

CATALOG YEAR 2011-2012

(Please use separate form for each add/change)

COLLEGE/SCHOOL/SECTION: _____ College of Arts and Sciences _____

Current Catalog Page(s) Affected: pp. _____ On Line _____

Course: Add: _____ Delete: _____ Change: Number _____ Title _____

(check all that apply) SCH _____ Description Prerequisite _____

If new, provide Course Prefix, Number, Title, SCH Value, Description, prerequisite, lecture/lab (hours if applicable) and **student learning outcomes**. If in current catalog, provide change and attach page with changes in red and provide a brief justification.

Revised System Engineering Courses

SENG 3370 *Computer Integrated Manufacturing*. Three semester hours. (*)
Programmable automation applied to manufacturing systems. ~~Programmable logic controllers,~~ sensors, and data acquisition. Continuous and discrete control system design and analysis. Computer control of manufacturing processes and integration. Communications through local areas networks. Prerequisite: SENG 3310. **Course Fee: \$35.**

Justification

The topic “Programmable logic controllers” is covered in SENG 3310. Also, a course fee of \$35 needs to be added for this course.

Justification for Adding Course Fee

This course requires several softwares such as LabView, MatLAB, Microsoft Academic Licenses (MSDN Licenses). The cost of the above mentioned softwares and renewal fees per year are:

1. LabView—\$7,999 For Academic Department License with \$500 renewal fees after 5 years.
2. Matlab—\$9,000 for 100 concurrent users licenses for with \$90 per user per year renewal fees.
3. MSDN Academic Alliance (Microsoft softwares)—\$1,200 for the Department Licenses with renewal fee of \$500 per year after 3 years.

Also, during the course period students use different electronic parts including programmable logic controllers, integrators, C/C++ compilers for programming robots, etc., which incur costs to replace and restore parts for student usages. Therefore, an average cost of \$35 needs to be added as a course fee for SENG 3370 to purchase of different electronic products and renewal/update the software licenses.

Program: Add: _____ Change: _____ Attach new/changed Program of Study description

and 4-year plan. If in current catalog, provide change and attach page with changes in red.

Minor: Add: _____ Delete: _____ Change: _____ Attach new/changed minor.
If in current catalog, provide change and attach page with changes in red.

Faculty: Add: _____ Delete: _____ Change: _____ Attach new/changed faculty entry.
If in current catalog, provide change and attach page with changes in red.

College Introductory Pages: Add information: _____ Change information: _____
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

Other: Add information: _____ Change information: _____
Attach new/changed information. If in current catalog, provide change and attach page with changes in red.

| Approvals: | Signature | Date |
|--|-----------|-------|
| Chair Department Curriculum Committee | _____ | _____ |
| Chair Department | _____ | _____ |
| Chair College Curriculum Committee | _____ | _____ |
| Dean | _____ | _____ |