

## BSEE Electrical & Electronics Engineering Fall 2024

This document is an example of a BSEE program of study. Several factors can affect the course scheduling sequence. For a copy of the official curriculum, please go to the UGA Bulletin: <http://bulletin.uga.edu/>

### Major Requirements

Students must earn a grade of "C" (2.0) or better in the courses indicated in **bold**.

### High Demand Entrance Requirements

To be considered as a candidate for BSEE, students must complete the courses indicated in *italics*. For more information on entrance requirements, please refer to the UGA Bulletin: <http://bulletin.uga.edu/> and our website: <https://engineering.uga.edu/>.

| YEAR ONE                  |  |              |                           |                                     |              |
|---------------------------|--|--------------|---------------------------|-------------------------------------|--------------|
| <u>Fall Semester</u>      |  | <u>Hours</u> | <u>Spring Semester</u>    |                                     | <u>Hours</u> |
| <b>MATH 2250</b>          | <i>Calculus I</i>                        | <b>4</b>     | <b>MATH 2260</b>          | <i>Calculus II</i>                  | <b>4</b>     |
| <b>PHYS 1251</b>          | <i>Physics for Engineers I</i>           | <b>3</b>     | <b>PHYS 1252</b>          | <i>Physics for Engineers II</i>     | <b>3</b>     |
| <b>ECSE 1100</b>          | <i>Intro to ECSE</i>                     | <b>3</b>     | <b>CSEE 2220</b>          | <i>Fundamentals of Logic Design</i> | <b>3</b>     |
| <b>ENGL 1101</b>          | <i>English Composition I</i>             | <b>3</b>     | ENGL 1102                 | English Composition II              | <b>3</b>     |
|                           | Life Science Elective*                   | <b>3</b>     |                           | World Lang & Culture Elective       | <b>3</b>     |
| FYOS                      | First-Year Odyssey                       | <b>1</b>     |                           |                                     |              |
| <b>Total Credit Hours</b> |  | <b>17</b>    | <b>Total Credit Hours</b> |                                     | <b>16</b>    |
| YEAR TWO                  |  |              |                           |                                     |              |
| <u>Fall Semester</u>      |  | <u>Hours</u> | <u>Spring Semester</u>    |                                     | <u>Hours</u> |
| <b>MATH 2700</b>          | <i>Differential Equations</i>            | <b>3</b>     | <b>MATH 2500</b>          | <i>Multivariable Calculus</i>       | <b>3</b>     |
| <b>ECSE 2170+L</b>        | <i>Fundamentals of Circuit Analysis</i>  | <b>3</b>     | ECSE 2920                 | ECSE Design Methodology             | <b>3</b>     |
| <b>INFO 2000</b>          | <i>Experiential Data Science Spec. I</i> | <b>3</b>     | ELEE 2045                 | Programming Applications for EE     | <b>2</b>     |
| COMM 1110                 | Intro to Public Speaking                 | <b>3</b>     | ENGR 2090                 | Probability & Statistics for Engrs  | <b>3</b>     |
| CHEM 1211&L               | Freshman Chemistry I                     | <b>4</b>     | ELEE 3270                 | Electronics I                       | <b>3</b>     |
|                           |  |              |                           | Social Sciences Elective            | <b>3</b>     |
| <b>Total Credit Hours</b> |  | <b>16</b>    | <b>Total Credit Hours</b> |                                     | <b>17</b>    |
| YEAR THREE                |  |              |                           |                                     |              |
| <u>Fall Semester</u>      |  | <u>Hours</u> | <u>Spring Semester</u>    |                                     | <u>Hours</u> |
| ELEE 4210                 | Linear Systems                           | <b>3</b>     | CSEE 4210                 | Digital Signal Processing           | <b>3</b>     |
| ELEE 4270                 | Electronics II                           | <b>3</b>     | ELEE 4220                 | Feedback Control Systems            | <b>3</b>     |
| ENGR 2110                 | Engineering Decision Making              | <b>3</b>     | ECSE 4230                 | Embedded Systems Design I           | <b>3</b>     |
| ELEE 4230                 | Sensors & Transducers                    | <b>3</b>     | ELEE 4710                 | Fundamentals of Power Engineering   | <b>3</b>     |
| ELEE 4020                 | Electromagnetics                         | <b>3</b>     |                           | Social Sciences Elective            | <b>3</b>     |
| <b>Total Credit Hours</b> |  | <b>15</b>    | <b>Total Credit Hours</b> |                                     | <b>15</b>    |
| YEAR FOUR                 |  |              |                           |                                     |              |
| <u>Fall Semester</u>      |  | <u>Hours</u> | <u>Spring Semester</u>    |                                     | <u>Hours</u> |
| ELEE 4910                 | EE Capstone Design I                     | <b>2</b>     | ELEE 4911                 | EE Capstone Design II               | <b>2</b>     |
| ELEE 4750                 | Power System Analysis                    | <b>3</b>     | ELEE 4590                 | Principles of Communication Systems | <b>3</b>     |
| ENGR 3140                 | Thermodynamics I                         | <b>3</b>     |                           | Major Elective                      | <b>3</b>     |
|                           | Major Elective                           | <b>3</b>     |                           | Major Elective                      | <b>3</b>     |
|                           | Major Elective                           | <b>3</b>     |                           | Social Sciences Elective            | <b>3</b>     |
|                           | World Lang & Culture Elective            | <b>3</b>     |                           | World Lang & Culture Elective       | <b>3</b>     |
| <b>Total Credit Hours</b> |  | <b>17</b>    | <b>Total Credit Hours</b> |                                     | <b>17</b>    |

\*Life Science Elective: For complete information on these options, please go to the UGA Bulletin: <http://bulletin.uga.edu/GenEdCoreBulletin.aspx>. This should also meet the [Environmental Literacy University Requirement](#).

**Major Electives:** Choose at least four elective courses numbered 3000-4949 and comprising 12 or more credit hours. At least one must be a course from the [CSEE](#), [ECSE](#), [ELEE](#), or [INFO](#) prefixes. The remaining can be courses from the [AENG](#), [AERO](#), [ARTI](#), [ASTR](#), [BCHE](#), [BCMB](#), [BINF](#), [BIOE](#), [BIOS](#), [CBIO](#), [CHEM](#), [CSCI](#), [CSEE](#), [CURO](#), [CVLE](#), [ECOL](#), [ECSE](#), [ELEE](#), [ENGR](#), [ENTO](#), [ENVE](#), [GENE](#), [GEOL](#), [GISC](#), [INFO](#), [MATH](#), [MCHE](#), [MIBO](#), [MIST](#), [PBIO](#), [PHYS](#), or [STAT](#) prefixes. Research credits and internship/co-op credits are not "courses" for this purpose, and are treated differently: Refer to the Bulletin or speak to your advisor.