**REQUIREMENTS FOR THE DEGREE OF Fall 2023**

 **BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (As per Undergraduate**

 **Catalog 2023-2024)**

**FRESHMAN YEAR**

CHEM 1311/1111 General Inorganic Chemistry I and Lab 4

(prereq: MATH 1314, HS Chemistry or CHEM 1481)

CSEN 2304 Introduction to Computer Science 3

(Coreq: MATH 1314)

ENGL 1301 Rhetoric and Composition 3

MATH 2413 Calculus I (prereq: MATH 1348) 4

GEEN 1201 Engineering as a Career1 2

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EEEN 2340 Digital Logic Design (prereq: CSEN 2304) 3

ENGL 1302 Rhetoric and Composition 3

MATH 2414 Calculus II (prereq: MATH 2413) 4

PHYS 2325/2125 University Physics I and Lab 4

(prereq: PHYS 1305/1105; coreq: MATH 2413)

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 **SOPHOMORE YEAR**

EEEN 3449 Microprocessor Systems (prereq: EEEN 2340) 4

MATH 3320 Differential Equations (prereq: MATH 2414) 3

PHYS 2326/2126 University Physics II and Lab 4

(prereq: PHYS 2325/2125; coreq: MATH 2414)

POLS 2301 Govt. & Politics of U.S. 3

*^Communication*\* 3

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CSEN 2328 Data Structures and Algorithms 3

(prereq: CSEN 2304)

EEEN 2323 Network Analysis I 3

(prereq: MATH 2414; coreq: PHYS 2326/2126, MATH 3320)

MATH 3370 Discrete Math 3

POLS 2302 Govt. & Politics of Texas 3

*^Language/Philosophy/Culture* 3

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**JUNIOR YEAR**

EEEN 3321 Network Analysis II 3

(prereq: EEEN 2323, CSEN 2304, MATH 3320)

EEEN 3325 Electronics I 3

(prereq: EEEN 2323, PHYS 2326/2126)

EEEN 3334 Random Signals (prereq: MATH 2414) 3

EEEN 4344 Computer Architecture and Design 3

(prereq: EEEN 3449)

MATH 3415 Calculus III (prereq: MATH 2414) 4

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CSEN 4362 Operating Systems 3

(prereq: EEEN 3449)

EEEN 3212 Circuits and Electronics Lab (coreq: EEEN 3325) 2

EEEN 4355 Digital Systems Engineering (prereq: EEEN 3325, EEEN 2340) 3

MATH 4341 Linear Algebra 3

*^Social/behavioral* ^^ ………………….3

*^Creative Arts* 3

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 **SENIOR YEAR**

CSEN 4201 Senior Project (prereq: senior standing) or

EEEN 4252 Advanced Laboratory 2

(prereq: EEEN 3212, EEEN 3321, EEEN 3449, Communications elective)

CSEN 4320 Computer Networks 3

(prereq: 6 hours of upper level CS)

HIST 1301 American History 3

Approved Elective\*\*\*\*\* 3

CSEN Elective\*\*\*\* 3

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*Total Number of Hours: 120*CSEN 4202 Senior Project (prereq: senior standing) or

EEEN 4224 Electrical & Computer Engineering Projects Lab 2

(prereq: EEEN 4252)

HIST 1302 American History 3

EEEN 4358 Embedded Systems 3

(prereq: EEEN 3449, EEEN 4355

EECS Elective\*\*\* 3

EECS Elective\*\*\* 3

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1 Pre-Engineering Students and Alternate Pre-Engineering Students are required to take UNIV 1201 instead of GEEN 1201.

\* All general education elective courses must be chosen from the approved elective list, after discussions with the academic advisor.

\*\*COMS 2374, or ENGL 2374 is strongly recommended.

\*\*\* Approved CSEN or EEEN elective must be chosen to satisfy a professional objective and must be chosen with the consent of the academic advisor or the department chair.

\*\*\*\* Approved upper level CSEN elective must be chosen to satisfy a professional objective and must be chosen with the consent of the academic advisor or the department chair.

\*\*\*\*\* CEEN 3317 or Approved CSEN or EEEN elective must be chosen to satisfy a professional objective and must be chosen with the consent of the academic advisor or the department chair.

^^ECON 2301 or ECON 2302 is strongly recommended.

^For courses listed under Core Curriculum “Components” see “General Requirements for Graduation with a Baccalaureate Degree” in an earlier section of this Catalog.

**General Education Electives**

**\* Recently added to the general education electives list**

**^Creative Arts**

ARTS 1303, ARTS 1304

MUSI 1305, MUSI 2306, MUSI 2308, MUSI 2310. MUSI 2320

THEA 2310

**^Language, Philosophy and Culture**

ANTH 2302

ENGL 2342, ENGL 2362

FREN 1311, FREN 1312, FREN 2311, FREN 2312

HIST 2321, HIST 2322

PHIL 1301

SPAN 1313, SPAN 1314, SPAN 1373, SPAN 2301, SPAN 2302,

SPAN 2311, SPAN 2312

WGST 1301

**^Communication**

COMM 1307

COMS 1311, COMS 1315, COMS 2374

ENGL 2374 (recommended)

**^Social/Behavioral**

ANTH 2301

ECON 2301, ECON 2302

EDKN 2335

EVEN 2372

HSCI 2323

POLS 2304, POLS 2340

PSYC 2301

SOCI 1301, SOCI 1306, SOCI 2361