

## Engineering Technology

**Course Number and name:** ET 362 Software Technology II

**Credits & Contact Hours:** ET 362 is 3cr. Each week has two lectures of 75 min(3 cr ). Total semester contact hours are approximately 45 hr.

**Instructor's name:** Lynn Kelly

**Textbook title, author, and year:** *Introduction to Java Programming, Y. Daniel Liang* Prentice Hall, 2011;

**Additional Materials:** Java

### **Specific Course Information:**

- a) **Course Catalog Description** – A continuation of topics from E T 262 that are directed toward more advanced software development. Topics include problem analysis, object oriented, structured logic, and development concepts.
- b) **Prerequisite:** ET 262 and Math 190
- c) This course is required for the ECET and IET degrees. It can be taken as part of the Digital Applications Minor.

### **Course Goals & Objectives:**

Introduce students to the following.

- Reinforcement of basic programing skills.
- Advanced software development. Problem analysis, object oriented, structured logic and development concepts.
- Class structures.

**Related ABET Objectives and Outcomes:** The department of Engineering Technology and Survey Engineering the ECET and IET option has an objective of having its graduates possess the following skills and knowledge.

1. An appropriate mastery of the knowledge, techniques, skills and the modern tools of their disciplines including:
  - The use of application software; the design and use of operating systems; and **the analysis, design, testing, and documentation of computer programs in support of electronic**, instrumentation, communications, control, and/or computer **systems**.

### **Course topics and lecture hours devoted to each topic:**

TOPICS	HRS.
• Review of basic concepts	
• Sequential programming	3
• Selection statements	3
• Loops	3
• Problem Solving	9

• Arrays	6
• Class Structure	9
• GUI intro	6
• Project	12
• Tests Problem Solving and Examples	8

**Prepared by: Lynn Kelly**

**Date: 1/15/11**