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:

MATH 270 (Calculus I)	Prerequisite for MATH 301, PHYS 201
MATH 301 (Calculus II)	Prerequisite for MATH 302 & 350, EECE 355 & 380
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 ENGR 218
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.

Advising information and suggestions for ensuring student success in courses.

- Advise students of prerequisites for your given course and encourage them to review online Catalog Course Descriptions. catalog.louisiana.edu
- Pass a role and have students sign and attest they have proper prerequisites for the enrolled course.

- Require students without proper prerequisites to unenroll if you do not think they might not succeed in the enrolled course.

- Share the advising information posted online and in the department.
- Most courses have a minimum "C" requirement. See advising information with given justifications.
- Utilize DegreeWorks to see where a student is and to help plan semesters ahead.

Some course paths to pay attention to due to the prerequisite requirements.

Calculus I -> Calculus II -> Circuits I

Calculus II <--> Physics I

Physics I & (Calculus II or Diff. Equations) -> Physics II

Circuits I & Diff. Equations -> Circuits II

CMPS 260 <--> Microprocessors (EECE 340) -> Microprocessor Lab (EECE 342)

Physics II -> Physical Electronics (EECE 335)

EECE 335 & Circuits II (EECE 356) -> Electronic Circuits (EECE 353)

Physics II & Diff. Equations & Calculus III -> Electromagnetics (EECE 344)

Calculus II -> Random Processes (EECE 380)

Statics and Strength of Materials (ENGR 218) & Matlab (EECE 260) & Circuits II -> Controls (EECE 461)

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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, 245, 250, 370)
- **SOCI** (Recommended: 100, 241)

Or choose any ANTH, CJUS, ECON, GEOG, POLS, PSYC, SOCI, or other social behavioral science course.

EECE Required Courses not offered every semester

EECE 344 (Spring only)

EECE 452 (Summer, Fall only)

EECE ELECTIVES

Students must pick (12 credit hours) four 3 credit EECE, CMPS, other elective courses listed below.

EECE 430G - Digital Signal Processing **(Fall only)**
EECE 431G - Intelligent Cyber Physical System **(Spring odd years)**
EECE 432G - Cyber-Secured System Engineering **(Spring even years)**
EECE 433G - Data Engineering and Machine Learning **(Fall even years)**
EECE 434G - Data Communications
EECE 435G - Wireless Communications
EECE 436G - Introduction to Embedded Systems **(Spring only)**
EECE 437 - Power Electronics
EECE 438G - Green Renewable Energy **(Spring odd years)**
EECE 448 - Smart Power Grids **(Spring even years)**
EECE 450 - Power Systems **(Fall only)**
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 **(Fall only)**
EECE 464G - Internet of Things Systems and Applications **(Fall odd years)**
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
CHEM 107 – General Chemistry I

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

EECE 442 - Computer Control Laboratory **(Fall only)**
EECE 453 - Communications Engineering Laboratory **(Spring only)**

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 430, 431, 432, 436, 451, 454, 464, 472, 479, and 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, 472, 479, 479, and others with Department Head approval.)

Secure Smart Systems Concentration

Students must complete the following EECE elective courses:

EECE 431 or 433, EECE 432, EECE 464, and one of (CMPS 420, 452, EECE 436, 454, 457, 458, 459, 481, 479, and others with Department Head approval.)

EECE 443 (Design I Prerequisite Requirements) Completion of all 300-level EECE, CMPS, ENGR, MATH, and PHYS courses in the curriculum, excluding EECE 344, EECE 353, and MATH 302, with a grade of “C” or better in each course.