1. General Information

1a. Submitted by the College of: ENGINEERING
Date Submitted: 2/11/2016

1b. Department/Division: Electrical and Computer Engineering

1c. Contact Person
   Name: Larry Holloway
   Email: holloway@uky.edu
   Phone: 859-323-8523

   Responsible Faculty ID (if different from Contact)
   Name:
   Email:
   Phone:

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: EE 391

2c. Full Title: Undergraduate Research Experience

2d. Transcript Title: Undergraduate Research Experience

2e. Cross-listing:

2f. Meeting Patterns
   RESEARCH: 3

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 1

2i. Is this course repeatable for additional credit? Yes
   If Yes: Maximum number of credit hours: 3
   If Yes: Will this course allow multiple registrations during the same semester? Yes

2j. Course Description for Bulletin: Research project or activity led by an engineering faculty member, designed to provide students research experience. Completion of this course requires that the student submit a report overviewing activities of the student and summarizing the experience. Course may be repeated to a maximum of three credit hours.
2k. Prerequisites, if any: Prerequisites: Submission of approved learning plan and approval of department.

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No
   If YES, enter the off campus address:

4. Frequency of Course Offering: Summer.
   Will the course be offered every year?: Yes
   If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes
   If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 5

7. Anticipated Student Demand
   Will this course serve students primarily within the degree program?: Yes
   Will it be of interest to a significant number of students outside the degree pgm?: No
   If Yes, explain:

8. Check the category most applicable to this course: Not Yet Found in Many (or Any) Other Universities
   If No, explain:

9. Course Relationship to Program(s):
   a. Is this course part of a proposed new program?: No
   If YES, name the proposed new program:
   b. Will this course be a new requirement for ANY program?: Yes
   If YES, list affected programs: This course is one course option to satisfy an "Experiences" credit in a proposed revision of BS Electrical Engineering and BS Computer Engineering.

10. Information to be Placed on Syllabus.
    a. Is the course 400G or 500?: No
    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: Yes

Distance Learning Form

Instructor Name:
Instructor Email:
Internet/Web-based: No
Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy, etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE B.JUSTOK J.Barbara J Brandenburg EE 391 NEW College Review 20180201
SIGNATURE J.METT2 Joanie Ett-Mims EE 391 NEW Undergrad Council Review 20180413
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Individual Learning Plan for

EE391: UNDERGRADUATE RESEARCH EXPERIENCE

Student Name:

Student ID Number:

Supervising Professor:

Semester:

On the following page, provide a synopsis (approximately 1 page) of the planned research experience to be completed by student in consultation with the supervising professor. The synopsis should include the following:

- Brief summary of the research topic or area
- Objectives of the student research experience
- List of tasks or responsibilities of the student in the research
- Expectations for regular meetings of the student with the supervising professor
- Expectations for providing a "periodic written record" of the goals, activities, and progress. This may be in the form of an engineering notebook, a journal, or more informal periodic written documentation of activities and progress.

Note that at the end of the semester, the student is required to provide a report that summarizes the research problem considered, the process to investigate the problem, and the student’s involvement in the research process, and then provides a short reflection on what the student learned (technical, professional, or personal) in the experience. The final report is expected to be approximately 1000 words or more.

EE391 is a 1 credit hour research experience course intended to provide undergraduate students some exposure and experience in an engineering research lab. EE391 recognizes that the research experience may be as part of a research team, but the student is expected to identify his/her contributions to the research team activity. Students who will be doing larger and more independent research activities may consider EE395 ("Independent Work") instead, which has an option for more credit hours.

As per UK Senate recommendations, the 1 credit hour EE391 expects at least 800 minutes of activity per semester, which is a minimum of roughly 3 hours per week through a semester for a 1 credit hour course. (http://www.uky.edu/Faculty/Senate/files/Meetings/1_2011-2012/20120430/Credit%20hour%20grid%20proposal_TO%20SC_April%2030_Complete.pdf )

________________________________________
Student Date

________________________________________
Supervising Professor Date

________________________________________
Director of Undergraduate Studies Date
Synopsis of the planned EE391 research experience

(This synopsis should accompany the cover sheet for the Individual Learning Plan for EE391, and should address the items listed on the cover sheet.)
New Course Form

https://myuk.eku.edu/sap/bc/roapp/tc?SAPB100
Open in full window to print or save

Attachments:

ID: 60256607 Attachments:
Delete: 60256607 EE 391 Learning Contract-rev-b.doc
Delete: 6607 EE 391 UC Research Experience syllabus-b-revised.doc
Delete: 6607 EE 391 Learning Contract-rev-b.doc

First: 1 Last

(*denotes required fields)

1. General Information
a. * Submitted by the College of: Engineering
   Submission Date: 2/11/2016
b. * Department/Division: Electrical and Computer Engineering

c. * Contact Person Name: Larry Holloway
   Email: holloway@uky.edu
   Phone: 859-323-8523
   Responsible Faculty ID (if different from Contact)
   Email:
   Phone:

d. * Requested Effective Date: * Semester following approval OR Specific Term/Year

   Should this course be a UK Core Course? ○ Yes ○ No

   If YES, check the areas that apply:
   ☐ Inquiry - Arts & Creativity
   ☐ Composition & Communications - I
   ☐ Inquiry - Humanities
   ☐ Quantitative Foundations
   ☐ Inquiry - Natural/Physical Sci
   ☐ Statistical Inferential Reasoning
   ☐ Inquiry - Social Sciences
   ☐ U.S. Citizenship, Community, Diversity
   ☐ Composition & Communications - I
   ☐ Global Dynamics

2. Designation and Description of Proposed Course.
a. * Will this course also be offered through Distance Learning? ○ Yes ○ No

   Prefix and Number:
   EE 391

c. * Full Title: Undergraduate Research Experience

d. Transcript Title (if full title is more than 40 characters): Undergraduate Research Experience

   To be Cross-listed with (Prefix and Number):

   Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours for each meeting pattern type.

   Lecture
   Independent Study
   Clinical
   Research
   Residency
   Other

   If Other, Please explain:

   Identify a grading system:
   ☐ Letter (A, B, C, etc.)
   ☐ Pass/Fail
   ☐ Medicine Numeric Grade (Non-medical students will receive a letter grade)
   ☐ Graduate School Grade Scale

   Number of credits: 1

   Is this course repeatable for additional credit? ○ Yes ○ No

   If YES: Maximum number of credit hours: 3
   If YES: Will this course allow multiple registrations during the same semester? ○ Yes ○ No

j. * Course Description for Bulletin:

Research project or activity led by an engineering faculty member, designed to provide students research experience. Completion of this course requires that the student submit a report overviewing activities of the student and summarizing the experience. Course may be repeated to a maximum of three credit hours.

k. Prerequisites, if any:

Prerequisites: Submission of approved learning plan and approval of department.

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

3. * Will this course be taught off campus? ☐ Yes ☐ No

If YES, enter the off campus address:

4. Frequency of Course Offering.

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

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? 5

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 program? ☐ 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
d for any program? ☐ Yes ☐ No

If YES, list affected programs:

This course is one course option to satisfy an *Experiences* credit in a proposed revision of EE Electrical Engineering and EE Computer Engineering.

10. Information to be Placed on Syllabus.

a. * Is the course 400G or 500G? ☐ 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 10.a above) are attached.

b. ☐ The syllabus, including course description, student learning outcomes, and grading policies (400G/560-level grading differentiation if applicable) are attached.

In general, undergraduate courses are developed on the premise that one semester hour of credit represents one hour of class per week except for seminar, excluding any laboratory meeting. (Laboratory meeting, generally, is two hours per week for a semester for one credit hour.)

In order to change a program, a proposal change form must also be submitted.

Rev 8/09