REQUEST FOR NEW COURSE

1. **General Information.**

   a. Submitted by the College of: Engineering   Today's Date: Nov. 9, 2009

   b. Department/Division: Electrical and Computer Engineering

   c. Contact person name: YuMing Zhang   Email: ymzhang@engr.uky.edu   Phone: 7-6262 Ext. 223

   d. Requested Effective Date: ☒ Semester following approval   OR   ☐ Specific Term/Year[1] : _____

2. **Designation and Description of Proposed Course.**

   a. Prefix and Number: EE 780

   b. Full Title: Advanced Practice in Electrical and Computer Engineering

   c. Transcript Title (if full title is more than 40 characters):   Advanced Practice Electr & Compu Eng

   d. To be Cross-Listed[2] with (Prefix and Number):   _____

   e. Courses must be described by <u>at least one</u> of the meeting patterns below. Include number of actual contact hours[3] for each meeting pattern type.

   _____ Lecture   _____ Laboratory[1]   _____ Recitation   _____ Discussion   _____ Indep. Study

   _____ Clinical   _____ Colloquium   XX Practicum   _____ Research   _____ Residency

   _____ Seminar   _____ Studio   _____ Other – Please explain: _____

   f. Identify a grading system: ☒ Letter (A, B, C, etc.)   ☐ Pass/Fail

   g. Number of credits: 1 - 3

   h. Is this course repeatable for additional credit?   YES ☒   NO ☐

   If YES: Maximum number of credit hours: 6

   If YES: Will this course allow multiple registrations during the same semester?   YES ☐   NO ☒

   i. Course Description for Bulletin: Apply advanced training in electrical/computer engineering to solve complex practical problems through analysis, design, implementation, experiments, and/or developments subject to approval of the course instructor. This course may be repeated for a maximum of 6 credit hours in combination with EE 783.

   j. Prerequisites, if any: 18 hours of graduate courses

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[1] Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

[2] The chair of the cross-listing department must sign off on the Signature Routing Log.

[3] In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)

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k. Will this course also be offered through Distance Learning?   YES[4] ☐   NO ☒

l. Supplementary teaching component, if any: ☐ Community-Based Experience   ☐ Service Learning   ☐ Both

3. **Will this course be taught off campus?**   YES ☐   NO ☒

4. **Frequency of Course Offering.**

a. Course will be offered (check all that apply):   ☒ Fall   ☒ Spring   ☒ Summer

b. Will the course be offered every year?   YES ☒   NO ☐

If NO, explain: _____

5. **Are facilities and personnel necessary for the proposed new course available?**   YES ☒   NO ☐

If NO, explain: _____

6. **What enrollment (per section per semester) may reasonably be expected?**   10

7. **Anticipated Student Demand.**

a. Will this course serve students primarily within the degree program?   YES ☒   NO ☐

b. Will it be of interest to a significant number of students outside the degree pgm?   YES ☐   NO ☒

If YES, explain: _____

8. **Check the category most applicable to this course:**

☐ Traditional – Offered in Corresponding Departments at Universities Elsewhere

☒ Relatively New – Now Being Widely Established

☐ Not Yet Found in Many (or Any) Other Universities

9. **Course Relationship to Program(s).**

a. Is this course part of a proposed new program?   YES ☐   NO ☒

If YES, name the proposed new program: _____

b. Will this course be a new requirement[5] for ANY program?   YES ☐   NO ☒

If YES[5], list affected programs: _____

10. **Information to be Placed on Syllabus.**

a. Is the course 400G or 500?   YES ☐   NO ☒

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in **10.b**. You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See *SR 3.1.4.*)

b. ☐ The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10.a** above) are attached.

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[4] You must *also* submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.
[5] In order to change a program, a program change form must also be submitted.

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Signature Routing Log

General Information:

Course Prefix and Number: EE 780

Proposal Contact Person Name: YuMing Zhang   Phone: 76262X223   Email: ymzhang@engr.uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
ECE Faculty	1/26/2010	Larry Holloway/3-8523/holloway@engr.uky.edu	_Larry Holloway_
College of Engineering Faculty	3/26/10	RICHARD J. SWEIGARD/7-1864/rsweigar@engr.uky.edu	_Richard Sweigard_
		/ /	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision[6]
Undergraduate Council			
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

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[6] Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

EE 780 *Syllabus*
Advanced Practice in Electrical and Computer Engineering

Instructor:

YuMing Zhang

Professor of Electrical Engineering

Dept. of Electrical and Computer Engineering

414P CRMS Building

E-mail: ymzhang@engr.uky.edu

Description: Apply advanced training in electrical/computer engineering to solve complex practical problems through hands-on analysis, design, implementation, experiments, and/or developments subject to approval of the course instructor. This course may be repeated for a maximum of 6 credit hours in combination with EE 783.

Prerequisite: MS and PhD students in electrical engineering and completion of 18 hours of graduate courses.

Course Requirements: The student must submit a 2-page mini proposal with a faculty or industrial sponsor for a project that utilizes advanced training in electrical/computer engineering to resolve complex practical problems through hands-on analysis, design, implementation, experiments, and/or developments for the approval from the instructor. The proposal will include objective, proposed task, and anticipated results. A report will be submitted to document the performed work and achieved results.

Grading: Achievement of anticipated results 60%, innovation/creativity: 20%, report: 20%.

Final Grade: A letter grade will be assigned as following: 90% or higher (A), 80% – 89% (B), 70% – 79% (C), 70% or lower.