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**East Tennessee State University • Department of Engineering Technology**  
**ENTC 4957/5957-002 • Introduction to Mechatronics • Spring 2012**



**Instructor** Mr. Garth Ghearing  
**Classroom** 111C Wilson Wallis Hall  
**Class times** Tuesday and Thursday 9:45-12:35AM  
**E-mail** ghearingg@etsu.edu  
**Phone** (423) 439-7825  
**Office** 111A Wilson Wallis Hall  
**Office Hours** Mon., Wed., & Fri. 6:45-9:15AM  
**Class Homepage** <https://elearn.etsu.edu/d2l/>

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**I Course Description, Credit Hours, and Prerequisites**

ENTC 4957/5957-002 (4 credits). Introduction to Mechatronics. The design and development of both remote controlled and autonomous robotics. Lecture and Lab.

**II Course Objectives**

The purpose of this class is to allow the students to work on a real world engineering technology assignment with complex requirements. Upon the successful completion of the course, the student will have developed and demonstrated the ability to:

- design and fabricate a mechanical structure for fulfilling a predetermined task;
- develop a microcontrolled system of motors and sensors for this structure;
- program the completed robotic system to perform other dissimilar tasks;
- work together with other classmates in a collaborative effort towards a more complex system;

**III Texts and Materials**

No Text Required

**IV Attendance Policy**

Attendance may be taken at any time during each class meeting. ***Your presence and participation are important.*** In-class design/programming assignments will not necessarily be announced prior to those class meeting(s).

**V Evaluation and Grading**

Grading is based on performance as revealed in the functionality and quality of the system's design and fabrication as well as the quality and comprehensiveness of the accompanying report and presentation about the system and its development.

	Percent of Final Grade
1. Project.....	50%
2. Paper/Presentation.....	50%
	Points Total 100%

**Minimum Score to Receive**

A = 90    B+ = 87    B = 83    B- = 80    C+ = 77    C = 70    F = Below 60%

**VI Attachment Link for Academic Misconduct, Disabilities, Counseling, Dates, Tutoring, etc.**

<http://www.etsu.edu/reg/academics/syllabus.aspx>