber Physical System
EECE 432G - Cyber-Secured System Engineering
EECE 433G - Data Engineering and Machine Learning
EECE 434G - Data Communications
EECE 435G - Wireless Communications
EECE 436G - Introduction to Embedded Systems
EECE 437 - Power Electronics
EECE 438G - Green Renewable Energy
EECE 448 - Smart Power Grids
EECE 450 - Power Systems
EECE 451 - Digital Electronics
EECE 454G - Introduction to VLSI Design
EECE 456G - Flexible Microelectronic Devices and Systems
EECE 457G - Introduction to RFID Devices and Systems
EECE 458G - Communications Engineering II
EECE 459 - Computer Hardware Design
EECE 464G - Internet of Things Systems and Applications
EECE 466G - Communications Networks
EECE 470 - Physical Electronics II
EECE 472G - Special Topics
EECE 479 - Computer Control
EECE 481 – Robotic Technology
CMPS 261 - Advanced Data Structures and Software Engineering
CMPS 341 - Foundations of Computer Science
CMPS 455G - Operating Systems
MATH 362 - Elementary Linear Algebra

**Students must pick (1 credit hours) of EECE laboratory course.**

EECE 442 - Computer Control Laboratory
EECE 453 - Communications Engineering Laboratory

# Computer Engineering Concentration

## Students must complete the following EECE elective courses:

CMPS 261, EECE 442, EECE 459, CMPS 455G, and one of (CMPS 432, EECE 431, 432, 436, 451, 454, 464 others with Department Head approval)

# Power and Sustainable Energy Concentration

## Students must complete the following EECE elective courses:

EECE 438, EECE 448, EECE 450, and one of (EECE 432, 437, 464, 479)

# Secure Smart Systems Concentration

## Students must complete the following EECE elective courses:

EECE 431 or 433, EECE 432, EECE 464, and one of (EECE 436, 454, 457, 458, 459, 481)

EECE 443 (Design I Prerequisite Requirements

Completion of all EECE, CMPS, MATH, and PHYS courses in the curriculum up through all 300 level courses, excluding MATH 302 and EECE 344.