Master Syllabus

EET 2259 - Programming for Electronics Technology

Division: Science, Mathematics and Engineering

Department: Electronics Engineering Technology

Credit Hour Total: 4.0   **Lecture Hrs:** 3.0 **Lab Hrs:** 2.0

Prerequisite(s): EET 2201 AND EET 1131

Date Revised: October 2012

Course Description:

Computer solutions of engineering technology problems using LabVIEW. Covers the LabVIEW programming environment and virtual instruments, datatypes, debugging, sub-virtual instruments, programming structures, arrays, graphical presentation and analysis, file input/output, instrument control, data acquisition, and applications to electronic circuits. Three classroom, two lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Programming skills
Apply graphical programming skills using LabVIEW for problem solving and critical thinking.

> **Assessment Method:** Locally developed exams
> **Performance Criteria:** Correctly answer at least 70% of exam questions

Interfacing and control
Apply programming skills to interface with and control electronic systems.

> **Assessment Method:** Locally developed exams
> **Performance Criteria:** Correctly answer at least 70% of exam questions

Automated circuit analysis
Use LabVIEW to analyze circuits and electronic systems.

> **Assessment Method:** Locally developed exams
> **Performance Criteria:** Correctly answer at least 70% of exam questions

Outline:

LabVIEW Virtual Instruments (VIs)
Editing & debugging techniques
Datatypes
Sub-VIs
Structures
Arrays & Clusters
Charts & graphs
File I/O
Data acquisition
Data analysis
Instrument control
Applications to electronic circuits