61. Special Consideration

**Dwight Look College of Engineering**
Department of Engineering Technology and Industrial Distribution
Minor in Embedded Systems Integration
Request for a new minor
SPECIAL CONSIDERATION
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DWIGHT LOOK COLLEGE OF ENGINEERING
DEPARTMENT OF ENGINEERING TECHNOLOGY AND INDUSTRIAL DISTRIBUTION
MINOR IN EMBEDDED SYSTEMS INTEGRATION
REQUEST FOR A NEW MINOR
October 8, 2014

MEMORANDUM

TO: Dr. Tim Scott, Chair, Undergraduate Curriculum Committee

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs

FROM: Dr. Reza Langari, ETID Department Head

SUBJECT: Request for Minor – Embedded Systems Integration

The Electronic Systems Engineering Technology (ESET) program is requesting permission to create a minor in the area of embedded systems integration. As a fundamental component in most modern products and systems, embedded systems are used across a wide range of industries that span areas such as medical, oil/gas, process control, automotive, and quality of life. The ESET program is in a unique position to offer a minor that covers not only embedded systems hardware and software development but also how they these systems are used in modern products and systems. Because the minor begins with a sophomore course that does not have a prerequisite, it will be accessible to not only engineering students but also interested students outside of the College of Engineering. The minor will be of interest to students who are interested in how modern products such as cell phones, cars, and mobile devices function.

The minor will consist of 5 courses for a total of 18 hours, all offered by the Department of Engineering Technology and Industrial Distribution. These courses will include:

- ENTC 219 – Digital Electronics
- ENTC 269 – Embedded Systems Development in C
- ENTC 333 – Product Development
- ENTC 349 – Microcontroller Architecture
- ENTC 369 – Embedded Systems Software

Restrictions include:

- Students must make a C or better in all courses

NOTE: A request to change the course prefix from ENTC to ESET for these courses has already been submitted. Thus, these courses will change to ESET courses in the future.

NOTE: ENTC 369 normally requires registration in ENTC 350. The requirement will be waived for students outside of the ESET program pursuing the Embedded Systems Integration minor.
Texas A&M University
Proposed Minor Field of Study

Name of Minor Program: Embedded Systems Integration

Department: Engineering Technology and Industrial Distribution

College: Engineering

Will grant a minor ☑ Yes ☐ No Academic Year: 2014-2015

A selection from among the following courses will constitute a minor field of study.

A. The following 18 hours of course work are required.
   ENTC 219
   ENTC 269
   ENTC 349
   ENTC 369
   ENTC 333

B. Select _____ hours from the following courses.

Please indicate further requirements such as grade point requirement, prerequisites, resident (if above the minimum 6 hours at the 300- to 400-level), capstone or methods courses.

Minimum of 18 hours required.

Minimum of 6 hours at 300- to 400-level

(Note: ENTC 369 normally requires registration in ENTC 350. This requirement will be waived for students outside of the ESET program pursuing this minor.)

All courses must be passed with a C or better.

Reviewed and approved by:

Department Head/Program Director

Date

AOC Dean of College

Date