Graduate cooperative education experience. Program coordinated by the Office of Professional Practice with cooperation from academic disciplines and participating employers. Students submit technical report and company evaluation.

Restrictions: Graduate Professional Practice students only. Prerequisite: ENGR6999

Professor Groll.
TO: Faculty of the College of Engineering  
FROM: The Professional Practice Advisory Council (PPAC)  
SUBJECT: New Graduate Course, PPE 69499 Professional Practice Graduate Co-Op IV

The Professional Practice Advisory Council has approved the new course listed below. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**PPE 69499 Professional Practice Graduate Co-Op IV**
Sem. 1, 2 or SS, cr. 0.
Restrictions: Graduate Professional Practice students only
Prerequisite: PPE 69399

**Course Description:**
Graduate cooperative education experience. Program coordinated by the Office of Professional Practice with cooperation from academic disciplines and participating employers. Students submit technical report and company evaluation.

**REASON:** To establish appropriate courses for recently established Masters-level Cooperative Education Program.

\[Signature\]

*Eckhard Groll, Dr. Eng.*  
*Professor of Mechanical Engineering*  
*Director of Office of Professional Practice*

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**APPROVED FOR THE FACULTY OF THE SCHOOLS OF ENGINEERING BY THE ENGINEERING CURRICULUM COMMITTEE**

**ECC Minutes #13**  
**Date 5/10/2013**  
**Chairman ECC**
Supporting Document for a New Graduate Course

To: Purdue University Graduate Council
From: Faculty Member: Eckhard Hroll
Department: Office of Professional Practice
Campus: West Lafayette

Date: February 27, 2013
Subject: Proposal for New Graduate Course-Documentation Required by the Graduate Council to Accompany Registrar's Form 40G

For Reviewer's comments only
(Select One)

Reviewer:

Comments:

Contact for information if questions arise:
Name: Tina Alsop
Phone Number: 67376
E-mail: alsop@purdue.edu
Campus Address: POTR 118

Course Subject Abbreviation and Number: PPE 69399
Course Title: Professional Practice Graduate Co-Op IV

A. Justification for the Course:

- Provide a complete and detailed explanation of the need for the course (e.g., in the preparation of students, in providing new knowledge/training in one or more topics, in meeting degree requirements, etc.), how the course contributes to existing majors and/or concentrations, and how the course relates to other graduate courses offered by the department, other departments, or interdisciplinary programs.

- Justify the level of the proposed graduate course (500- or 600-level) including statements on, but not limited to: (1) the target audience, including the anticipated number of undergraduate and graduate students who will enroll in the course; and (2) the rigor of the course.

B. Learning Outcomes and Method of Evaluation or Assessment:

- Describe the course objectives and student learning outcomes that address the objectives (i.e., knowledge, communication, critical thinking, ethical research, etc.).

- Describe the methods of evaluation or assessment of student learning outcomes. (Include evidence for both direct and indirect methods.)

- Grading criteria (select from dropdown box); include a statement describing the criteria that will be used to assess students and how the final grade will be determined.

Criteria

Papers and Projects
- Identify the method(s) of instruction (select from dropdown box) and describe how the methods promote the likely success of the desired student learning outcomes.

    Method of Instruction [Experiential]

C. Prerequisite(s):

- List prerequisite courses by subject abbreviation, number, and title.
- List other prerequisites and/or experiences/background required. If no prerequisites are indicated, provide an explanation for their absence.

D. Course Instructor(s):

- Provide the name, rank, and department/program affiliation of the instructor(s).
- Is the instructor currently a member of the Graduate Faculty? — Yes — No
  (If the answer is no, indicate when it is expected that a request will be submitted.)

E. Course Outline:

- Provide an outline of topics to be covered and indicate the relative amount of time or emphasis devoted to each topic. If laboratory or field experiences are used to supplement a lecture course, explain the value of the experience(s) to enhance the quality of the course and student learning. For special topics courses, include a sample outline of a course that would be offered under the proposed course.

F. Reading List (including course text):

- A primary reading list or bibliography should be limited to material the students will be required to read in order to successfully complete the course. It should not be a compilation of general reference material.
- A secondary reading list or bibliography should include material students may use as background information.

G. Library Resources

- Describe the library resources that are currently available or the resources needed to support this proposed course.

H. Example of a Course Syllabus (While not a necessary component of this supporting document, an example of a course syllabus is available, for information, by clicking on the link below, which goes to the Graduate School's Policies and Procedures Manual for Administering Graduate Student Programs. See Appendix K.)

A. Justification for the Course:

- Currently no integrated graduate-level cooperative education programs exist within the engineering programs of Purdue University’s peer institutions. By introducing such a program, the College of Engineering at Purdue University will be able to position itself as a unique and forward-thinking entity in the recruitment of graduate students. The MS-level cooperative education program differs from the traditional MS degree programs in two main aspects. First, students use thesis research or independent project courses to conduct relevant work-integrated research and/or development experiences. Second, students participate in a minimum of two semesters of work-integrated learning that is directly related to their research/development experiences. Such a program will provide a very important and highly desired option to superior students who are oriented towards developing stronger technical skills and a broader industrial knowledge base than they would develop through exposure to the traditional MS curriculum alone. This will prepare graduates, who are interested in pursuing either technical and/or research careers in industry.

All students will have to meet the regular course requirements of the MS degrees in their chosen disciplines. The program is geared towards those students who demonstrate the commitment, and the academic ability, to be successful in the program. Therefore, only highly motivated and qualified students will be counseled to enter the MS-level cooperative education program.

As with the current undergraduate cooperative education program, student will enroll in a 0-credit hour experiential course during each work session with full time privileges.

One non-repeatable course will be created for each of four potential work sessions. These courses will use the approved professional practice fee.

- The professional practice courses will be created as 60000-level courses with only MS students enrolling. Only highly motivated and qualified students will be counseled to enter the MS-level cooperative education program.
B. Learning Outcomes and Method of Evaluation or Assessment:

- The director of the Office of Professional Practice, through a network of co-operative education coordinators, serves as the facilitating body to 1) moderate the progress of students after each academic and work session and to (2) assess course outcomes via:
  - Student evaluation of work sessions
  - Supervisor evaluation of student
  - Work session technical report

- The course will be graded as Satisfactory/Unsatisfactory progress.

C. Prerequisite(s):

- Students in the MS-level cooperative education program will be required to maintain a minimum GPA of 3.0. Only students in disciplines that offer MS programs are able to participate.

D. Course Instructor:

- Dr. Eckhard Groll
  Professor of Mechanical Engineering
  Director of Office of Professional Practice

- Dr. Groll is currently a member of the Graduate Faculty

E. Course Outline:

- Course work will consist of work-integrated learning that is directly related to the student's research/development experiences. Each student will be required to submit:
  - Student evaluation of work sessions
  - Supervisor evaluation of student
  - Work session technical report

F. Reading List:

- There are no required readings for this course.

G. Library Resources

- No library resources are required to support this proposed course.