# Graduate Program Learning Outcomes for Electrical and Computer Engineering

Updated: January 23, 2023

**GSLG #1: *Understand, interpret, shape, and augment the knowledge base.***

- PLO #1: Demonstrate facility with methods of advanced engineering analysis and design.
- PLO #2: Solve complex electrical and computer engineering problems by using advanced engineering analysis and design methods.
- *Satisfied by:* Many courses in our graduate seminar talks, thesis or dissertation. Representative student work could be seminar representations, theses or dissertations.

**GSLG #2: *Share disciplinary expertise openly, effectively, and accurately.***

- PLO #3: Create professional-quality reports, engineering design projects, and/or presentations with significant technical content that address complex electrical and computer engineering systems.
- *Satisfied by:* Classes with a design project that includes a report and/or presentation; thesis or dissertation. Representative student work would be seminar representations, theses, or dissertations.

**GSLG #3: *Demonstrate responsible and ethical practice.***

- PLO #4: Students will design hardware devices and systems, as well as software code, using engineering methodologies such as safety, reliability, compliance, efficiency, and privacy/security.
- *Satisfied by:* Classes with significant design content incorporating safety, reliability, compliance, efficiency, and privacy/security into coursework, research, and thesis. Representative student work could be seminar representations, theses, or dissertations. RCR Training.

**Table 1: Mapping of PLOs to the ECE core graduate courses**

| Course | PLO #1 | PLO #2 | PLO #3 | PLO #4 |
|---|---|---|---|---|
| ECE 598 Seminar | X | X | X | X |
| ECE 699 Research | X | X | X | X |