**MEng Design Project Announcement – 2018-19 AY**

**Project title:** Design and testing of a printed circuit board (PCB) for a wireless backscatter RFID-style communication system.

**Brief Description of Design Project Goals:**

**Overview:** Students will design a PCB for a near-field backscatter RFID-style system to allow communication with a custom integrated circuit that will be mounted on a honeybee. Students will select and order components, and students will assemble and test the PCB. The PCB must meet sizing and performance specifications set by the needs of the application.

**Specific MEng Contribution:** Students will learn the Altium Designer PCB design software, which is widely used in industry. Students will learn RF board design and layout, and learn to use RF testing equipment.

**ECE Field Advisor Name:** Alyosha Molnar
- Email – am699@cornell.edu
- Phone -
- Office – Phillips 423

**Number of MEng Students Needed:** Two is preferred.

**Required Skills:**
Analog circuits knowledge on the level of ECE 3150.
Knowledge of basic RF and Microwave theory is preferred, but not required.

**Estimated Project Time Frame:**
2018-19 Academic Year, Two (2) Semesters