

## 1. Foundations in Electrical and Computer Engineering – Take 16 Required Courses - 54 hours

- EE 1014: Introduction to Electrical Engineering
- EE 1024: Introduction to Computer Engineering
- EE 2104: Circuits I
- EE 2114: Circuits II
- EE 2213: Instrumentation Laboratory
- EE 3214: Electromagnetics and Materials I
- EE 3343: Electronics I
- EE 3513: Digital Signals and Systems
- EE 3613 Computer Organization
- EE 3753 Intro to Computer Networks
- EE 3954: Microprocessors and Microcontrollers
- EE 4673: Embedded Systems
- EE 4683: Computer Architecture
- EE 4953: EE and CpE Capstone Design I
- EE 4963: EE and CpE Capstone Design II
- CS 4420: Operating Systems (3.0)

## 2. Senior EE/CS Electives – Choose 2 Courses – (minimum of 6 hours)

- EE 4053: Physical and Power Electronics
- EE 4143: Design of Digital Circuits
- EE 4183: Micro and Nano Fabrication
- EE 4213: Feedback Control Theory
- EE 4313: Optoelectronics and Photonics
- EE 4403: Microwave Theory and Devices
- EE 4523: Intro to Electric Power System Engineering & Analysis
- EE 4713: Communication Engineering
- EE 4853: Electronic Navigation Systems
- EE 4913: Programmable Logic Controllers
- CS 4000: Intro to Distributed, Parallel, & Web-Centric Computing (3.0)
- CS 4040: Design & Analysis of Algorithms (3.0)
- CS 4060: Computation Theory (3.0)
- CS 4100: Intro to Formal Lang.&Compilers (3.0)
- CS 4160: Prblm Solving w/ Bioinf. Tools (3.0)
- CS 4170: Programming for Bioinformatics (3.0)
- CS 4250: Interactive Computer Graphics (3.0)
- CS 4440: Data Communications (3.0)
- CS 4500: Advanced Object Oriented Design & GUI Techniques (3.0)
- CS 4580: Operating Systems II (3.0)
- CS 4620: Database Systems (3.0)
- CS 4750: Internet Engineering (4.0)
- CS 4800: Artificial Intelligence (3.0)
- CS 4201: Software Verification (3.0)

## 3. Technical Electives – Choose 2 Courses – (min: 6 hours) ) (+0.5 ET 1500 Career Orientation).

- Any EE 4XXX,
- Any CS 4XXX,
- Any MATH 4XXX;
- MGT 2000;
- ME 3510 (CAD);
- CE 3400 (Fluid Mech);
- ET 2240 (Dynamics);
- ET 3200 (Thermo);
- ET 1500 (Career)
- ET 2300 (Materials);
- ET 2220 (Strengths)

## 4. Math&Basic Science (Take 7 Required + 1 Elective) (min: 32 hours; Accreditation Requirement)

- MATH 2301: Calculus I (4.0)
- MATH 2302: Calculus II (4.0)
- CS 3000: Intro to Discrete Structures (4.0)
- CHEM 1510: Fundamentals of Chemistry I (4.0)
- PHYS 2051: Gen. Phys (5.0)
- EE 3713: Applied Probability & Statistics
- EE 2324: Analytical Foundations of EE
- Science Elective with Lab (4.0) [ >PHYS 2502 .or. >CHEM 1510 .or. (BIOS 1700 .and. BIOS 1705)]

## 5. Additional Requirements-(15 semester hours General Engineering+14 hours of General Education)

- **Take Four Computer Science Courses for General Engineering (15 hours)**
  - CS 2400: Introduction to Computer Science - I (4.0)
  - CS 2401: Introduction to Computer Science - II (4.0)
  - CS 3560: Software Engineering Tools and Practices (3.0)
  - CS 3610: Data Structures (4.0)
- **Take Six General Education Courses:** (14 hours = 3+3+2+2+2+2) (1E;1J;2CP;2HL;2FA;2SS)

## 6. IMPORTANT NOTES:

- a) **You cannot use the** same course to satisfy two program requirements at the same time (unless in TierIII or in Minors).
- b) **Failing a Required** course 3-times (with F, WF, FS, or with < C in EE 2104, MATH 2301, 2302 ), forces you out of the program.
- c) **Cannot retake** class to improve a grade, if the class is a prereq to another class that you have already passed.
- d) **To graduate:** You need three (OU, ENT, Major) GPAs > 2.0 and at least 127 hours of credit.