EEO224: Object Oriented Programming for Electrical and Computer Engineers

2003-2014 Catalog Description: An introduction to object oriented programming using the C++ language. Key aspects of object oriented programming including polymorphism, encapsulation, data hiding, and inheritance will be discussed, as will the difference between procedural and object oriented programming. Good practices to enable effective collaboration and code reuse will be considered. The use of C++ as a hardware description language will be briefly described. Students gain experience in applying the C++ language to the solution of a variety of electrical and computer engineering problems.

Learning Objectives:
1) Gain an understanding of the main concepts of object oriented Programming.
2) Be able to read, write, and modify object oriented code in C++
3) Demonstrate proficiency in writing correct, well documented, and reusable code

Program OUTCOMES AND ASSESSMENT

On the following "3 a-k" list, please check those topics which are covered within the course:
- (a) ability to apply knowledge of math, engineering, and science
- (b1) ability to design and conduct experiments
- (b2) ability to analyze and interpret data
- (c) ability to design system, component or process to meet needs ✔ 35
- (d) ability to function on multi-disciplinary teams
- (e) ability to identify, formulate, and solve engineering problems ✔ 25
- (f) understanding of professional and ethical responsibility
- (g) ability to communicate effectively
- (h) broad education
- (i) recognition of need an ability to engage in life-long learning
- (j) knowledge of contemporary issues
- (k) ability to use techniques, skills, and tools in engineering practice ✔ 40

Any other outcomes and assessments?