#### ECE 6910 - INTRODUCTION TO GRADUATE RESEARCH

## **Catalog Description:**

Lec. 1. Cr. 1.

Prerequisite: Graduate student standing.

Research tools and written and oral presentations in electrical and computer engineering area; graduate thesis; ethics in research.

Course Coordinator: Dr. Mohamed Mahmoud

Updated: 1/28/2015

# **Textbook(s) and Supplemental Material(s):**

Required: None References:

ECE Department website:

https://www.tntech.edu/engineering/departments/ece/

College of Graduate Studies Website: https://www.tntech.edu/graduatestudies/degrees

University Graduate Catalog Website: <a href="http://catalog.tntech.edu/index.php?catoid=14">http://catalog.tntech.edu/index.php?catoid=14</a>

Electronic Thesis/Dissertation Information Website:

https://www.tntech.edu/graduatestudies/currentstudent/etd

#### **Course Goal(s):**

To familiarize ECE graduate students with the various aspects of graduate study and research.

### **Instructional Outcomes for the Course:**

Upon completion of this course, the student will be able to:

- 1. Navigate requirements for degree completion.
- 2. Select appropriate publication venue.
- 3. Conduct a literature review.
- 4. Understand the characteristics of a good technical paper.
- 5. Write an abstract for a technical publication.
- 6. Make a technical presentation.
- 7. Understand ethics in research and publishing.

### **Course Topics:**

- 1. Graduate degree requirements
- 2. Steps in research process
- 3. Library usage and literature search
- 4. Characteristics of good technical papers
- 5. Review of journal articles
- 6. Identification of research problems

- 7. Ethical issues in research and thesis writing
- 8. Technical presentation
- 9. Active listening of technical presentations