 **New Academic Program Submission**

**REGISTRAR’S OFFICE**

University of Cincinnati PO Box 210060, Cincinnati, OH 45221-0060 Telephone: 513-556-9900; E-mail: registrar.info@uc.edu

This form must be completed when a new academic program is created. The form is required to clearly define the characteristics of the program. This program and its code will become part of UC’s official list of programs. It will be used to identify students in the program, for advising, and will appear on the student’s transcript at the time of graduation. It will be reported as a unique program code to the Ohio Board of Regents (OBR) and will be reported every quarter to OBR along with each student’s enrollment record. Review by the appropriate College Dean and the Provost’s Office is required before a code is assigned in the student information system (UniverSIS). A copy of the new program proposal, as well as OBR approval, if appropriate, must be attached.

College Engineering and Applied Science

Program award (e.g., Bachelor of Arts): Minor

Program academic area/major (e.g., History): Embedded Systems (housed in SECS, School of Electronic and Computing Systems)

Number of credit hours required for the academic program: 19-20

Length of the academic program (in years): one

Credit level of the academic program: **Undergraduate** Graduate Professional

Beginning term of the academic program: Fall 2012

Special comments or characteristics of the program (e.g. distance learning, etc.):

This is a new minor created during the reorganization of SECS programs in preparation for conversion to semesters and designed to provide the opportunity for science and engineering students to develop specific expertise in the area or embedded systems

Submitted by: A. Helmicki, Interim Director, School of Electronic & Computing Systems (SECS) Date: 07/19/2011

Phone number: 556-6069 Mail Location: 30

Approval — College Dean: Date:

Approval — Graduate School: Date:

Approval — Provost’s Office: Date:

**Submit the completed form to the Office of the Registrar, ML 0060.**

Registrar Comments: Date:

Department of Enrollment Management  Division of Student Affairs and Services REV 8/11/10

SECS--Proposed Minor under Semesters--approved by CEAS Faculty Tuesday, May 31, 2011

**Embedded Systems (6 courses, 19-21 credits)**

**Learning Objectives:**

1. Students will demonstrate in-depth knowledge of the science and engineering concepts important in the development of embedded systems.

2. Students will demonstrate the ability to design a system or component for an embedded system.

3. Students will participate in the definition and completion of a team project related to embedded systems.

**Admission:**

Open to all students who satisfy course prerequisites.

**Requirements:**

1. Required courses--4 hours

EECE6017C Embedded Systems

2. Senior Project/Capstone--6 hours

3. Elective Group A--3-7 hours. One or two courses chosen from:

EECE4029 Operating Systems & Systems Programming

EECE4038C Embedded System Design

EECE4090 Control Systems

EECE6007 Biomedical Microsystems

4. Elective Group B 3--3--7 hours. One or two courses chosen from:

EECE3026 Introduction to Computer Architecture & Organization

EECE6015C Instrumentation & Industrial Control

ELTN4015 Flexible Automation

**Restrictions on Courses Chosen:**

* The student must choose the appropriate senior design or capstone course for their major.
* The senior design or equivalent capstone and advanced coursework must have an embedded systems focus.
* The senior design or equivalent capstone and advanced coursework must be approved in advance by the Embedded Systems Minor advisor.
* No more than 6 credit hours can come from courses required for the student's major(s).

**Transformative Changes:**

This is a new minor created during the reorganization of SECS programs in preparation for conversion to semesters and designed to provide the opportunity for science and engineering students to develop specific expertise in the area of embedded systems.