A. M.S. RECOMMENDED COURSES

To insure that EE graduate students have advanced knowledge in engineering principles, an EE recommended course program has been implemented. All M.S. students must participate in the EE recommended course program. Competency will be tested as part of the M.S. Comprehensive Exam. The current EE recommended courses are listed below. Students must choose at least three out of the following six courses:

- EE 203 – Solid State Devices and Circuits
- EE 204 – Advanced Electromagnetics
- EE 210 – Advanced Digital Signal Processing
- EE 215 – Stochastic Processes
- EE 235 – Linear System Theory
- EE 242 – Intelligent Systems
** Place your pointer on the underlined fields and start typing to fill in text, **
or use an X or a number to fill in "check-box" or numbered fields.

Current or proposed number: EE205(current) MSE237D(proposed) Effective: 2013 or 2014 W(Quarter and Year)

Check the box next to each item below that is to be revised. If an asterisk follows an item, see
the guidelines and instructions on the subsequent pages. If the proposed revision is
substantive, attach a syllabus.

[X] Number (current number: EE 205- MSE 237D)
[ ] Catalog description*
[ ] New segment to be added to an E-Z umbrella course*
[ ] Grading*
[ ] Segment to be restored to an E-Z umbrella course*
[ ] Repeatability*
[ ] Maximum number of units that may be earned
[ ] Number of times the course may be taken in the same quarter
[ ] Segment to be deleted from an E-Z umbrella course
[ ] Segment to be revised on an E-Z umbrella course
[ ] Title/Subtitle

[ ] Quarters offered
[X] Cross-listing
[ ] Instructor(s)
[ ] Overlap of course content with content of another course
[ ] Units*
[ ] Breadth requirement statement*
[ ] Activity or hours per week associated with an activity*
[ ] Affects programs and/or prerequisites or descriptions of other courses
[X] Prerequisite(s)

Course requirements (e.g., term papers, examinations)

Description of proposed revisions (attach additional sheets if necessary):

Basis of this request is for cross-listing of EE205 Optoelectronic and Photonic Devices under MSE 237D.

Justification for each proposed revision (attach additional sheets if necessary):

Based on constant request from MSE graduate students, cross-listing of EE205 under MSE 237D is requested. Currently, MSE students cannot count the credits of EE205 as MSE credits and cannot list this course for their Preliminary exam course selection. Since many MSE graduate students pointed out these facts and requested whether EE 205 can be cross-listed as an MSE 237D course, this request is prepared. Further, since EE 205 also emphasizes materials aspects and their impacts in the fields of optoelectronics and photonic devices, instructor believes that this course can be very beneficial to MSE graduate students conducting research in the fields of lasers, light emitting displays, solar cells, photodiodes, sensors, materials synthesis etc.
Also, the proposed prerequisites for this course are EE 203/MSE 237C or consent of instructor. The previous prerequisite EE 204 is not essential in understanding the material in EE 205, and hence will be dropped. Instructor has been waiving this requirement until today.

UNITS, ACTIVITIES, AND HOURS PER WEEK

Hours per week per unit of credit may not be less than but may exceed those listed below.

- One unit for each hour per week of lecture, seminar, discussion, colloquium, workshop, or consultation
- One unit for each three hours per week of laboratory, practicum, clinic, individual study, scheduled and outside research, fieldwork, extra reading, term paper or written work, screening, internship, tutorial, activity, thesis, and similar assigned problems
- One unit for each two to three hours per week of studio

Activities That Do Not Involve Faculty Contact (e.g., extra reading, individual study, outside research)

- **New Activity:** If an activity that does not involve faculty contact is being added, explain how that activity will be structured and evaluated.
- **Revised Activity:** If the hours per week associated with an activity that does not involve faculty contact are being revised, explain how that activity is structured and evaluated.
- **Restored Course:** If the course is being restored and has an activity that does not involve faculty contact, explain how that activity will be structured and evaluated.

Consultation Hours

If consultation hours are being added, explain how they will be monitored.

CATALOG DESCRIPTION

Write the description in the present tense and limit it to 50 words (do not count grading information, repeatability information, or a list of E-Z subtitles). If possible, do not use complete sentences. However, use sentences that contain more than a list of items or topics.

**Examples:**

Instead of "This course will introduce students to the history of . . .," use one of the following:

- Introduces the history of . . .
- An introduction to the history of . . .
- Introduction to the history of . . .

Instead of "Functions, equations, and graphs," use a format similar to one of the following:

- Explores functions, equations, and graphs . . .
- Topics include functions, equations, and graphs . . .
- A study of functions, equations, and graphs . . .

E-Z SEGMENTS

- **New Segment:** If a new segment is being added to an E-Z umbrella course, include a description of the segment and a syllabus for the segment.
- **Restored Segment:** If a segment is being restored to an E-Z umbrella course, include a syllabus for the segment.

GRADING STATEMENTS

If the grading conditions need to be explained in the Catalog description, choose one of the following:

- Graded Satisfactory (S) or No Credit (NC).
- Satisfactory (S) or No Credit (NC) grading is not available.
- Normally graded Satisfactory (S) or No Credit (NC), but students may petition the instructor for a letter grade on the basis of assigned extra work or examination.
- May be taken Satisfactory (S) or No Credit (NC) with consent of instructor and graduate advisor.
- May be taken Satisfactory (S) or No Credit (NC) by students advanced to candidacy for the Ph.D.
Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade.

Students who present a seminar receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade.

Students who present a seminar or submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade.

Other: ___

REPEATABILITY STATEMENTS
If the course is repeatable, one of the following statements will be added to the Catalog description: “Course is repeatable” or “Course is repeatable to a maximum of ____ units.” To replace the statement with one of the following, check the appropriate box.

___ Course is repeatable.
___ Course is repeatable to a maximum of ____ units.
___ Course is repeatable as content changes.
___ Course is repeatable as content changes to a maximum of ____ units.
___ Course is repeatable as topics change.
___ Course is repeatable as topics change to a maximum of ____ units.
___ Other: ___

BREADTH REQUIREMENT STATEMENTS
To change the breadth requirement information included in the Catalog description of a CPAC, ETST, FVC, HASS, or WMST course, choose one of the following:

___ Fulfills the Humanities requirement for the College of Humanities, Arts, and Social Sciences.
___ Fulfills the Social Sciences requirement for the College of Humanities, Arts, and Social Sciences.
___ Fulfills either the Humanities or Social Sciences requirement for the College of Humanities, Arts, and Social Sciences.
___ See the Student Affairs Office in the College of Humanities, Arts, and Social Sciences for breadth requirement information.
___ Does not fulfill the Humanities or Social Sciences requirement for the College of Humanities, Arts, and Social Sciences.
___ Other: ___

ADDITIONAL INFORMATION
For further information about course guidelines, see the General Rules and Policies Governing Courses of Instruction at senate.ucr.edu/Committees/courses/guidelines.pdf
Professional development training is a requirement of all M.A., M.S., M.F.A. and Ph.D. programs. Training typically includes elements of research and professional ethics, grant and professional writing, strategies for success in graduate school and the profession, pedagogy, public speaking, career and job market guidance, and other relevant topics to help students become successful professionals. Each program determines the format, content, and extent of its training in order to make it specific to and appropriate for the discipline. A program may provide all of its training independently, or it may partner with other programs or utilize services provided by other campus units or professional organizations. Training must be for unit credit and may be delivered as a single course or as portions of multiple courses.