AGENDA
GRADUATE COUNCIL MEETING
FRIDAY, OCTOBER 1, 2010
1:15 pm –3:30 pm
ACADEMIC SENATE CONFERENCE ROOM
ROOM 220 UNIVERSITY OFFICE BUILDING

1. Approval of Minutes of June 15, 2010
   Pages 2-7

2. Conflict of Interest Statement
   8-9

3. Announcements
   a. Chair of the Graduate Council
   b. CCGA Representative
   c. Graduate Student Council Representative
   d. Dean of the Graduate Division

4. Courses and Programs Subcommittee
   a. Courses
   b. Discussion Item - Online Engineering Self-Supporting MS Proposal
      10-99

5. Graduate Program Review Subcommittee
   a. Status Report
      100-102

6. Old Business
   a. Change in Review Policy for Courses
      103-105
   b. Neuroscience Graduate Program Review
      106-107

7. New Business
   a. Change in Graduate Council Procedures
   b. Graduate Council Handbook
      108-139
   c. Request for Systemwide Review – Renaming Fees as Tuition
      140-147
   d. Request for Systemwide Review of Council Recommendation and UCLA Statement on the Future of the University
      148-156
   e. Request for Systemwide Review – Post Employment Benefits
      157-158
The Graduate Council of the Riverside Division of the Academic Senate met on Monday, May 17, 2010 at 12:00 noon. Present: K. Barish, I. Ethell, P. E. Green, S. Hackel, Y. Hua, P. Keller, C. Larive, M. Maduro, T. Miller, M. Vanderwood, D. Wong, Gary Coyne (Graduate Student Representative), and and J. W. Childers, ex officio. Absent: G. Gonzalez-Rivera, W. Liao, G. K. Ramakrishnan, A. Williams, and Jenni Deveau (Graduate Student Representative), Also present: Associate Deans Baerenklau and Haimo.

I. MINUTES

The minutes of the meeting of May 17, 2010 were approved as presented.

II. ANNOUNCEMENTS

a. Chair of the Graduate Council

Chair Maduro briefly discussed the restructuring of Graduate Council duties due to the move of the staffing from the Graduate Division to the Academic Senate. He stated that the Council will be going through a transition phase this coming year and that Council members will have to take on a bit of extra workload due to this transitional phase. He then thanked Council members who will be continuing on the Council next year, as well as those who are leaving the Council for their hard work on the Council.

b. Graduate Student Council Representative

Gary Coyne reported that Rachel Castle will be the GSA representative to the Council for the next academic year.

c. CCGA Representative

Chair Maduro stated that he will continue as CCGA representative next year, as he feels that he has benefited from interactions with other Graduate Council Chairs and CCGA representatives. He reported that at the last CCGA meeting, CCGA agreed as a whole that they wanted to see more relevance of the individual Graduate Councils to the CCGA committee itself. They discussed various issues currently facing Graduate Councils and discussed various ways to approach some of these issues. He stated that he has become aware of the occasional cases where graduate students had gone unfunded, even though they may have been promised a certain amount of funding. This is a concern that he brought to the Graduate Dean last week. He stated that the
Graduate Division is going to circulate a survey to see if this is actually occurring. Dean Childers stated that he will pull his own data and look at specific cohorts to see if indeed there are instances where students are leaving because they haven’t received the funding that they were promised. If we can identify these cases, then we can see how big this problem really is.

He stated that he has had discussions with other Graduate Council chairs as to how they conduct their graduate reviews, and one issue that is clear is that in no cases were course approvals brought to the full Council for approval. Either a subcommittee or some other committee reviewed the courses. This is something that definitely needs to be addressed this coming year.

Another issue that challenges Graduate Councils and CCGA is what role faculty should play in extension programs and self-supporting programs. He is sure that there will be more discussion on this topic in the coming year.

Another issue that was discussed at CCGA was GSHIP – the Graduate Student Health Insurance Program. The representative from UC San Diego stated that UC Riverside is one of the campuses that opted out of the GSHIP program. Dean Childers stated that one of the reasons that UCR hesitated to go forward with the systemwide GSHIP plan is because UCR has always done a very job in working with the graduate students to keep the health insurance costs down. Also, the data that they were using to analyze the systemwide health insurance program was not consistent, so we were not convinced to go with the systemwide plan at this time.

d. **Dean of the Graduate Division**

Dean Childers thanked every one for serving on the Council this year. This is the last Graduate Council meeting that the Division will host. He reported that in terms of recruitment, we are actually doing very well, we are 4% below where we were last year, however we still have some programs who are admitting students, so he expects to have the same numbers that we had last year. He stated that CNAS in particular has had a very good recruiting year.

He indicated that a brief meeting was held prior to graduations with the people from development and strategic communications about promoting our participation in SACNAS so that there will be a push both internally and externally to promote this event.

III. **COURSES AND PROGRAMS SUBCOMMITTEE**

a. **Courses**

The following courses were reviewed/approved.
EDUC 210 (E-Z) [Change] -- approved
EE 211 [Change] -- approved
ETST 228 [New] -- pending
ETST 248 [New] -- approved
ETST 249 [New] -- approved
GEO 201A [New] -- pending
GEO 201B [New] -- pending
PHYS 257 [New] -- approved
PHYS 259 [New] -- approved
STAT 209A [Change] -- approved
STAT 209B [Change] -- approved

b. Economics: proposed change in course requirements

The proposed change in course requirements for the Economics graduate program was approved as submitted.

c. Creative Writing and Writing for the Performing Arts: proposed program changes

The proposed changes to the Creative Writing and Writing for the Performing Arts graduate program were approved pending clarification of the number of required units.

d. Music: proposed program changes

The proposed changes to the Music graduate program were approved as submitted.

e. Mechanical Engineering: proposed program changes

The proposed changes to the Mechanical Engineering graduate program were approved as submitted.

f. Psychology: proposed program changes

The proposed changes to the Psychology graduate program were approved as submitted.

g. Postbaccalaureate Premedical Program

A request from Neal Schiller, Associate Dean of the Biomedical Sciences graduate program to extend the waiver of the GPA minimum of 3.30 for limited status students for applicants to the new Postbaccalaureate Premedical Program was approved.
IV. GRADUATE PROGRAM REVIEW SUBCOMMITTEE

a. Status Report

The status report was received.

b. Psychology: draft Findings and Recommendations

The draft Findings and Recommendations for Psychology were approved as presented.

c. Sociology: draft Findings and Recommendations

The draft Findings and Recommendations for Sociology were approved with one editorial change.

d. Visual Arts: draft Final Response

The draft final response for Visual Arts was approved as presented.

d. Microbiology: request to lift moratorium

The request from the Microbiology graduate program to lift the moratorium currently in place on their program was approved. The Council requested that the program provide bylaws for the program by December 1, 2010, and that in addition the program update their website as soon as possible.

f. Cell, Molecular and Developmental Biology: draft Findings & Recommendations

The draft Findings & Recommendations for the Cell, Molecular and Developmental Biology graduate program were approved as presented.

V. FELLOWSHIP SUBCOMMITTEE

There was no fellowship subcommittee report.

VI. OLD BUSINESS

a. Discussion of Fellowship procedures

Dean Childers stated that he is looking for guidance from the fellowship subcommittee members on how to improve the process for the fellowship competition for continuing students. He stated that the application numbers for these fellowships
have grown significantly over the years, with this year each fellowship subcommittee member having to review approximately 40 applications. The problem is that it is not quite clear how well the applications are being vetted, especially for those files that are out of the reviewer’s expertise. In these budgetary times, he expects that the number of applications will continue to grow. He asked Council members to think about ways in which the review process can be improved. He has given thought to perhaps adding college executive committee members to the review process, but is hesitant to do so, as this will add another step to the process. He has also thought of perhaps developing a rubric for ranking the files or perhaps requesting more detailed input from programs in order to make evaluations as fair as possible. He stated that any and all ideas are welcomed.

b. Procedural Investigation

Chair Maduro described a procedural issue regarding a student. He provided the Council with background information on this particular case. After discussion, the Council decided to ask Dean Childers to discuss this issue with campus counsel to seek advice on how to proceed.

c. Changes to Council and Its Duties for Next Year

Chair Maduro stated that he met with Dean Childers, the Graduate Division Associate Deans, and people in the senate to discuss the transfer of duties from the Graduate Division to the Academic Senate. His major concern is external reviews. Current Graduate Council structure has worked very well with Associate Deans and subcommittees split across the colleges. However this structure is not something that we are bound by, and the Council may want to restructure reviews by having ad hoc reviewers assigned to each review, such as a lead reviewer, a second reviewer and no particular committee. There was discussion about how this might reduce the discussion of a particular review as well as possibly lose expertise by Council members who are not asked to review more than one program. Discussion continued on the current review process and possible variations to the review process. It was suggested that the other campuses be polled to see how they conduct their graduate program reviews.

Discussion then turned to the issue of graduate course proposals, and how it appears that no other Graduate Councils review course proposals. Chair Maduro stated at the last meeting there was discussion of transferring the approval of graduate course proposals to the college executive committees. Especially with the increased workload with program reviews, Council members felt that a change in the course approval process is needed. Chair Maduro stated that he would look up the bylaw and recommend a change for the Council in the fall quarter.

VII. NEW BUSINESS

a. UCPB’s Choices Report

Chair Maduro stated that he would circulate a draft response to this report for Council review/approval.
### b. Request to use IELTS English Proficiency Exam Scores

A request from Victoria Long, Director of Graduate Admissions, to accept the IELTS English Proficiency Exam Scores beginning with academic year 2011-12 for Graduate Admission was approved.

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| Deveau | X | 0 | X | 0 | X | X | 0 | X | X | X |

*On leave Fall quarter.

**Appointed after first Council meeting.

***No longer on the Council.

#On leave Spring quarter.

##Dr. Keller was added to the Council in April 2010.
October 31, 2009

Anthony W. Norman, Chair
Riverside Division
Academic Senate

RE: GRADUATE COUNCIL’S POLICY ON MEMBERS’ CONFLICT OF INTEREST

Pursuant to the requirements of the Riverside Division Academic Senate, the Graduate council adopts the following statement regarding its governance with respect to possible conflicts of interest by its members.

Purpose

The Graduate Council should conduct itself in such a manner that neither the reality nor the appearance of a conflict of interest should be present in any action taken by the Council.

Terms

1. Whenever any matter that affects a member of the Council as an Individual or as a member of a department or program is to be decided, that member should absent himself/herself before the vote is taken. If the member does not leave voluntarily, the Chair should excuse the member.

   a. The Chair of the Council may ask the member to provide information on the matter before the member’s departure.

   b. When confidential information is being provided to the Council, the affected member will be excused by the Chair before the information is provided.

   c. When student petitions are considered, Council members should consider a student matter in their department/program as a conflict of interest for themselves.

   d. When routine matters (e.g., course approvals) are being considered, the Chair may elect to allow all members to participate in the discussion and vote. This section is not meant to include program revisions, review committee reports on a specific department or individual student matters.
2. Subcommittee operations are subject to the same rules as the Council as a whole. The Chair may name a replacement from the Council membership for an individual serving on a subcommittee who has a conflict of interest when necessary.

3. Students are not permitted to be present in Council meetings when matters pertaining to individual students are discussed.

4. In unforeseen cases, the Chair may rule that any member should be excused if the Chair foresees conflict of interest in the matter under discussion. The affected member may appeal to the Council. The member or the chair may appeal to the Committee on Privilege and Tenure if the results of the Council vote are not satisfactory; the matter to be discussed will be held without action pending the decision of the Committee on Privilege and Tenure.

5. Members with possible conflicts of interest should discuss the matter with the Council Chair before the pertinent Council meeting. If the Chair foresees a conflict of interest on the part of a Council member, he/she should discuss the matter with the affected member. It is to be hoped that a course of action satisfactory to the member and the Chair can be achieved. If this is not possible the Chair should determine the proper course of action. The member may appeal to the Council and/or the Committee on Privilege and Tenure as indicated in Section 4 above.

Alan E. Williams, Chair
Graduate Council

AEW/vb
Proposal to Establish a Self-Supporting, College-Wide, Online Master-of-Engineering Degree Program within the Bourns College of Engineering

January 14, 2010
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1 INTRODUCTION

1.1 Aims and Objectives

The primary purpose of BCOE’s proposed Online Master-of-Science in Engineering Program is to enable fully employed engineers, including computer scientists, to advance their professional education, enhancing their value to their employers. The training and education that the proposed program offers are of benefit to engineers, their employers, this state, and the nation. It is at the Master’s level that engineers have the opportunity to learn a specialization in depth and to renew and update their knowledge of technological advances.

This program is being developed for highly-qualified employed engineers who, for various reasons, do not or cannot attend traditional M.S. programs and who are keenly interested in maintaining up-to-date knowledge of engineering and technology.

The distinctive features of the proposed program are that:

1. The Program will be self supporting.

2. The Program will be college-wide. This structure enables efficient management at the college level and will facilitate the development of multidisciplinary specializations.

3. The Program will be delivered over the Internet. Students of the Program will receive all course materials, including lectures, in an “online” manner. The current mode of delivering many courses within the Bourns College of Engineering (BCOE) relies heavily upon information technology, using a learning-management systems. That is, currently, BCOE students receive course lecture notes, assignments, announcements, and other items via WEB interfaces, and they participate in online forums for questions and answers with instructors and TAs. In addition, prepared lectures will be available online for the students of the online M.S. in Engineering Program. The full description of what is meant by “online lecture” is contained in Subsection 2.6.

4. The Program’s requirements include a significant design experience, incorporating additional readings and the knowledge of the courses undertaken. The Program includes an online 296A course, Preparation for the Comprehensive Examination, which will address this engineering design experience — see Section 2.

5. Program profits will mainly be used to support Ph.D. students.

6. The design experience, the mode of delivery of the courses of instruction, the availability of this online M.S. in Engineering Program for employed engineers, and the ability to easily implement multidisciplinary programs

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1Engineering 296A is a yet-to-be-proposed course similar to UCLA’s 597A, which is offered by each engineering department.
of study are what distinguish this new program from the M.S. programs that BCOE departments currently offer.

1.2 College and Departmental Strength

This college-wide program will be based on existing areas of study and combinations thereof in order to implement appropriate (possibly multidisciplinary) "specializations." The material for each 100/200-level course of the online M.S. in Engineering Program is to be equivalent to the material delivered under the traditional MS/PhD program; the difference is the mode of delivery. Courses will be taught and administered by ladder-rank faculty and, at times, by selected adjunct faculty, emeriti, and lecturers. Program details are provided in Section 2.

Not all areas of study within the College will be candidates for this program and, as discussed in Section 2, the initial stage (the first year) will begin with Bioengineering as our initial specialization. At the beginning of the second year, the first year for the second cohort, we intend to have in place at least one additional specialization. Generally, any set of approved courses that can effectively be delivered by online instruction is a candidate to be included in the online M.S. in Engineering Program. However, during the "initialization stage," and the subsequent year 2 and/or year 3, it is most likely that only a few specializations will be offered. Further specializations will be chosen according to faculty availability and advice from our industry advisers, their employees, and our alumni.

1.3 Timetable for Development of the Program

We hope to implement an initial offering by the Fall 2011. Before implementation, a number of tasks will need to be done including:

- Development of initial specialization curriculum.
- Approval of new graduate courses for the professional component of this degree program.
- Development of appropriate versions of these newly developed courses as well as the technical courses that will make up the initial specialization areas for online delivery.
- Sufficient potential enrollments in the initial specializations (~5 students).

As stated above, we plan to initialize the online M.S. in Engineering Program by offering a specialization in Bioengineering. Upon imminent approval of the online M.S. in Engineering Program by the Graduate Council and CCGA, we will solicit further advice from our industry partners and alumni with respect to specializations in the other BCOE departments and programs.

\footnote{Instructor compensation is discussed on page 14.}
We will solicit the opinions of our alumni with respect to appropriate specializations, including suggested multidisciplinary areas. This will be an on-going effort of BCOE. We will be in frequent contact with our industry partners for their opinions on appropriate specializations, with emphasis upon emerging and future areas.

1.4 Relationship with Existing Programs on Campus

The online M.S. in Engineering Program will emphasize specializations. As an example, our initial specialization will be drawn from Bioengineering courses of the Bioengineering Department. As described in Section 2, the online M.S. in Engineering Program will consist of nine courses, including Engineering 296A to provide the appropriate instruction mechanism and course credit for the major design project. It is important to note that each 100/200 level course's material in the online M.S. in Engineering Program is equivalent to the material delivered in the traditional MS/PhD program; the difference is the mode of delivery.

There will be no operational relationship between the online M.S. in Engineering Program and the traditional M.S. programs. In particular, the offerings of a given course will be distinct. Each course of the online M.S. in Engineering Program will be constituted as a separate section of the traditional course (e.g., CS235, Section 2). Only students of the online M.S. in Engineering Program will be allowed to enroll in this latter section, and similarly students of the online M.S. in Engineering Program will not be allowed to enroll in the traditional offering (e.g., CS235, Section 1). Additionally, while many traditional graduate courses are offered once per year, their online counterparts may be offered more often.

1.5 Relationship with Other Programs

UCLA has an established self-supporting online "Master of Science in Engineering" program that is intended for employed engineers as well. Other UC campuses such as UCSD are also considering the establishment of similar programs.

Another local competitor for the proposed program is the Distance Education Network of USC, which offers the M.S. degree in the various engineering disciplines.

The Stanford Center for Professional Development (SCPD) offers online M.S. degrees, for employees of member companies, in several engineering disciplines (including Electrical Engineering, Mechanical Engineering, and Computer Science).

On the East Coast, the Georgia Institute of Technology offers online M.S. degrees in several engineering disciplines (including Electrical Engineering, Mechanical Engineering, and Civil Engineering).

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3This course, described in subsection 2.4, is yet to be submitted for approval to the Committee on Courses and the Graduate Council.
We believe the strength of the faculty and the specializations that we will include in the online M.S. in Engineering program will lead to considerable demand for the education and training that BCOE has to offer.

As this program is to be a self-supporting, no resources, teaching or otherwise, will be withdrawn from the BCOE's undergraduate or graduate programs.

1.6 Administration of the Program

The administration of the program will be the responsibility of the Bourns College of Engineering.

Admissions: Applications to the online M.S. in Engineering Program are to be made to the Bourns College of Engineering and to the Graduate Division. The standards for admission are the same as those for BCOE's traditional M.S. degrees, including GRE requirements and compliance with all Graduate Council regulations for admission. Each year, and for each specialization currently active in the online M.S. in Engineering Program, the Program's Director will appoint at least two faculty members, associated with the corresponding specialization, to act as an admissions committee. Each committee will make its recommendations to the Director, who will forward them to the Graduate Division. This recommendation process is virtually equivalent to what is now in place for the current M.S. and Ph.D. programs.

The applicant shall have completed the substantial equivalent of the basic requirements for the degree of Bachelor of Science in Engineering, Computer Science, Physical Science, or Mathematics. The adequacy of the applicant's preparation will be determined by the faculty admission committee.

Petitions, disqualification, and the legion miscellaneous issues that arise are to be handled in the same manner as they are for the M.S. and Ph.D. programs.

Each student's course work and comprehensive examination (major design experience and project) will be supervised as follows. For each specialization that is active in the online M.S. in Engineering Program, the Director will appoint two faculty members, associated with that specialization, to oversee the students' programs. The Director will recommend to the Graduate Division a committee of three faculty members, associated with the specialization, to constitute the comprehensive examination committee for the students of that specialization.

1.7 Evaluation of the Program

1. At the end of each quarter, students will be asked, via online questionnaires, for their opinions of the effectiveness of the teaching medium, approach, and content. Since these graduate students are employed engineers, a good deal of valuable feedback is expected, and improvements will be made accordingly.

2. During the initialization stage and the second year, the Dean and the Associate Dean will meet periodically with the faculty of the specializa-
tions. The head administrator of the computing facilities involved will also attend so that any problems associated with the physical resources needed for the delivery of online lectures may be discussed and resolved. Specifically sought will be the faculty opinion of the success of the online students relative to the traditional students.

3. At the end of each two-year period, the Dean will request that the Faculty Executive Committee review the program and provide its recommendations to the Dean, who will forward those recommendations, as well as the Dean's recommendations, to the Graduate Council to implement recommended changes.

4. As with all graduate programs, the Graduate Council executes its reviews according to its schedule.

2 PROGRAM

The online M.S. in Engineering Program will be structured in a manner that will allow employed engineers to complete the requirements in two academic years plus one additional summer quarter. All students will complete their requirements through the comprehensive examination (Plan II) path. The comprehensive examination will comprise a literature review of a specialization topic, a substantial engineering-design project, and a report based on those readings as well as upon course work.

The program will consist of nine courses (36 units), six of which must be at the 200 level. Each student's program will contain at least four core courses from the professional engineering series, four more from the student's chosen specialization, plus ENGR 296A (Preparation for M.S. Comprehensive Examination). The latter provides the opportunity for adequate study and instruction for the major design project, a key component of the online M.S. in Engineering Program.

2.1 Undergraduate Preparation for Admission

In addition to the requirements of the University, each applicant must possess the equivalent of a Bachelor's degree in engineering, computer science, physical science, or mathematics, and have sufficient background, courses or experience, to satisfy the prerequisites for the courses of the corresponding specialization.

2.2 Specializations

Each area of study within each BCOE's traditional graduate programs is a candidate for a corresponding specialization of the online M.S. in Engineering Program, provided that the courses can be effectively delivered in an online fashion. Combinations of such areas will be actively sought in order to enhance

\footnote{See Subsection 4 for more details.}
multidisciplinary education. A distinct advantage of the College-wide M.S. in Engineering Program will be the ability to provide multidisciplinary education.

We will initiate the Program by offering the Bioengineering specialization. At the beginning of the second year, we intend to introduce at least one more new area-of study, to be selected early in the first year upon the advice of faculty, industry, and alumni. Two likely possibilities include Water-Quality Control Systems and Computer Networks.

As a result of our on-going advice from our industry partners, as well as from our alumni, new specializations will be added to the Program.

3 Relationship Between the online M.S. in Engineering Program and the Traditional MS/PhD Programs

An on-going student of a traditional M.S. program may not switch to the online M.S. in Engineering program. Students who have completed the online M.S. in Engineering program may apply to the Ph.D. program. Students who have completed a traditional M.S. or Ph.D. programs may be admitted to the online M.S. in Engineering program; however, courses taken in completion of those programs' requirements may not be used for the online M.S. in Engineering program.

4 Sample Program

A specialization associated with the online M.S. in Engineering Program will be constructed from areas of study associated with the traditional M.S. programs. As an example, we consider the Bioengineering specialization.

Specializations

Bioengineering

Principles and applications of Bioengineering based on a solid fundamental foundation in biological science and engineering to equip the students with diverse communication skills and training in the most advanced quantitative bioengineering research so that they can become leaders in their respective fields. The result is a rigorous, but exceptionally interactive and welcoming educational training for Bioengineering graduate students.

Prerequisite. B.S. degree in engineering or equivalent.

Minimum Course Requirements. Nine four-unit courses, of which at least six must be graduate courses, i.e., at the 200 level.

Plan II. Engineering 296A; four courses from the professional engineering core; plus four courses from the following list, subject to the approval of the student's adviser:
• BIEN 223 – Engineering Analysis of Physiological Systems
• BIEN 224 – Cellular and Molecular Engineering
• BIEN 249 – Integration of Computational and Experimental Biology
• BIEN 264 – Dynamics of Biological Systems

Selection of courses for the professional engineering core will include courses such as the following: ⁵
• MGT 201 Quantative Analysis
• MGT 221 Decision Making Under Uncertainty
• MGT 236 Decision Making Under Certainty
• MGT 230 Databases for Management
• MGT 243 Product Development
• MGT 266 Project Management
• MGT 281 Systems Analysis and Design
• XRC 463 Systems Engineering Management Egr.
• XRC 463.1 Systems Requirements Definition and Analysis Egr.
• XRC 463.2 Systems Concepts Development and Selection Egr.
• XRC 463.3 Systems Design and Integration Egr.
• XRC 463.4 Systems Verification Egr.
• XRC 470.37 New Product Development
• XRC 470.41 Project Management Essentials (an online course)

A sample specialization, drawn from Bioengineering follows: ⁶
• BIEN 223
• BIEN 224
• BIEN 249
• BIEN 264

⁵ Online versions of these courses have been neither developed nor proposed for Academic Senate approval. Nor have the X 463 series and X 470 series been proposed for XRC status. Online version will be developed as needed, except that X 470.41 is already an online course that has been delivered multiple times by UNEX.
⁶ Online versions of these courses have been neither been developed nor proposed for Academic Senate approval at this time.
The comprehensive-examination requirement will be met by a literature review, a major design project, plus a report; one enrollment in Engineering 296A\textsuperscript{7} will provide the appropriate course credit and instruction vehicle for this requirement.

ENGR 296A. Preparation for M.S. Comprehensive Examination. (4 units) Tutorial, to be arranged. **Limited to graduate engineering students in the online M.S. program.** Reading and preparation for M.S. comprehensive examination. S/U grading.

We believe that ENGR 296A requirement will benefit employed engineers far more than only lectures, the mode of operation of other online engineering programs. We believe that the design project and the concomitant satisfaction upon its completion will attract online M.S. in Engineering students to our Ph.D. programs.

### 4.1 Normative Time for Completion

The normative time for completion will be two calendar years plus one or two additional summer sessions. We expect that most of the students will complete within two calendar years.

### 4.2 The Online Courses for the Program

BCOE has deployed a full-service, sophisticated, website interface that provides student and faculty access to courses and associated materials. Assignments, answer sheets, announcements, lecture slides, lecture notes, etc., may be uploaded by the faculty and easily accessed and downloaded by the student. It also provides threaded forums by which student questions are addressed by the instructor or TA, as well as, possibly, by other students. An e-mail tool is built in that allows the instructor to easily send information to the students of the class.

#### 4.2.1 The Online Lectures for the Program

There are, of course, several technologies for producing online lectures. We have decided that it is best to have the instructor visible and speaking directly to the remote audience. We have decided upon producing video-audio synchronized PowerPoint lectures. Many faculty members of BCOE have a good deal of experience with the production of such lectures. Considerable effort is required of the instructor to create such video-synchronized PowerPoint lectures for an entire course.

When the lecture has been constructed, various files are published (uploaded) to two servers, for the purpose of streaming the lecture material. Each of these servers acts as a backup for the other.

\textsuperscript{7}Engineering 296A is a yet-to-be-proposed course similar to UCLA's 597A, which is offered by each engineering department.
This technology enables the student to have complete control of the streamed lecture material. The student may stop (pause) the flow of the presentation to carefully view a particular slide, the student may easily move from the present slide to any other slide and its concomitant video explanation, and, of course, the student may repeat a lecture or portions of a lecture as often as desired. When the student "clicks" on the appropriate hyperlink, the lecture is streamed to that student's machine and displayed in the machine's browser.

We are currently exploring various "net meeting" technologies that will enhance office hours, beyond the usage of online forums, allowing audio and visual contact between the instructor and several students of the class, even if such students are geographically dispersed.

In summary, the physical resources of BCOE, the availability of a sophisticated learning-management system, and our expertise in the construction of online lectures enable BCOE to provide this program. An outside vendor is unnecessary.

4.2.2 Examinations

Examinations need not be online examinations. During the initialization stage, we expect to mainly enroll those applicants who are employed in organizations with which we are familiar and for which we are able to "localize" the examination. As an example, if we have employees of Company X in Boston enrolled in the program, an examination (e.g., midterm, final) can be posted at a given time and downloaded to a Company X facility at which we have arranged for a trusted proctor (e.g., a member of the office of the "VP of University Relations"). We would also have an "open link" with the proctor to be able to answer the typical clarification questions that arise during an examination. The students' examinations would then be scanned and sent back to the instructor via e-mail or by FTP to a protected site.

The design project (comprehensive-examination requirement) will be handled as a course (296A) in which the instructor will be in contact with the students, and with portions of the projects being sent to the instructor throughout the duration of the course. In addition to online lecture material (e.g., to clarify the design project), and in addition to the communication ability built into BCOE's online learning-management system, we may also initiate a "net meeting" implementation to enhance our visual and audio communication with the students of this program.

If there are students of the program who are within a reasonable distance from the UCR Campus, those students may be asked to come to the campus for their examinations, to be synchronously taken along with their remote student colleagues.

As the program develops beyond the initialization stage, we will develop arrangements with organizations, including other schools, at which examinations may take place in a trusted, proctored environment.
4.2.3 Intellectual Property

UC policy is that "[T]he University owns the copyright to recordings of classroom lectures, but faculty own the copyright to their own lecture notes and teaching aids." It is the College's position that studio-based pre-recorded lectures are teaching aids and, therefore, the property of the faculty member who created those lectures. No other faculty member may use them without the explicit approval of the creator. Neither the College nor its representatives will distribute those lectures to others without the explicit approval of the creator of those materials.

5 PROJECTED NEED

Working engineers, even those with years of experience, need to frequently renew and update their knowledge to deal with technology advances that occur, and have been occurring, at a rapid rate. There are likely few professions for which the need to renew and update is so critical. The faculty and administration of the BCOE wish to provide a critical educational service for California's and the nation's engineers and for the organizations that employ them. This program will make it convenient for working engineers to renew their education, while continuing their professional careers, and to have the benefit of instruction by and access to research-active UCR faculty members.

BCOE has numerous alumni employed throughout the U.S. and other countries. Not only are many of them candidates for our program, but many are also in positions to influence others to take advantage of what BCOE at UCR has to offer. We have no doubt that there is a considerable potential base of knowledgeable engineers who will appreciate BCOE's efforts and enroll in the online M.S. in Engineering Program.

6 STAFF

As discussed in Subsection 2.2, we will initiate the online M.S. in Engineering Program with the Bioengineering specialization. We expect that as the Program develops, more specializations and associated faculty will become active participants.

All online courses are to be taught by the ladder faculty generally associated with the corresponding specialization. Occasionally, adjuncts, emeriti, and lecturers may also be instructors of online courses.

7 COURSES

The graduate courses of the BCOE are candidates, along with appropriate undergraduate prerequisite courses, for inclusion in the online M.S. in Engineering

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8See http://www.ucop.edu/irc/wp/wp_Docs/wp002.html
Program. Courses are added to the program as a result of the addition of specializations.

8 RESOURCES AND ENROLLMENT PLANNING

Our intention is to initiate this online M.S. in Engineering Program modestly. As stated above, we intend initially to offer a single specialization, Bioengineering. In each of the subsequent years, we intend to add an additional specialization (and possibly more), while continuing with the previous areas as well. At this point, a likely specialization to be included at the beginning of the second year is Water-Quality Control Systems and/or Computer Networks. The following table illustrates this conservative course offering plan by specialization: five incoming students per area per year with four of the five continuing through the second year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Specialization</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spec 1</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Spec 1</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spec 2</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Spec 1</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spec 2</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spec 3</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Spec 1</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Spec 2</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Spec 3</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spec 4</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Online M.S. in Engineering Program Course Offerings.

We propose that the basic fee for the online M.S. in Engineering Program be $15,000 per year for the two-year program, i.e., $30,000 per student for the two-year program. Revenue will be used for faculty compensation, Special Reader support for Ph.D. students, fee remissions, administrative and computer support. A faculty member's compensation covers the instructor's workload, comprising construction of new assignments, changes in the original lectures, online office hours, instructing and monitoring the special readers, and general grading responsibilities — payments to the faculty may be used for additional student support, travel, and summer salary. Programmer and Student Affairs (Administrative Analyst) assistance will also be needed, in addition to computer server equipment additions that will be needed as enrollment grows and the physical demands of lecture "streaming" increase. We will also allocate one Special Readers for each class. The nature of online lectures necessitates, certainly at the beginning of the Program, adequate consultation resources for
the students of the Program. These positions also contribute to needed Ph.D. student support.

The following table describes the revenue and costs for a single specialization of the online M.S. in Engineering Program — the expectation is to introduce one new specialization per year. Profits will be used for unpredicted costs and for graduate fellowships for BCOE's Ph.D. students.

It is expected that the technical courses will be delivered by tenure-track faculty, who will be both the developer of the course and its instructor.\(^9\) For offerings of that course, the faculty member will receive $400 per student per offering, and will have the assistance of a .25-FTE Special Reader, who will receive $4500 in salary plus $400 in benefits.\(^10\) Other courses, commonly the core engineering methodology courses, will be delivered by adjunct faculty or lecturers, who will work without a TA or Reader and will receive a $400/student/offering instructor fee in addition to $4500 in salary and $400 in benefits for each offering.

\(^9\) These on-line courses will not be in lieu of or replacement for a faculty member's normal teaching, research, or service duties.

\(^{10}\) It is expected that .25-FTE Special Readers will be responsible for an average of five students and a maximum of eight — at that level the load would be split over two .25-FTE Special Readers or given to a .50-FTE Special Reader.
<table>
<thead>
<tr>
<th>M.S. in Engineering (online)</th>
<th>DRAFT</th>
<th>DRAFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine-course, two-year program with a new cohort each fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of courses/year/student</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Tuition ($15,000/student/year)</td>
<td>$15,000</td>
<td></td>
</tr>
<tr>
<td>Application fee (one time per student)</td>
<td>$70</td>
<td></td>
</tr>
<tr>
<td><strong>Online-Course Develop/Mgmt Fees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost to develop 1st offering of online course</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>Cost to update for each subsequent offering</td>
<td>$1,000</td>
<td></td>
</tr>
<tr>
<td>Instructional Services Fee (per student/offerings)</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td><strong>Instructional Support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor compensation (per student/offerings)</td>
<td>$400</td>
<td></td>
</tr>
<tr>
<td>25-FTE TA/Reader costs/offerings (salary + fees)</td>
<td>$2,772</td>
<td>$3,255</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5 new students annually</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses Offered</td>
<td>5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Enrollments</td>
<td>5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Average enrollment per offering</td>
<td>5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Total Annual Revenue</td>
<td>$75,000</td>
<td>$135,000</td>
<td>$135,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Course Development (one-time costs)</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Online course conversion ($5000 for 1st offering)</td>
<td>$25,000</td>
<td>$20,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total One-Time Costs</td>
<td>$25,000</td>
<td>$20,000</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Direct Instructional Costs</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Instructor compensation ($400/student/offerings)</td>
<td>$10,000</td>
<td>$16,200</td>
<td>$16,200</td>
</tr>
<tr>
<td>TA/Reader salary and benefits</td>
<td>$30,135</td>
<td>$54,243</td>
<td>$54,243</td>
</tr>
<tr>
<td>Instructional Services Fee ($500/student/offerings)</td>
<td>$12,500</td>
<td>$20,250</td>
<td>$20,250</td>
</tr>
<tr>
<td>Course update/revision fee ($1,000/offerings)</td>
<td>$5,000</td>
<td>$9,000</td>
<td></td>
</tr>
<tr>
<td>Ongoing Instructional Costs</td>
<td>$67,635</td>
<td>$110,693</td>
<td>$114,693</td>
</tr>
<tr>
<td>Total Annual costs</td>
<td>$92,635</td>
<td>$130,693</td>
<td>$114,693</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Three-Year Net Revenue</strong>&lt;sup&gt;12&lt;/sup&gt;</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$6979</td>
</tr>
</tbody>
</table>

Table 2. Budget for the online M.S. in Engineering Program.

<sup>11</sup>This fee covers such things as student affairs and technical services.
<sup>12</sup>Any net-positive Revenue will be used to support BCOE Graduate Students.
9 GRADUATE STUDENT SUPPORT

Since the online M.S. in Engineering Program is for employed engineers, the issue of support of graduate students of the program is not relevant. However, an important reason for the introduction of the online M.S. in Engineering Program is to generate funds to support Ph.D. students, and the profit generated by the program by this program will be used primarily to do so.

10 DEGREE DESIGNATION

This section discusses several related issues: (1) the reason for the requested degree designation, (2) the issue of differential fees, and (3) SR 694.

10.1 Master of Science in Engineering (M.S.)

It is well-understood in the engineering/computer-science community that the M.S. degree is the degree that leads to the specialized advanced education that is of importance to the student, to industry, and to the students entering the Ph.D. program. Engineers seek the M.S. degree to expand their engineering education to attain a level of technical competence that is generally not achieved at the baccalaureate level, and to enhance their opportunities and be of greater use to their employers. Indeed, the attainment of the M.S. generally leads to increases in pay.

The M.S. program provides the education by which engineers improve their educational and professional status; that is, the M.S. degree in engineering/computer-science areas is the de facto "professional" degree. To use any other designation would inappropriately diminish the dedication of the faculty and the value to be accrued by the students of the program. Our proposed degree program is educationally equivalent to the traditional M.S. program and so should be its degree designation. It is the position of the College's administration and faculty that to call the degree anything other than M.S. would be inappropriate, misleading, and would contradict the Program's content and would defeat the Program's purpose. UCLA, Stanford, USC, Georgia Tech, and a host of other engineering schools use M.S. and in no way distinguish the online program's degree from the traditional degree.

10.2 Differential Fees

The proposed online Master-of-Engineering program is educationally comparable to the traditional M.S. programs offered by the College. However, considerable extra effort and time are required of the participating faculty who will not receive "teaching credit" for the courses of this program. Additionally, there will be considerable infrastructure, special reader, programmer analyst, and student affairs officer costs.
10.3 SR 694

In 1956, in a "Report of the Graduate Council, Northern Section," (1956/05/24, Academic Senate, Northern Section: Notice of Special Meeting of the Representative Assembly (Vol. II, No. 11)), the following opening sentence occurs:

"At its meeting on April 23, 1956, the Graduate Council gave consideration to a report of its sub-committee appointed to study a proposal presented by Dr. B. M. Woods, Vice-Chairman--University Extension, that off-campus instruction be offered for the master's degree, and to study also the entire conception of off-campus instruction directed toward higher degrees."

The resulting legislation, SR 883, was renumbered in 1964 to SR 694. The main request by the Vice-Chairman of University Extension, in 1956, was to allow University Extension to have a wider role in Master's programs. It is our opinion, upon reading the referenced report, that "off-campus instruction" refers to off-campus centers generally operated by Extension. Parts C and D also reveal the Council's concern with faculty, courses, and programs at such centers. It is our opinion that SR 694(B) is essentially a restriction on Extension with respect to the M.A. and M.S. degrees and certainly should not be considered to be a restriction on ladder faculty presenting courses and programs approved by the Graduate Council, the Committee on Courses, and the Committee on Educational Policy. In any event, SR 694 is so thoroughly intertwined with Extension and its centers (indeed, the opening sentence of SR 694 requires the cooperation of Extension) that we strongly believe that SR 694 is irrelevant with respect to BCOE's proposal.

Moreover, today's technology could not have been envisioned by the legislators of 1956.
DRAFT
Reply to Graduate Council

June 9, 2010

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1 Justification for the proposed program 2
2 Academic standards 3
3 Precedents other than UCLA 5
4 Consultation with Committee on Courses 6
5 Information on participating faculty 7

On 2/8/2010, UCR’s Graduate Council’s 2/8/2010 sent this reply to BCOE’s “Proposal to Establish a Self-Supporting, College-Wide, Online Master-of-Engineering Degree Program:"

February 8, 2010
Thomas Payne
BCOE

At its meeting of Friday, January 22, 2010, the Graduate Council considered the proposal to establish a Self-Supporting, College-Wide, Online Master-of-Engineering degree program with the Bourns College of Engineering. While the Council finds the concept of such a program interesting, due to the complexities of initiating this type of program, they feel that the proposal lacks information that is needed in order to send this proposal forward for campus approval.

Specific areas in which the Council feels the proposal is lacking include:

• A stronger justification from the program why it feels that online graduate education is needed on our campus, and how such a program will enhance our campus as a whole.
Further justification and reassurance that the academic standards for this program will be held to the same standards as those students who are enrolled in a traditional-type program is needed.

Additional documentation on other universities, besides UCLA, who offer similar on-line, self-supporting programs should be included. Detailed information on the success of these types of programs, including placement data that indicates the types of jobs students receive who graduate with on-line degrees should also be included.

The Council would like confirmation that the faculty involved with this proposal have had communications with the Committee on Courses about how to implement on-line courses. In addition, the Council requests that a sample or prototype of an on-line course be prepared and presented to the Graduate Council for review.

The Council also feels that additional information on faculty who have agreed to participate in this program needs be included (e.g., CV’s).

Once this information has been received, the Council will reconsider the proposals for approval.

Alan E. Williams, Chair Graduate Council

AEW/vb

Cc: Academic Senate

What follows is BCOE’s response to each of those five items.

1 Justification for the proposed program

A stronger justification from the program why it feels that on-line graduate education is needed on our campus, and how such a program will enhance our campus as a whole.

There are several reasons for the proposed online MS-degree program in Engineering:

- It furthers the mission of the University.
- It provides UCR in general and BCOE in particular with an entre to online education, which is certain to become a major mode of delivery for higher education in the 21st Century. A recent survey found that almost a third of UC and UC-eligible students had already taken at least one online course. The number for UCR is not available, but it is very likely to be below that number.
• It serves the needs of working professionals and serves the needs of the industrial community.

• It provides industrial contacts for faculty members to establish research collaborations.

• It provides support funds for PhD students.

According to Professor Mark Matsumoto, a member of the Size and Shape of UC working group of President Yudof’s Commission on the Future, that group’s sixth draft recommendation reads:

6. Terminal Masters. The Size & Shape Working Group is in favor of expanding self-supporting Master’s programs.

Rationale: The terminal Masters is slightly anomalous at UC, where graduate students who are not pursuing professional degrees are usually pursuing doctorates. **Self-supporting Master’s programs are beneficial both to the UC mission and to state economic needs.**

Emphasis added.

Also, per President Yudof’s May 14, 2010 letter to the Regents:

The University’s self-supporting programs extend the University’s degree programs to academically qualified working adults who cannot be full-time students, as well as to foreign-trained students, students located off campus, and students seeking instruction in niche fields.

A scanned copy of that letter is attached along with a list of UC’s self-supporting programs and their fee schedules.

### 2 Academic standards

*Further justification and reassurance that the academic standards for this program will be held to the same standards as those students who are enrolled in a traditional-type program is needed.*

The Council’s assurance of academic standards for the proposed program is the track record of the proposing unit. In the 20 years of its existence, BCOE has established six graduate programs including the two largest PhD programs on the UCR campus. In addition:

• The students entering the program will meet the same admission standards as those entering the standard programs.

• The courses for this program will be approved via UCR’s standard process.

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1[http://ucfuture.universityofcalifornia.edu/sizeofuc.html](http://ucfuture.universityofcalifornia.edu/sizeofuc.html)
The program will be reviewed via UCR’s standard graduate-review process on the standard review cycle.

The courses will be taught by UCR faculty who are reviewed via the standard processes.

Some of the courses will be taught to live audiences of resident students and simultaneously recorded for online students. This technique has been successfully employed by other top universities, such as the University of Florida.²

The program committee will monitor the annual BCOE alumni surveys to determine whether the program’s objectives are being met.

There will be UCR’s standard course evaluations.

All students’ exams will be proctored.

Each student must either take a comprehensive examination prepared by a committee of BCOE faculty or do an MS project under the supervision of a BCOE faculty member. In either case, there will be faculty feedback regarding the educational outcomes.

Each course is taught under the auspices of an existing UCR department, which will have oversight responsibility for that course.

In addition, the proposed program has been modeled after a successful program at UCLA. Also, there are precedents for such programs at many other top universities throughout the country.

According to a 3/1/2010 report from UCOP, “Current state of online education in the US: Opportunities and challenges”³

A systematic analysis conducted by the U.S. Department of Education of the research literature from 1996 through July 2008 identified more than a thousand empirical studies of online learning in K-12, post-secondary, and professional education. An analysis of the studies that:

- contrasted an online to a fact-to-face condition,
- measured student learning outcomes,
- employed rigorous research design, and
- provided adequate information to calculate an effect size,

produced 51 independent effects (44 of which were based on research with students beyond K-12) that could be subjected to meta-analysis.

²http://www.ufedge.ufl.edu/programs/degree.php
³http://groups.ischool.berkeley.edu/onlineeducation/docs/currentstate
The meta-analysis found that, on average, students in online learning conditions performed better than those receiving face-to-face instruction.

Online education will not dilute the integrity and quality of the host institution’s academic offerings whether delivered in person or online. And online courses need not require more faculty time than face-to-face instruction.

3 Precedents other than UCLA

Additional documentation on other universities, besides UCLA, who offer similar on-line, self-supporting programs should be included. Detailed information on the success of these types of programs, including placement data that indicates the types of jobs students receive who graduate with on-line degrees should also be included.

Within the UC System:

• UCLA proposed their Online MS in Engineering in 2004. It was established in 2007 and now has 450 students.

• UCSD has proposed a Master of Advanced Studies in Systems Engineering, and that proposal has gone forward to the CCGA.

• UCB is proposing a one year, Master of Engineering program that is not online.

US News has published a list of 60 well respected universities that offer online degrees in engineering, both graduate and/or undergraduate.

Here are further examples of online M.S. degree programs in engineering offered by top-fifty engineering schools — specifically, US News ranks the University of Illinois-Urbana-Champaign as fifth, USC as seventh, UCLA as 14th, the University of Florida as 25th, Arizona State as 45th:

• USC’s Viterbi School of Engineering offers 66 M.S. degree programs in engineering of which 46 are available online.

• The EDGE (Electronic Delivery of Graduate Engineering) Program of the University of Florida offers 20 different MS degree programs within seven majors.

– Civil and Coastal Engineering

31
- Computer and Information Science and Engineering
- Electrical and Computer Engineering
- Environmental Engineering Sciences
- Industrial & Systems Engineering
- Materials Science and Engineering
- Mechanical and Aerospace Engineering

Their most popular degree is in Environmental Engineering.

UF has been offering distance education since 1964. For 2009-2010, EDGE had approximately 1200 graduate course enrollments. Half of these students came from Florida, with the remainder distributed all over the U.S. and internationally.

- The University of Illinois–Urbana-Champaign offers an online M.S. degree in Mechanical Engineering.
- Arizona State University offers an online M.S. degree in Software Engineering.

According to Darryl Stevens, Assistant Director of UCR’s Career Services Center, “Placement data are notoriously unreliable and based on surveys with a 3%-4% return rate.” In addition, it is estimated that over 80% of enrollees in online MS degree programs are fully employed. So, placement data is of dubious relevance. Also, in any case, it is difficult to collect, e.g., the following reply from one officer at the University of Florida to the question of which companies their students come from: “Due to respecting the privacy of our companies, I would like to decline answering this question.”

4 Consultation with Committee on Courses

The Council would like confirmation that the faculty involved with this proposal have had communications with the Committee on Courses about how to implement on-line courses. In addition, the Council requests that a sample or prototype of an on-line course be prepared and presented to the Graduate Council for review.

UCLA has a sample, demonstration course posted on its web site. Also, USC has an extensive web site detailing how they run their online programs. Regarding academic standards they note that

8http://online.engineering.illinois.edu/degrees/mechanical.htm
9http://www.earnmydegree.com/online-education/online-college/arizona-state-university.html
10http://msengrol.seas.ucla.edu/prospective-students/demo
11http://mapp.usc.edu/distanceeducation/index.html
12http://www.ufedge.ufl.edu/programs/degree.php
“[S]ince the classes you are completing are the exact same courses our on-campus graduate students take, your degree earned is the exact same degree as our on-campus students, with absolutely no mention of ‘distance learning’ on your diploma or transcript.”

They also describe their process for appointing a proctor and processing exams. And, they have posted a cover sheet for exam proctors certification.

As previously noted, the proposed program is based on existing courses that are yet-to-be approved for online delivery. We, therefore, request that this proposal be approved contingent upon Committee on Courses approval of the online delivery of those courses.

5 Information on participating faculty

The Council also feels that additional information on faculty who have agreed to participate in this program needs be included (e.g., CV’s).

The proposed program will have an oversight committee consisting of representatives from the various BCOE departments and programs:

- Reza Abbaschian, Dean BCOE and former chair of Material Science and Engineering at the University of Florida (ex officio)
- Mark Matsumoto, Associate Dean BCOE and Interim Dean of Engineering at UC, Merced, and former chair of Chemical and Environmental Engineering at UCR (ex officio and representing Chemical and Environmental Engineering)
- Jie Chen, former chair of Electrical Engineering at UCR (representing Electrical Engineering)
- Rajiv Gupta, Professor of Computer Science and Engineering and Fellow of the Association for Computing Machinery (representing Computer Science and Engineering)
- Cengiz Ozkan, Associate Professor of Mechanical Engineering specializing in materials research (representing MS&E)
- Tom Payne, former chair of Computer Science and Engineering at UCR (Chair of programs oversight committee)
- Jerry Schultz, founding chair of Bioengineering at UCR and member of the National Academy of Engineering (representing Bioengineering)
- Kambiz Vafai, Professor of Mechanical Engineering specializing in transport phenomena (representing Mechanical Engineering)

13http://www.ufedge.ufl.edu/partners/proctors.php
14http://www.ufedge.ufl.edu/pdf/ExamCoverSheet_2010.pdf
Appointment histories are attached.

Instructors for the online courses will be selected and assigned via the same methods and criteria as for BCOE’s existing programs. Mostly, they will be ladder-rank UCR faculty. And, the fact that the program is online does not affect their credentials.
Date: January 14, 2010

To: Alan Williams, Chair, Graduate Council, UCR

Fr: Tom Payne, Chair, Committee to Establish an Online M.S. in Engineering, BCOE

Re: Academic Senate committees’ reports on BCOE’s proposal to establish an online M.S. in Engineering

Four Academic Senate committees have reviewed BCOE’s proposal to establish an online MS degree in Engineering. Planning and Budget (P&B) was favorable, while the Committee on Educational Policy (CEP), the Committee on Library and Scholarly Communications (L&SC), and the Committee on Courses (CC) were critical and itemized a total of 17 points of concern.

Background and perspective. In reviewing and responding to the committees’ reports, it’s important to keep the following five points of perspective in mind:

- Online delivery of courses is, by now, a well-understood technology in which UCR has some expertise:
  - UNEX has been delivering online courses for a few years.
  - For a number of years, AGSM’s dean, David Stewart, was in charge of online instruction at USC (among other programs).
  - Dean of Engineering, Reza Abbaschian, had over two decades of with remote delivery of graduate education at the University of Florida. The program, called FEEDS (Florida Engineering Education Delivery System), started by real time videotaping and delivery to off-site graduate students. The program had to address most, if not all, of the issues raised here. The major difference is that FEEDS was state supported. The UF program now utilizes more advanced on-line delivery techniques, and is called UF EDGE (Electronic Delivery of Graduate Engineering).

Nevertheless, UCR lags behind many of its competitors, particularly UCLA and USC, in experience with this available technology.

- Established in 2006, UCLA’s Online M.S. degree program in Engineering is successful, now in its third year of operation. During its first two years, 2007-08 and 2008-09, UCLA’s program averaged 74 new registrants per year (out of an average of 120 applicants per year)¹. The BCOE proposal was deliberately patterned on that of UCLA and is nearly identical to that of UCLA in the matters of concern to the committees.

Specifically, following the UCLA online M.S. degree program model, BCOE proposes:
  - a program based on (yet-to-be-approved) online offerings of existing approved courses that would be given separate section numbers and new courses that will be delivered both in the normal “in-residence” mode, as well as the online mode.
  - a program whose enrollees have the status of “UCR student,” with all attendant rights and privileges.

- The Committee on Planning and Budget (P&B) has reviewed the financial aspects of the proposal and, after posing a set of questions (attached as Appendix A), reviewing the written reply (attached as Appendix B), and discussing their concerns with BCOE representatives concluded that: “The financial plan proposed is conservative, requiring an enrollment of only five

¹ [http://www.gdnet.ucla.edu/asis/progprofile/result.asp?selectmajor=00A5&searchDeptButton=Display+Report]
students per year. [...] Overall, there appears minimal cost to the campus and little financial risk to BCOE."

- The Campus currently offers courses that do not “require” attendance at lectures and in which all non-proctored work is submitted and returned via iLearn (Blackboard). Students can, in principle, take such courses without setting foot on campus except to take exams.

- The Campus currently admits M.S. student without prior face-to-face contact with them.

**Committee on Planning and Budget:**

UCR Planning and Budget Committee (P&B) reviewed the “Proposal to Establish a Self-supporting, College-wide, Online Master-of-Engineering Degree Program within the Bourns College of Engineering (BCOE)” on October 2, 2009. A resulting set of questions for clarification of information in the proposal was sent to Akula Venkatram, the BCOE member on P&B (Appendix A). At P&B’s October 9th meeting, Professors Mark Matsumoto and Thomas Payne provided a set of written responses to P&B’s questions (Appendix B) and went over the responses with the committee and answered additional questions.

Planning and Budget voted in favor of the development of the Online Master’s Program in the Bourns College of Engineering contingent on approval of the program and proposed courses by other appropriate Academic Senate Committees.

The financial plan proposed is conservative, requiring an enrollment of only five students per year. Even with an annual student attrition rate of once student at the end of year 1, the Online Engineering Master’s is projected to recoup most of its expenses in year 2 and generate net revenue by year 3.

Student enrollment in the campus-based Engineering Master’s Program should not be impacted by the online program due to the significantly higher fees charged for the online Engineering Master’s Program. Further, the online Engineering Master’s at UCR is designed to avoid competition with similar programs at other universities, such as UCLA.

Overall, there appears minimal cost to the campus and little financial risk to BCOE.

**It should be noted that P&B submitted their written concerns to BCOE and discussed the response with BCOE representatives.**

**Committee on Educational Policy (CEP):**

[It was generally felt that, as presented, this proposal was incomplete and too vague in several key aspects to warrant approval. Among the issues raised were the following:

1. The proposed program is based on a series of online courses, none of which have been approved. This makes it difficult to assess many of the fundamental aspects of the program, such as the educational impact and its visibility.

Many of the courses outlined in the BCOE proposal are based on existing courses. For these existing courses, the goal is to create an online version that will have a separate section designation with the purpose of keeping the on campus and online versions separate. New courses outlined in the BCOE proposal will be developed for both on campus and online versions.
Numerous major universities offer courses online for graduate degree programs, including USC, UCLA, and Stanford.

2. The CEP believes that the development of effective online courses can proceed only with a significant investment of time and funds, and that this issue must be thoroughly addressed in order for the program to be considered viable.

It would not be prudent to make that investment of time and funds until and unless this proposal is approved.

As previously noted, many major research universities, both public and private currently offer online courses and degree programs, which are successful. Because online degree programs allow their employees to work full-time, many companies and industries subsidize the pursuit of advanced professional degrees by their engineering work force. Clearly, if the quality of these online degree programs were not beneficial to both employee and employer, the demand for these types of programs would be low. However, this is not the case. In a recent survey of local companies by the BCOE, the availability of online degree programs and courses are favored.

There are economical ways to produce the lectures for online courses. Some universities simply video-record the lectures of a standard offerings. Others, notably UCLA, prefer video-audio synchronized PowerPoint lectures, which take somewhat more effort to produce. Sample lectures can be found on UCLA’s website.² ² BCOE has already set up a small studio to generate and edit such online lectures.

Our estimates of the cost of adapting courses to online delivery are based on the budget from UCLA’s proposal and on input from UNEX regarding their experience with the generation of online courseware.

Again, note that Planning & Budget has addressed the fiscal aspects of this proposal and concluded that: “Overall, there appears minimal cost to the campus and little financial risk to BCOE.”

3. Given the existence of competing programs, the Committee was seriously concerned about the impact this program would have.

No supporting letters from other UC campuses or institutions were provided to indicate that this would not be a serious problem.

Currently, UCLA has the only UC online engineering degree program, although we are aware that other UC campuses are similarly pursuing online engineering degree programs. With respect to UCLA’s program, BCOE’s proposed program does not pose a significant threat, given that the one specialization proposed, bioengineering, is not one that UCLA

² http://coursweb.seas.ucla.edu/olms/classPresentation.php?term=07F&ars=000000001
offers. Our goal is not to compete with UCLA, although we believe we can offer a program of similar or higher quality than UCLA. We intend to provide unique specialization options not offered by UCLA.

Moreover, as indicated in our response to CEP, we believe that:

Because of its distinctive features, the UCR program will be as good as if not better than the UCLA program. The UCR program includes a combination of in-depth specialization that is geared to specific industries and cohorts, and professional management components. In contrast, the UCLA program has more technical depth and no professional management components. Specifically, the UCR program includes engineering management and professional development courses, which UCLA’s program does not (see attachment).” UCR program will also be different than USC’s which involves management training only, without professional specialization. As such, the UCR program will be distinctive from both, and not much difficulty is envisioned in attracting the best students and providing quality program.

4. As described, the assessment methods were considered unsatisfactory. It is unclear whether virtual homework assignments would satisfy the educational needs of students, especially with the potential lack of hands-on experience.

The online course offerings would use the same iLearn-based protocols as current courses to post, collect, return, and discuss homework assignments.

So far as hands-on experience is concerned, recall that this is an MS program intended for practicing engineers. The students admitted to this program will necessarily already have a B.S. degree and should normally have one or more years of industrial experience. In fact, they will have more hands-on experience than most of our current in-residence M.S. students have. Most of our current M.S. students enter the program directly following their B.S. degree program.

5. It is also unclear whether the assessments process will be adequately protected against dishonesty.

The only aspect in which the assessments process differs from current courses is that the personnel proctoring exams will not always be UCR faculty and/or TAs. The proctoring of exams at a distance is, however, a problem that has been solved by many other universities; e.g., per UCLA’s proposal:

“Examinations will not be on-line examinations. Especially during the initialization stage, we expect to mainly enroll those applicants who are employed in organizations with which we are familiar and for which we are able to “localize” the examination. As an example, if we have employees of Company X in Boston enrolled in the program, an
examination (e.g., midterm, final) will be posted at a given time and downloaded to a Company X facility at which we have arranged for a trusted proctor (e.g., a member of the office of the ‘VP of University Relations’). We would also have an “open link” with the proctor in order to be able to answer the typical clarification questions that arise during an examination. The students’ examinations would be scanned and sent back to the instructor via e-mail or by FTP to a protected site.”

6. Given the costs associated with course development and assessment management, and the lack of evidence that this program can successfully attract students, the CEP was concerned about the financial viability of the program.

The fiscal soundness of the proposal has been reviewed by P&B. For financial details, see Appendix B of this document.

In summary, the CEP feels that there is no convincing evidence that this program can effectively deliver quality education required of all UCR programs; the program should be revised to address this and all related issues before it can be approved by the Committee. [...]
7. University Committee on Library and Scholarly Communication (L&SC)

The University Committee on Library and Scholarly Communication has just a few concerns with the proposal for an Online Master-of-Science in Engineering:

1. First, this proposal does not address how distance learning students will obtain access to library materials. Students in the program will need access to the electronic library resources on campus. Thus, they will need to be granted access through WebVPN and Client VPN systems for accessing library materials from off-campus. However even with this access, library resources may be restricted for distance learning students unless the university pays additional licensing fees or document delivery costs.

These resources are already available to all current students. Therefore, it is crucial that the online students be given the same privileges in this respect, even if additional expenditures are required. Our question is whether the College has adequately addressed these issues. We would like to have a formal response to this question prior to our full endorsement.

\textbf{Client VPN had been established exactly to facilitate remote access to UCR’s library resources by members of the UCR community. Students of the proposed program would be UCR students, in the same way that students of UCLA’s Online MS in Engineering are UCLA students.}

2. It is assumed that the online students will need some instruction in how to use the library, particularly its electronic resources. (This is also not considered in the proposal.)

\textbf{Presumably the online resources of UCR’s libraries have been designed sufficiently well that they do not require face-to-face instruction to be used. Current in-residence students do not receive formal face-to-face instruction. Generally, they obtain this experience as undergraduates. Accredited B.S. degree programs require a capstone design project that involves literature research and review.}

3. As the online program develops, its focus on new specializations such as Bioengineering may require new library materials. Paying for these will require a new funding source provided to the Libraries by the University or the College. Even without the current budget reduction, the library budget is insufficient to absorb the costs of these new materials.

\textbf{Per the proposal, the program's specializations would be in existing areas of study within BCOE:}

\textbf{“Each area of study within each BCOE’s traditional graduate programs is a candidate for a corresponding specialization of the online M.S. in Engineering Program, provided that the courses can be effectively delivered in an online fashion.”}

With respect to the bioengineering specialization, M.S. and Ph.D. programs in Bioengineering already exist. Presumably among the materials needed to support these existing programs there are sufficient holdings to support the program's proposed specialization in bioengineering.
Committee on Courses (CC):

We wish to comment on what we see as a number of lacunae in the proposal and possible questions and problems raised by the current draft of the proposal.

Rationale for the program at UCR:

1. Since such on-line graduate engineering programs already exist at UCLA, USC, and perhaps many other prestigious schools of engineering nationwide, what makes the proposed program distinctive, so that it would attract an additional student body not already "housed" in an existing program.

   The program would need only five new students per year to be financially viable, and its one current specialization, bioengineering, is not offered as a specialization at UCLA. As P&B has noted: "The financial plan proposed is conservative, requiring an enrollment of only five students per year. [...] Overall, there appears minimal cost to the campus and little financial risk to BCOE."

   One of the major distinctions of the proposed UCR online degree program is that it includes both a technical component and a management component. The UCLA program only has a technical component and the USC programs have either a technical component or are directed to an engineering management degree. Ours would be a hybrid version.

2. Will international students be a part of the desired clientele for this program, and if so, how will their qualifications, entrance examinations, etc., be certified as authentic? We can imagine the program attracting numerous highly-qualified international students with the ability to pay the fees, so this question should be considered carefully be for the request for applications is launched.

   Initially, we plan to limit enrollment in the online M.S. in Engineering program to domestic students. However, if and when international students are allowed to enroll, BCOE and UCR's Graduate Division have a great deal of experience at assessing the qualifications of foreign applicants. The tasks of assessing the qualifications of applicants and conforming to existing UCR policies and mechanisms will be followed and will suffice for the proposed program.

Curricular issues:

1. Although the design of the program presupposes that the students to be admitted will be working engineers with ample funding to cover the costs of the program, there may also be highly qualified candidates who live at a distance from UCR, are not currently employed, and will be able to enroll in the program only with the help of financial aid. The federal government has established guidelines for awarding financial aid based on faculty-student contact hours. These guidelines should be studied and the program designed accordingly.

   The opportunity for federal financial aid is worth exploring in terms of attractiveness and marketing. Many online degree programs suggest that
federal financial assistance is available. However, financial assistance is not a curricular issue.

With respect to students who are not employed, we would recommend that they apply to the in-residence program. They would be able to complete the M.S. degree program in a shorter time, assuming they follow the Plan II option, and be eligible for financial assistance via the normal financial aid programs on campus.

2. How will advising, tutoring, and other services that are usually delivered one-on-one in person be provided?

Advising and tutoring of on-line MS students will be via phone (Skype provides excellent communication opportunities), e-mail, online forums, and teleconferencing.

3. The current proposal does not make clear how examinations and research work for the program will be handled. Will there be periods of in-residence contact between instructors and students?

Similar to UCLA’s program, there will be no required periods of in-residence contacts between instructors and students. However, there will be opportunities to take advantage of instructors’ office hours. In addition, students within close proximity to campus may opt to take exams on campus.

How will the students complete laboratory work under faculty supervision, as is essential for an engineering degree?

Unlike most Ph.D. dissertation research, in-laboratory work is not essential to a large fraction of M.S. projects in engineering. Most M.S. projects involve gathering, application, and evaluation of laboratory data generated by others, modeling/projections using computers (which can be accessed remotely), and/or economic assessments to identify the most cost beneficial method to successfully achieve an engineering goal. This type of activity can be supervised/directed via the methodologies outlined above.

Will the ENGR 296A be some sort of a lab, residency, or workshop (perhaps during Summer Session) which will bring students together and/or give them hands-on research experience?

Similar to UCLA’s program, most of the project experience will be individualized. However, as much as possible, the M.S. projects will be coordinated with the students’ employer on work-related projects. When opportunities arise such as Department of Energy or Department of Defense technology competitions, group/team projects may be used.

Based on a recently-developed UCR on-line graduate program, the MFA in Creative Writing administered by the Palm Desert campus, we recommend that the BCOE faculty consider establishing some period(s) of intensive, short-term residency as an integral part of the program.

Following the successful model of UCLA, we propose not to require such residency. Working engineers have many opportunities to network already.
Almost all professional engineers belong to a professional organization that has local chapters that meet regularly (e.g. monthly) and have regional, national, and international conferences.

4. How will the on-line courses be calendared? Will the program conform at all to UCRs regular academic terms?

Although not necessary, we plan to conform to UCR’s regular academic terms; yet again, like UCLA.

5. On-line courses and programs present many issues concerning authentication of students’ identities and the honesty of the work they present (homework, exams, research results, etc.). The proposal states that arrangements with trustworthy testing centers will be made to deliver large examinations, but how will periodic homework and other work to be handed in by the students be handled to ensure honesty.

The BCOE should contact schools which already functioning on-line programs to learn how these issues are handled. If international students are to be welcomed into the program, this may compound the possible problems.

BCOE has a great deal of experience with the online posting, submission, grading, return, and discussion of homework assignments. That is our main mode of operation for existing courses. Also, we have some experience managing projects whose participants are elsewhere on the Internet. However, the remote proctoring of exams is new to us. We intend to follow the practices of UCLA and USC regarding the remote proctoring of exams and expect to have a great deal of contact with both. See prior responses regarding international students.

6. With respect to the courses for the program, the proposal assumes (1.4 page 5) that the current courses can be offered with simply a separate section for students in the on-line program. We cannot accept this method, because the activities and assessment methods for the on-line courses will necessarily be different from the in-person versions of the courses.

The on-line courses will have to go through the approval process with a specific accounting for the activities required of the students in the new format.

Moreover, we strongly recommend to BCOE that a different rubric (for example, ENOL rather than ENGR) be used for the on-line program’s courses. This will immediately identify the on-line versions of the courses, and it will facilitate records-keeping and future assessments and reviews of the on-line students’ progress, easily differentiated from resident students.

The online offerings will require pre-recorded online lectures and special provisions for the remote proctoring, collection, and submission of exams. Beyond that we intend to use established protocols and standards for the grading of student work. Many of the courses currently offered on campus, in BCOE and other UCR colleges/schools utilize electronic means to submit assignments, papers, and tests. The proposed online courses will use these same methodologies.

Following the precedent of UCLA, we have proposed the offering of online sections of existing courses and, as noted in the proposal we agree that
such offerings need to “go through the approval process with a specific accounting for the activities required of the students in the on-line format.”

With respect to the proposed designation rubric, UCLA is employing the protocol used in our proposal without any known difficulties.

Costs and profits:

1. No clear mention of administrative support for this program (clerical handling of applications, clerical correspondence, responses to questions concerning administrative or technical matters, enrollment, etc.), or its cost, is made in the proposal, and, based on our own (admittedly hearsay) knowledge of the design of successful on-line courses, we suspect that the amounts budgeted for production costs are considerably understated. Since the projected net revenue for the first three-year period is very modest, we do not have confidence in the projections of fees compared to costs, at least for the start up.

This question was raised by P&B and answered to their satisfaction in our response (Appendix B) to their questions (Appendix A).
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

I am pleased to provide the enclosed report on the fee levels for self-supporting professional degree programs approved for 2010-11, consistent with Regental action at the November 1998 meeting. At that time, the Board delegated authority to the President to set fees for these programs.

The University's self-supporting programs extend the University's degree programs to academically qualified working adults who cannot be full-time students, as well as to foreign-trained students, students located off campus, and students seeking instruction in niche fields. Self-supporting programs receive no State support and must generate sufficient revenue to cover program costs, including but not limited to faculty instructional costs, program support costs, student services costs, and overhead. In accordance with the policy, these programs have been developed recognizing that market factors play a role in determining fee levels.

Please let me know if you have any questions.

With best wishes, I am,

Sincerely yours,

Mark G. Yudof
President

Enclosure

cc: Chancellors
# Self-Supporting Graduate Professional Degree Programs

<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
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<tbody>
<tr>
<td>Berkeley</td>
<td>Evening-Weekend MBA Program (annual fee) 3-year, part-time program for working professionals. The annual fee covers the instructional program and campus-specific fees. Health insurance is not included.</td>
<td><strong>$30,030 annual fee</strong> (all students)</td>
<td><strong>$31,528 annual fee</strong> (all students)</td>
<td><strong>$33,418 annual fee</strong> (all students)</td>
</tr>
<tr>
<td>Berkeley</td>
<td>Master of Financial Engineering Program Intensive 1-year program in theoretical finance and computer modeling. The annual fee covers the instructional program and campus-specific fees. Additional costs to students include books and supplies, living expenses, and if applicable, health insurance.</td>
<td><strong>$49,500 annual fee</strong> New students entering Spring 2009</td>
<td><strong>$50,000 annual fee</strong> New students entering Spring 2010</td>
<td><strong>$50,595 annual fee</strong> New students entering Spring 2011</td>
</tr>
<tr>
<td>Berkeley</td>
<td>Berkeley-Columbia Executive MBA Program 19-month, dual-degree program with Columbia University. The program fee covers the instructional program, campus-specific fees, books, accommodations and some meals during residence periods and the International Seminar. Airfare is not included.</td>
<td><strong>$70,000 Berkeley portion of $135,000 total program fee</strong> New students entering Summer 2008 <strong>$67,500 Berkeley portion of $135,000 total program fee</strong> Continuing students who entered in Summer 2007</td>
<td><strong>$72,480 Berkeley portion of $144,960 total program fee</strong> New students entering Summer 2009 <strong>$70,000 Berkeley portion of $135,000 total program fee</strong> Continuing students who entered in Summer 2008</td>
<td><strong>$75,000 for Berkeley portion of $150,000 total program fee</strong> New students entering Summer 2010 <strong>$72,480 Berkeley portion of $144,960 total program fee</strong> Continuing students who entered in Summer 2009</td>
</tr>
<tr>
<td>Berkeley</td>
<td>Master of Laws (LLM) Program 1-year law program primarily for qualified foreign-trained lawyers. The annual fee covers the instructional program and campus-specific fees. Books and supplies and living expenses are not covered.</td>
<td><strong>$42,795 annual fee</strong> New students entering Fall 2008 and continuing students who entered in Fall 2007</td>
<td><strong>$44,935 annual fee</strong> New students entering Fall 2009 and continuing students who entered in Fall 2008</td>
<td><strong>$49,427 annual fee</strong> New students entering Fall 2010 and continuing students who entered in Fall 2009</td>
</tr>
<tr>
<td>Berkeley</td>
<td>Master of Electrical Engineering and Computer Science 1-year full-time program focused on current technology in areas of interest to employers. The program fee covers the cost of the instructional program and campus-specific fees.</td>
<td>N/A</td>
<td>N/A</td>
<td><strong>$40,000 annual fee</strong> New students entering Fall 2010</td>
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Fees are set by the individual programs per [Regental policy](#).  
*Pending program approval.*
# Self-Supporting Graduate Professional Degree Programs

Health insurance is not included.

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<th>Campus</th>
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<th>2009-10 Student Fees</th>
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<td>SACRAMENTO LOCATION:</td>
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<td>$2,676 per course</td>
<td>$2,808 per course</td>
<td>$872 per unit</td>
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<td></td>
<td></td>
<td>New students entering in 2008; (total program fee is approximately $64,224)</td>
<td>New students entering in 2009; (total program fee is approximately $67,392)</td>
<td>New students entering in 2010; (total program fee is approximately $69,984)</td>
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<td>$2,550 per course</td>
<td>$2,676 per course</td>
<td>$2,808 per course</td>
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<td>Continuing students who entered in 2007</td>
<td>Continuing students who entered in 2008</td>
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<td>$2,490 per course</td>
<td>$2,550 per course</td>
<td>$2,676 per course</td>
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<td>Continuing students who entered in 2006</td>
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<td>$2,400 per course</td>
<td>$2,490 per course</td>
<td>$2,550 per course</td>
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<td>Continuing students who entered in 2005</td>
<td>Continuing students who entered in 2006</td>
<td>Continuing students who entered in 2007</td>
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<td></td>
<td>$2,199 per course</td>
<td>$2,400 per course</td>
<td>$2,490 per course</td>
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<td>Continuing students who entered in 2004 and earlier</td>
<td>Continuing students who entered in 2005</td>
<td>Continuing students who entered in 2006</td>
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<td></td>
<td></td>
<td>BAY AREA LOCATION: $3,399 per course</td>
<td>BAY AREA LOCATION: $3,570 per course</td>
<td>BAY AREA LOCATION: $1,244 per unit</td>
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<tr>
<td></td>
<td></td>
<td>New students entering in 2008; (total program fee is approximately $81,576)</td>
<td>New students entering in 2009; (total program fee is approximately $85,680)</td>
<td>(total program fee is approximately $89,568)</td>
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<td>$3,240 per course</td>
<td>$3,399 per course</td>
<td>$3,570 per course</td>
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<td>Continuing students who entered in 2007</td>
<td>Continuing students who entered in 2008</td>
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<td>$3,150 per course</td>
<td>$3,240 per course</td>
<td>$3,399 per course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuing students who entered in 2006</td>
<td>Continuing students who entered in 2007</td>
<td>Continuing students who entered in 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$3,000 per course</td>
<td>$3,150 per course</td>
<td>$3,240 per course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuing students who entered in 2005</td>
<td>Continuing students who entered in 2006</td>
<td>Continuing students who entered in 2007</td>
</tr>
</tbody>
</table>

Fees are set by the individual programs per Regental policy.

*Pending program approval.*
# SELF-SUPPORTING GRADUATE PROFESSIONAL DEGREE PROGRAMS

<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
</table>
| Davis  | Master of Advanced Study - Clinical Research  
2-year program for advanced pre-doctoral students, post-doctoral fellows, and faculty members who wish to master clinical research methods and pursue independent research careers.  
The annual fee covers the cost of the instructional program. | $481 per unit  
New and continuing students  
(total program fee is approximately $17,316; federal grant funding allows 100% return-to-aid) | $481 per unit  
New and continuing students  
(total program fee is approximately $17,316; federal grant funding allows 100% return-to-aid) | $481 per unit  
New and continuing students  
(total program fee is approximately $17,316; federal grant funding allows 100% return-to-aid) |
| Irvine | Fully-employed MBA (FEMBA) Program  
3-year (nine quarters), part-time program for working professionals.  
The program fee covers the instructional program, textbooks and other course materials, and parking. $1,000 of the fee will be waived for students who purchase the recommended laptop computer. The fee also covers meals and lodging during residential sessions held off-campus. Airfare for the international student is not covered. | $75,970 program fee  
New students entering Fall 2008 and Spring 2009  
$71,000 program fee  
Continuing students who entered Fall 2007 and Spring 2008  
$66,500 program fee  
Continuing students who entered Fall 2006 and Spring 2007 | $79,500 program fee  
New students entering Fall 2009 and Spring 2010  
$75,970 program fee  
Continuing students who entered Fall 2008 and Spring 2009  
$71,000 program fee  
Continuing students who entered Fall 2007 and Spring 2008 | $84,375 program fee  
New students entering Fall 2010 and Spring 2011  
$79,500 program fee  
Continuing students who entered Fall 2009 and Spring 2010  
$75,970 program fee  
Continuing students who entered Fall 2008 and Spring 2009 |
| Irvine | Executive MBA (EMBA) Program  
2-year (seven quarters), full-time program for business executives.  
The program fee covers the instructional program, textbooks and other course materials, meals and lodging during residential sessions held off-campus, and parking. $1,000 of the fee will be waived for students who purchase the recommended laptop computer. Airfare for the international student is not covered. | $86,250 program fee  
New students entering Fall 2008  
$81,500 program fee  
Continuing students who entered Fall 2007 | $89,500 program fee  
New students entering Fall 2009  
$86,250 program fee  
Continuing students who entered Fall 2008 | $94,850 program fee  
New students entering Fall 2010  
$89,500 program fee  
Continuing students who entered Fall 2009 |

Fees are set by the individual programs per [Regental policy](#).  
*Pending program approval.*
# Self-Supporting Graduate Professional Degree Programs

<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irvine</td>
<td>Health Care Executive MBA (HCEMBA) Program</td>
<td>$86,250 program fee&lt;br&gt; New students entering Fall 2008</td>
<td>$89,500 program fee&lt;br&gt; New students entering Fall 2009</td>
<td>$94,850 program fee&lt;br&gt; New students entering Fall 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$81,500 program fee&lt;br&gt; Continuing students who entered Fall 2007</td>
<td>$86,250 program fee&lt;br&gt; Continuing students who entered Fall 2008</td>
<td>$89,500 program fee&lt;br&gt; Continuing students who entered Fall 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The program fee covers the instructional program, textbooks and other course materials, meals and lodging during residential sessions held off-campus, and parking. $1,000 of the fee will be waived for students who purchase the recommended laptop computer. Airfare for the international student is not covered.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irvine</td>
<td>Master of Advanced Study in Criminology, Law and Society Program</td>
<td>$10,836 annual fee&lt;br&gt; (all students)</td>
<td>$10,836 annual fee&lt;br&gt; (all students)</td>
<td>$10,836 annual fee&lt;br&gt; (all students)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The annual fee covers the instructional program only. It does not include textbooks and other course materials, living expenses, parking, services related to the recreation center, the graduate student association, or student health insurance program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irvine</td>
<td>Master of Science in Information and Computer Systems</td>
<td>No entering cohort in 2008-09</td>
<td>No entering cohort in 2009-10</td>
<td>No entering cohort in 2010-11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The program fee covers the instructional program only.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fees are set by the individual programs per [Regental policy](#).

*Pending program approval.*
<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>Fully-employed MBA Program (FEMBA) Program</td>
<td>$30,000 annual fee</td>
<td>$33,000 annual fee</td>
<td>$34,755 annual fee</td>
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<tr>
<td></td>
<td>3-year, part-time program for working professionals.</td>
<td>New students entering Fall 2008</td>
<td>New students entering Fall 2009</td>
<td>New students entering Fall 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$28,800 annual fee</td>
<td>$31,750 annual fee</td>
<td>$34,005 annual fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuing students who entered Fall 2007 or earlier</td>
<td>Continuing students who entered Fall 2008</td>
<td>Continuing students who entered Fall 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$30,500 annual fee</td>
<td>$32,754 annual fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Continuing students who entered Fall 2007 or earlier</td>
<td>Continuing students who entered Fall 2008 or earlier</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Executive MBA (EMBA) Program</td>
<td>$50,000 annual fee (all students)</td>
<td>$53,500 annual fee</td>
<td>$57,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>2-year, full-time program for business executives.</td>
<td></td>
<td>New students who entered Fall 2009</td>
<td>New students who entered Fall 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$50,000 annual fee</td>
<td>$55,500 annual fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Continuing students who entered Fall 2008</td>
<td>Continuing students who entered Fall 2009</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Global Executive MBA Program</td>
<td>$27,900 annual fee</td>
<td>$31,900 UC annual fee</td>
<td>$31,900 UC annual fee</td>
</tr>
<tr>
<td></td>
<td>15-month, dual-degree program for business professionals with sessions</td>
<td>New students entering Summer 2008</td>
<td>New students entering Summer 2009</td>
<td>New students entering Summer 2010</td>
</tr>
<tr>
<td></td>
<td>in Singapore, Los Angeles and Shanghai.</td>
<td>$8,400 program fee</td>
<td>$9,500 program fee</td>
<td>$10,500 program fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuing students who entered Summer 2007 (remaining 3 months)</td>
<td>Continuing students who entered in Summer 2008 (remaining 3 months)</td>
<td>Continuing students who entered in Summer 2009 (remaining 3 months)</td>
</tr>
</tbody>
</table>

Fees are set by the individual programs per [Regental policy](#).  
*Pending program approval.
<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>Master of Science in Engineering (On-line) Program</td>
<td>$3,333 course fee</td>
<td>$3,333 course fee</td>
<td>$3,333 course fee</td>
</tr>
<tr>
<td></td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Master of Public Health Program for Health Professionals</td>
<td>$22,000 annual fee</td>
<td>$22,000 annual fee</td>
<td>$22,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Educational Leadership (EdD) Program</td>
<td>$17,304 annual fee</td>
<td>$17,823 annual fee</td>
<td>$17,823 annual fee</td>
</tr>
<tr>
<td></td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Professional Program for International Dentists</td>
<td>$50,935 annual fee</td>
<td>$61,240 annual fee</td>
<td>$64,300 annual fee</td>
</tr>
<tr>
<td></td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
<td>(all students)</td>
</tr>
</tbody>
</table>

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*Pending program approval.
# Self-Supporting Graduate Professional Degree Programs

<table>
<thead>
<tr>
<th>Campus</th>
<th>Program</th>
<th>2008-09 Student Fees</th>
<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>Master of Laws (LLM) Program 1-year law program primarily for qualified foreign-trained lawyers. The annual fee covers the instructional program, plus GSHIP and Ashe Center fees. Books and supplies, travel, and living expenses are not included.</td>
<td>$41,500 annual fee (all students)</td>
<td>$45,000 annual fee (all students)</td>
<td>$49,000 annual fee (all students)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Master of Financial Engineering Program 1-year, full-time program for training finance professionals. Upon acceptance, a $2,000 non-refundable deposit is required indicating intent to register. Books and supplies, required laptop computer, travel and living expenses, medical insurance, parking and other campus-specific fees are not included.</td>
<td>$50,000 program fee New students entering January 2008</td>
<td>$50,000 program fee New students entering January 2009</td>
<td>$51,500 program fee New students entering January 2010</td>
</tr>
<tr>
<td>Riverside</td>
<td>Master of Fine Arts Writing Program Part-time program offered at UCR’s Palm Desert campus. The annual fee covers the cost of the instructional program.</td>
<td>$440 per-unit course fee (all students)</td>
<td>$460 per-unit course fee (all students)</td>
<td>$480 per-unit course fee (all students)</td>
</tr>
<tr>
<td>Riverside</td>
<td>Executive MBA Program 21-month MBA program offered to working professionals at UCR’s Palm Desert campus. The program fee covers the cost of the instructional program, housing, and meals.</td>
<td>N/A</td>
<td>$75,000 program fee New students entering Fall 2009</td>
<td>$75,000 program fee New students entering Fall 2010</td>
</tr>
<tr>
<td>San Diego</td>
<td>Rady School of Management FlexMBA Programs Alternatively-scheduled program for working professionals. The annual fee covers the instructional program, books and course materials, parking, meals and lodging during class weekends.</td>
<td>$870 unit fee New students entering Fall 2008 $37,500 annual fee New and continuing students who entered Fall 2008 or earlier</td>
<td>$870 unit fee New students entering Fall 2009 and continuing students who entered Fall 2008 $37,500 annual fee New and continuing students who entered Fall 2009 or earlier</td>
<td>$950 unit fee New students entering Fall 2010 and continuing students who entered Fall 2009 $43,700 annual fee New and continuing students who entered Fall 2010 and continuing students who entered Fall 2009</td>
</tr>
</tbody>
</table>

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# SELF-SUPPORTING GRADUATE PROFESSIONAL DEGREE PROGRAMS

<table>
<thead>
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<th>Program</th>
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<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego</td>
<td>Master of Advanced Study in International Relations and Pacific Studies</td>
<td>N/A</td>
<td>N/A</td>
<td>$625 unit fee</td>
</tr>
<tr>
<td></td>
<td>The nine-month, full-time MAS program offered at UCSD’s School of International Relations and Pacific Studies is aimed at mid-career professionals seeking advanced training in international affairs and public policy. (The program may also be taken on a part-time basis over two nine-month academic cycles.) The program fee covers the cost of the instructional program.</td>
<td></td>
<td></td>
<td>New students entering Fall 2010</td>
</tr>
<tr>
<td>San Francisco</td>
<td>International Dentist Program (IDP)</td>
<td>$70,420 annual fee</td>
<td>$73,300 annual fee</td>
<td>$73,300 annual fee</td>
</tr>
<tr>
<td></td>
<td>2-year, full-time DDS degree program for qualified foreign-trained dentists.</td>
<td>New students entering Summer 2008</td>
<td>New students entering Summer 2009</td>
<td>New students entering Summer 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the instructional program, but does not include a mandatory instrument/laboratory kit fee.</td>
<td>$61,240 annual fee</td>
<td>$70,420 annual fee</td>
<td>$73,300 annual fee</td>
</tr>
<tr>
<td></td>
<td>Continuing students who entered Summer 2007</td>
<td>Continuing students who entered Summer 2008</td>
<td>Continuing students who entered Summer 2009</td>
<td>Continuing students who entered Summer 2009</td>
</tr>
<tr>
<td>San Francisco</td>
<td>Masters Entry Program in Nursing (MEPN)</td>
<td>$31,000 annual fee</td>
<td>$31,000 annual fee</td>
<td>$34,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>1-year, full-time pre-nursing program to prepare students to enroll in the Masters program in Nursing.</td>
<td>New students entering Summer 2008</td>
<td>New students entering Summer 2009</td>
<td>New students entering Summer 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the instructional program, but does not include books and supplies, living expenses, transportation, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Master of Advanced Studies in Clinical Research</td>
<td>$17,500 annual fee</td>
<td>$18,000 annual fee</td>
<td>$19,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>2-year program for advanced pre-doctoral students, post-doctoral fellows, and faculty members who wish to master clinical research methods and pursue independent research careers.</td>
<td>(all students)</td>
<td>New students entering Summer 2009</td>
<td>New students entering Summer 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the cost of the instructional program.</td>
<td></td>
<td>$17,500 annual fee</td>
<td>$19,000 annual fee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continuing students entering Fall 2009</td>
<td>Continuing students entering Fall 2009</td>
<td>Continuing students entering Fall 2010</td>
</tr>
</tbody>
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## SELF-SUPPORTING GRADUATE PROFESSIONAL DEGREE PROGRAMS

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<th>2009-10 Student Fees</th>
<th>2010-11 Student Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>Joint UCSF/SFSU Doctorate in Physical Therapy (DPT)</td>
<td>$18,000 annual fee</td>
<td>$21,000 annual fee</td>
<td>$21,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>1-year program for licensed physical therapists.</td>
<td>New students entering Fall 2008</td>
<td>New students entering Fall 2009</td>
<td>New students entering Fall 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the cost of the instructional program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Joint UCSF/CSU Fresno Doctorate in Physical Therapy (DPT)</td>
<td>$18,000 annual fee</td>
<td>$21,000 annual fee</td>
<td>$21,000 annual fee</td>
</tr>
<tr>
<td></td>
<td>1-year program for licensed physical therapists.</td>
<td>New students entering Fall 2008</td>
<td>New students entering Fall 2009</td>
<td>New students entering Fall 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the cost of the instructional program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Master of Global Health Sciences Program</td>
<td>$30,650 annual fee</td>
<td>$31,570 annual fee</td>
<td>$33,500 annual fee</td>
</tr>
<tr>
<td></td>
<td>1-year interdisciplinary program to train graduates to achieve mastery and leadership skills in the field of global health.</td>
<td>New students entering Fall 2008</td>
<td>New students entering Fall 2009</td>
<td>New students entering Fall 2010</td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the cost of the instructional program. The costs of travel, insurance/visa, project and residence abroad; Health, Evacuation and Repatriation insurance for students completing field work will be provided by the program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Master of Science and Technology Studies in Medicine Program</td>
<td>N/A</td>
<td>$26,500 annual fee</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1-year program for advanced pre-doctoral students, post-doctoral fellows, and faculty members who wish to master qualitative social science and humanities-oriented research methods to enhance their research designs and broaden their investigative skills.</td>
<td>Approved for new students entering Fall 2009; program has been postponed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The annual fee covers the cost of the instructional program.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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*Pending program approval.*
**Individual Appointment History**

**Department:** Electrical Eng.

**Name:** Jie Chen  
**UC Hire Date:** 1/1/1994  
**UCR Appt Date:** 1/1/1994

**Previous Affiliation:** Georgia Institute of Technology

**Previous Affiliation Title:** Research Fellow  
**Prev. Affil. From:** 10/1990  
**To:** 12/1993

**Awards/Honors:**
- Best Paper Presentation Award, 1993 American Control Conference, San Francisco, CA, June 1993
- Adjunct Professor, by invitation, Northwestern Polytechnic University, China, 1994 - Present
- UCR Regents Fellowship Award, UCR, 1995
- NSF Career Award, 1996
- Sloan Fellows, 1996
- Guest Professor, Zhejiang University, China, 1997 - present
- Visiting Fellow, Tokyo Institute of Technology, Tokyo, Japan, July 2000
- Visiting Associate Professor, Hong Kong University of Science and Technology, Hong Kong, P.R. China, January - June 2000
- Visiting Fellow, University of Newcastle, Newcastle, Australia, August - September 2000
- Guest Professor, Dalian Institute of Technology, Dalian, P.R. China, 8/2001 - present
- Adjunct Professor, Harbin Institute of Technology-Shenzhen Graduate School, Shenzhen, P.R. China, April 2004 - present
- Visiting Fellow, University of Western Sydney, Penrith, Australia, May - June 2004
- SICE International Award, 2004 SICE Annual Meeting, July 2004
- Outstanding Overseas Young Investigator, natural Science Foundation of China, P.R. China, August 2006
- Fellow, IEEE (Institute of Electrical and Electronics Engineers), 2007
- Yangtze Scholar and Chair Professor, Ministry of Education, China 2007
- Fellow, American Association Advancement of Science (AAAS), 12/2008 - present

**Research Spec:**
Research Specialization: Dr. Chen's current research interests include system identification, robust control, linear multivariable system theory, networked control, optimization and complexity theory.

**Fellow:**
Fellow, IEEE (Institute of Electrical and Electronics Engineers), 2007
Fellow, American Association Advancement of Science (AAAS), 12/2008 - present

**Special Chair:**

**Member NAE** ✅
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>From Date</th>
<th>To Date</th>
<th>Title</th>
<th>Step</th>
<th>Ch Dir</th>
<th>Vice-Chair</th>
<th>Director Research Unit</th>
<th>Coop Appt1</th>
<th>Coop Appt2</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/10</td>
<td>7/1/2009</td>
<td>6/30/2010</td>
<td>Professor</td>
<td>IV (OS)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>08/09</td>
<td>7/1/2008</td>
<td>6/30/2009</td>
<td>Professor</td>
<td>IV (OS)</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>07/08</td>
<td>10/1/2007</td>
<td>6/30/2008</td>
<td>Professor</td>
<td>IV (OS)</td>
<td></td>
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</tr>
<tr>
<td>07/08</td>
<td>7/1/2007</td>
<td>9/30/2007</td>
<td>Professor</td>
<td>IV (OS)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>06/07</td>
<td>7/1/2006</td>
<td>9/30/2006</td>
<td>Professor</td>
<td>III (OS)</td>
<td></td>
<td></td>
<td>Mechanical Eng.</td>
<td></td>
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</tr>
<tr>
<td>05/06</td>
<td>10/1/2005</td>
<td>6/30/2006</td>
<td>Professor</td>
<td>III (OS)</td>
<td>☑</td>
<td></td>
<td>Mechanical Eng.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/06</td>
<td>7/1/2005</td>
<td>9/30/2005</td>
<td>Professor</td>
<td>III (OS)</td>
<td>☑</td>
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<td>Mechanical Eng.</td>
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<tr>
<td>04/05</td>
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Individual Appointment History

Department  Computer Science & Eng.

Name: Rajiv Gupta  UC Hire Date: 7/1/2007  UCR Appt Date: 7/1/2007

Previous Affiliation:  U. of Arizona, Tucson, Arizona

Previous Affiliation Title:  Professor of Computer Science (1999 - 2007)

Name: Rajiv Gupta

U. of Arizona, Tucson, Arizona

Previous Affiliation:

Name: Rajiv Gupta

UC Hire Date: 7/1/2007

UCR Appt Date: 7/1/2007

Previous Affiliation:  U. of Arizona, Tucson, Arizona

Previous Affiliation Title:  Professor of Computer Science (1999 - 2007)


AwardsHonors:

Andrew Mellon Pre-doctoral Fellow, U. of Pittsburgh, 1985
Making a Difference Award, Philips Laboratories, New York, 1988
Presidential Young Investigator Award, National Science Foundation, 1991
Teaching Awards for highest teaching evaluations in:
- a graduate core course during academic year 1995/1996, U. of Pittsburgh
- a graduate elective course during academic year 1995-1996, U. of Pittsburgh
- a graduate core course during academic year 1994-1995, U. of Pittsburgh
ACM Recognition of Service Award (received on 4 occasions)
Outstanding Paper Award, IEEE International Conf. on Complex Computer Systems, 1996
Most Influential Papers of PLDI 1979 - 1999 - paper from PLDI 1998 selected among top 50 papers selected
IEEE Distinguished Visitor, 2000 - 2002
Most original paper award, International Conf. on Parallel Processing, 2003
Distinguished Paper Award, International Conference on Software Engineering, 2003
Faculty Impact Award, U. of Arizona, 2006
Fellow, IEEE (Institute of Electrical and Electronics Engineers), 2008
Fellow, ACM (Association for Computing Machinery), 12/1/2009 -

ResearchSpec:

Embedded Systems: Compiler and Architectural Support for Optimization of Performance, Power, & Memory, and providing Security
Software Engineering: Software Tools for Profiling, Slicing, and Debugging
Program Analysis: Static, Dynamic, and Profile-based

Fellow:

Fellow, IEEE (Institute of Electrical and Electronics Engineers), 2008
Fellow, ACM (Association for Computing Machinery), 12/1/2009 -

SpecialChair:

Friday, May 14, 2010  Rajiv Gupta

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Friday, May 14, 2010
Individual Appointment History

Department: Chemical/Environmental Eng.

Name: Mark Matsumoto  
UC Hire Date: 7/1/1994  
UCR Appt Date: 7/1/1994

Previous Affiliation: Department of Civil Engineering, SUNY Buffalo

Previous Affiliation Title: Associate Professor (9/89 - 6/94)


Awards/Honors:
- Lilly Foundation Teaching Fellow, 1987 - 1988
- Outstanding Teaching Award, Bourns College of Engineering, 2000
- Editorial Board Advances in Environmental Research Fellow, AAAS (American Association for the Advancement of Science) 2001
- Ph.D. 1982 Civil Engineering UC Davis

ResearchSpec: Water and wastewater treatment, especially land-based treatment systems, and hazardous waste site remediation.

Fellow: Fellow, AAAS (American Association for the Advancement of Science), 2001

SpecialChair:

MemberNAE

Fiscal Year  From Date To Date Title Step Ch Dir Vice-Chair Degree DD  Degree Subject/Field Institution

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08/09  7/1/2008  6/30/2009  Professor  V (OS) □ □ □
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Individual Appointment History

Department: Mechanical Eng.

Name: Cengiz Ozkan  
UC Hire Date: 7/1/2001  
UCR Appt Date: 7/1/2001

Previous Affiliation: Applied Micro Circuits Corporation

Previous Affiliation Title: Senior Development Engineer

To: 6/30/01

Awards Honors:
- University President's Honor List, Middle East Technical University, Ankara, Turkey, 1984, 1988
- Ph.D. Fellowship, North Atlantic Treaty Organization (NATO), 1991
- Dean of Engineering Fellowship, Stanford University, 1993 - 1994
- Recognition by the Materials Research Society for Symposium Organization, 2001
- Regent's Faculty Fellowship/Faculty Development Award, 2002
- Academic Senate Faculty Excellence Award, 2002
- Invited Research Fellow, Max-Plank Institute, Bio-Nano Group, Stuttgart, 2002
- Achievement in Technical Ingenuity Award, 2003
- Recognition by the Materials Research Society for Symposium Organization, 2003
- Academic Senate Faculty Excellence Award, 2003
- Regents' Fellowship/Faculty Development Award, 2005
- Research Recognition Award, Taiwanese American Aeronautics and Space Association (TAASA), 2005
- University of California, Academic Senate Excellence Award, 2006
- Workshop Recognition Award, Nanotechnology Workshop, Bilkent University, Turkey, 2006
- Inventor Recognition Award, Global Research Collaboration (GRC) Program, sponsored by the Semiconductor Research Corporation (SRC), Sept. 2008

Research Spec:
Cengiz Ozkan's research interests are in the areas of wafer fab processing, thin film mechanics and nanotechnology. His research in thin films emphasized strain relaxation, defect formation and morphological evolution in heteroepitaxial thin films and reliability of microelectronic devices. His current research is focused on self-assembly of structures and nanofabrication in semiconductors and polymers and fabrication of micro- and nano-electromechanical systems for biosensing and mechanical testing.

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Individual Appointment History

Department: Computer Science & Eng.

Name: Thomas Payne

UC Hire Date: 7/1/1967
UCR Appt Date: 7/1/1967

Previous Affiliation: IBM

Previous Affiliation Title: Summer Engineer


UCR Employment Comments:
Originally employed in the Mathematics Department.
Transferred to COE 7/1/92
Professor Emeritus (WOS)

appointed as Associate Professor Recall 10/1/09-6/30/10.
Retirement waiver signed and on file

Awards/Honors:
T. J. Watson Memorial Scholarship
NASA Traineeship

Research Spec:
Research Specialization - Dr. Payne's current research involves the efficient implementation of various programming language features related to issues in operating systems: concurrency, protection, and dynamic binding.

Fellow:

Special Chair:

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**Individual Appointment History**

**Department:** Bioengineering  
**Name:** Jerome Schultz  
**UC Hire Date:** 7/1/2003  
**UCR Appt Date:** 7/1/2003

### Previous Affiliation
- **University of Pittsburgh**

### Previous Affiliation Title
- Chair, Distinguished Professor

### Degree & Institution
- **B.S.:** Chemical Engineering, Columbia University  
- **M.S.:** Chemical Engineering, Columbia University  
- **Ph.D.:** Biochemistry, University of Wisconsin

### Previous Affiliation Dates
- **From:** 1987  
- **To:** Present

### UCR Employment Comments
- Appointment proposed for 7/1/03 leave without pay request to be submitted through Fall 03 Quarter.

### Awards Honors
- "One Hundred Engineers of the Modern Era", American Institute of Chemical Engineers, 2008
- Fellow, BMES (Biomedical Engineering Society), 2005
- Donald Katz Lectureship, University of Michigan, School of Engineering, 2002
- Marvin J. Johnson Biotechnology Award, American Chemical Society, BIOT Division, 2000
- University of Pittsburgh Distinguished Service Professor of Engineering, 1999
- Whitaker Plenary Lecturer, American Society for Artificial Internal Organs, 1997
- Career Achievement Award, Houston Society for Artificial Internal Organs, 1997
- Career Achievement Award, Houston Society for Engineering in Medicine and Biology, 1995
- National Academy of Engineering, Member 1994
- Fellow and Founding President, AIMBE (American Institute for Medical and Biological Engineering), 1992
- American Institute of Chemical Engineering, Bioengineering Award, 1984
- Excellence in Research Award, University of Michigan, College of Engineering, 1983
- Ruth Symposium Lecturer, Iowa State University, 1979
- NIH Research Career Development Award for Membrane Transport, 1970 - 1975

### Research Specific
- Biosensors, transport processes in tissues, pharmacokinetics, immobilized enzymes, biomaterials, membrane-based separations

### Fellow
- Fellow, AAAS, (American Association Advancement of Sciences), 1997
- Fellow, BMES (Biomedical Engineering Society), 2005
- Fellow and Founding President, AIMBE (American Institute for Medical and Biological Engineering), 1992

### Special Chair

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*Wednesday, May 12, 2010*  
Jerome Schultz  
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Individual Appointment History

Department: Mechanical Eng.

Name: Kambiz Vafai

UC Hire Date: 7/1/2000

UCR Appt Date: 7/1/2000

Previous Affiliation: Ohio State University

Previous Affiliation Title: Professor


To: 6/30/00

AwardsHonors:

- Honor Society Membership: Pi Tau Sigma, Tau Beta Pi, 1974 - present
- Mary Ann Wheeler Academic Scholarship, UC Berkeley, 1975-1976
- Earle C. Anthony Academic Fellowship, UC Berkeley, 1975-1976
- Department Citation, 1st Place in Mechanical Engineering Department Graduating Class of 1975, U. of Minnesota, Minneapolis (Graduated with high distinction honors)
- Dupont Summer Faculty Fellowship, 1982
- Certificate of Appreciation and high regards of the co-workers by the ASME Board of Governors and the students as the Faculty Advisor, for 1985-1987
- Chair of the General Papers Committee for the National Heat Transfer Division, ASME, 9/88 - 9/90
- Owens/Corning Faculty Fellowship, 1985
- College of Engineering, Ohio State University, Outstanding Research Award, 1986, 1991, and 1996
- Fellow, American Society of Mechanical Engineers (ASME), 1992
- Associate Editor of ASME J. of Heat Transfer, 2/94 - 8/97
- Board of Editors - Experimental heat Transfer, 10/97 - present
- Editor in Chief - J. of Porous Media, 1/97 - present
- Classic Paper Award ASME Heat Transfer Division, 1999
- Presidential Chair, UCR, 7/00 - 6/30/02
- Fellow, American Association for the Advancement of Science (AAAS), 2002
- Editorial Advisory Board-Numerical Heat Transfer Journal, 11/02 - present
- Fellow of World Innovation Foundation (WIF), 10/2003
- Listed in ISI Highly Cited, 2/04 - present
- Editorial Advisory Board-International Journal of Numerical
Kambiz Vafai’s research interests include transport through porous media, multiphase transport, natural convection in complex configurations, analysis of porous insulations, heat flux applications, free surface flows, unconventional heat pipes, and power electronics. Basic and applied research is conducted in several areas related to heat and mass transfer, such as Fundamental Aspects of Transport through Porous Media, Natural Convection in Open-Ended Configurations, Condensation and Phase Change, Multiphase Transport through Porous Media, Heat Pipe Analysis as Applied to Flat Shaped Heat Pipes, Flow and Heat Transfer in the Brake Housing of an Aircraft, Heat Transfer and Phase Change Effects on Insulation and in Partial Insulations, and Free Surface Analysis in regular and porous media. Due to the nature of his research in porous media, he has also been involved in some biomedical applications such as the use of magnetic resonance imaging in the early detection of brain strokes and simulation of macromolecule transport through arteries. He has also worked on developing biosensors for biological detection and has established a patent in this area.

Fellow, American Society of Mechanical Engineers (ASME), 1992
Fellow, American Association for the Advancement of Science (AAAS), 2002

Presidential Chair, UCR, ME Department, 7/00 - 6/30/02
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September 20, 2009

TO: Dallas Rabenstein

CC: Joseph W. Childers

FROM: Reza Abbaschian

Subject: Establishment of Online Master-of-Science in Engineering Program

I am pleased to support and strongly endorse the proposal to establish an online Master-of-Science in Engineering Program in the Bourns College of Engineering. The primary purpose of the program is to enable fully employed engineers, including computer scientists, to advance their professional education, enhance their value to their employers, this state, and the nation. The program will also complement our ongoing MS and PhD programs. The program will also bring our college in line with other top engineering schools, such as UCLA, Stanford, USC and Georgia Tech.

The distinctive feature of the proposed program is that it will be self supporting, and the profits generated will be mainly used to support residential PhD students. Another feature of the proposed program is that it will be administered college-wide. This will enable efficient management, save resources, and facilitate the development of multidisciplinary specializations. As such, all the initial support functions such as student services, accounting, purchasing, recruiting, contract and grant administration will be handled through the existing staffing in the college and participating departments as appropriate. However, as the program grows, additional staffing will be necessary. The funding for the additional staffing will come from the program revenues.

Professor Tom Payne has been contributing as the Director of the program since August 2008. In this capacity, Tom has been working with our faculty and departments to develop the proposal, and plans for its implementation, delivery and other related activities. I am pleased that Tom has agreed to continue helping us at least until the program is launched in 2010-11 academic year.

I hope the proposal receives approval within the campus. I believe the program will greatly enhance graduate training and education at UCR. Please let me know if you need any additional information.
My observations about this program:

1. Can they use TAs for this self-supporting programs?

2. In the Timetable for Development (p. 4) they say that when this is approved they will solicit further advice from industry partners, alumni, etc. on specializations. Shouldn't they do that now?

3. Under "2. Program" (page 7) they say that students will receive credit towards the master's degrees in the form of ENGR 296A which is reflective of work on their comp exams. Right now students enroll in 291 units and 291 units do not count towards the 36 units of required unit credit.

4. On page 9 under the selection of courses they list XRC 400 level courses. First of all, Extension units do not count (unless Graduate Council approves as an exception). Secondly, the Senate regulations say that MS students must complete 36 units of 100 and/or 200 level units. We never count 400 level units towards the 36 units.

5. On page 13 they begin to list the Resources and Enrollment Planning. First of all, I think our office should get some of this money. We're going to end up performing services for which we should be paid. We did not get any credit for Palm Desert self-supporting programs which is an oversight in my opinion. We spend lots and lots of time on that program. The Registrar should be paid as well.

Their fees are less than the fees for the other M.S. programs if the student is presumed to be fully enrolled. Since it is a two-year program I'm not sure they want them to be fully enrolled. Shouldn't they say how many courses students take per year? Shouldn't this be on a per unit basis like Palm Desert?

What about NRT for foreign students? Do they pay more?

They list a Special Reader. What is that? What have Readers but no Special Readers.

The pay for Readers is wrong. Readers are paid $12.72 per hour. A 25% time Reader for the quarter is paid about $1400 and remissions for a resident student is $3714.00. That is $5,114 per quarter and $15,342 per year. I don't know what they are talking about with the $4500 in salary and $400 in benefits.

A 25% time TA is paid a salary of $2772 per quarter or $8316 per year with the remissions listed above.

As for the app fee of $70 our domestic app fee is $80 and the foreign is $100.

As for the instruction support figures for TAs and Readers on page 15 I don't know how they arrived at that figure.

Linda

--

Linda G. Scott
Hi Virginia,

Attached are:

- an update of BCOE's proposal for establishment of an Online M.S. Degree in Engineering
- a point-by-point reply to your feedback regarding the previous draft of that proposal.

Regards,
Tom Payne
06/30/09

To: Virginia Bustamante, Graduate Division

Fr: Tom Payne, Bourns College of Engineering

Re: Response to feedback regarding Online MS Program.

I've updated the proposal per your input and have directly addressed each point in italics, below. Please let me know if these responses are satisfactory. Also, if you have further feedback:

==============================================

Dr. Payne:

Dean Childers asked me to respond to your request for comments on the proposed online MS of Engineering degree program. The following is a synopsis of comments made from Dean Childers as well as relevant staff in the Graduate Division. These comments are provided in order to help you address or prepare for any issues that may be questioned by the various Academic Senate committees. You may contact me if you have any questions concerning any of the comments:

p. 4 – 1.2 College and Departmental Strength ... “Courses will be taught and administered by ladder-rank faculty and...”

- You should explain how these faculty will be paid.
  I've inserted a footnote (footnote 2 on page 4) that refers to the discussion of instructor compensation in the budget section.

p. 4 – Timetable for Development of the Program Approal of new graduate courses for the professional component of this degree program.

- These courses should be submitted ASAP in order to get them approved in a timely manner.
  This will be done during the Summer.

p. 6 – Administration of the Program

- You need to explain how students will apply and pay the application fee.
  We intend that they use GradSys, just like other graduate student. Note, however, that unlike for other domestic applicants, the application fees for domestic students applying for the on-line MS degree will not be subsidized by BCOE
• Since you state that the standards for admission are the same as those for BCOE's traditional M.S. degree, does this mean that the GRE will be required? If yes, then a statement about this requirement needs to be made.

   Yes. And, such a clause has been added — see second paragraph of subsection 1.6 on page 6.

• What about international students — will you be accepting international students? If yes, will the TOEFL be required. Again, if yes, then a statement needs be made. Along this same line, if international students are eligible, will visas be needed?

   We are targeting domestic students for now. But will eventually consider whether/when to admit international students.

• You also need to reference the need to comply with Graduate Council regulations for admission.

   Such a clause has been added — see second paragraph of subsection 1.6 on page 6.

• Will you be accepting applications for Fall quarter only, or all year round?

   Initially, Fall only.

• What about financial support — will any type of financial support be available?

   No.

p. 8 — Relationship Between the online M.S. in Engineering Program and the Traditional MS/PhD Programs

• You state that students may switch back and forth between the regular program and the self-supporting program. If admission requirements are going to be exactly the same for both programs, then this may be possible. However, if there is any variance between admission requirements, then we would need to clarify with CCGA whether this switching between programs is permissible.

   This paragraph has been completely revised. Now it states that traditional students may NOT switch to the online program.

• In this same section you state that students who have completed the traditional M.S. or PhD programs may be admitted to the online M.S. in Engineering. However, wouldn't this constitute a duplication of degree, and thus not be allowed?

   This program is self-supporting, so that shouldn't be an issue.
• Perhaps it would be best to state that ... "Students who have completed the online M.S. in Engineering program may apply to the Ph.D. program, rather than to state that they may be admitted to the program."

Will do.

p. 8 – Sample Program

• You state that you want students to take 16 units from a list of courses that includes 400-level courses. Please be aware that only 8 units may be transferred for credit from extension courses. Also 400-level units may not be used towards a 36-unit master’s degree.

Noted. The plan is to cross-list these courses with new BCOE numbers.

• You also state that you want to use Engineering 296A toward the 36 units for the degree. Research units are not counted towards the degree. You would have to request that the Graduate Council approve an exception to have these units counted towards the degree.

Noted. This is project work as opposed to thesis research.

p. 10 – Sample Program

• Please make the following editorial change – ENGR 296A. Preparation for M.S. Comprehensive Examination. (4 units) Tutorial, to be arranged. Limited to graduate engineering students in the online program.

Done.

p. 10 – 4.2. The online M.S. in Engineering Online Course

• Syntax is awkward, please rephrase

Done.

p. 11 – The Online Lecture in the online M.S. in Engineering Program

• Again syntax is awkward. With the technology listed on page 11 (second and third full paragraphs), the program should address whether they have calculated the costs for creating or maintaining these types of technology and included them in the budget?

Done.

p. 12 – Intellectual Property
• You state that "No other faculty member may use lectures without the explicit approval of the creator." We assume that the program has checked with the Office of Research to ensure that this statement is correct.

The pre-recorded materials for these courses will be treated the same as instructor-written textbooks. Recordings of actual classroom lectures will be the property of the University, i.e., Regents.

p. 12 – Staff

• While you address who will teach courses, and mention on page 13 that a programmer and Student Affairs (Administrative Analyst) will be needed, it does not appear that you have indicated how their salaries will be paid nor do their salaries appear to be in the budget. This issue needs to be addressed.

The budget breakdown has been amended with a footnote stating that the "Instructional Services Fee" will cover these services.

p. 15 – Budget

• The tuition for this program ($15,000) appears to be on the low side. Tuition for the existing self-supporting graduate programs

That’s $15,000 per year for each of two years, i.e., $30,000 for the degree, which is the same as UCLA charges.

It has also come to our attention that this program may need to be approved by WASC (Western Association of Schools and Colleges), as we were recently informed that any new type of degree program that has not yet been offered on campus must be approved by WASC in addition to CCGA. Since UC Riverside does not currently offer any type of online degree program, we will need to research or confirm that WASC will need to approve this new program.

An additional concern is that currently there are no guidelines for online courses. While you list some sample courses that are currently offered on campus, they were not approved to be offered in this format, and thus will likely need to go through the approval process again. You should probably check with the Chair of Committee on Courses to see what guidance they can provide to get any new (or currently offered) courses approved in this new format.

Again, please do not hesitate to contact me if you have any questions concerning any of the issues raised in this email. Thank you.

Virginia Bustamante
Graduate Division
University of California, Riverside
Phone: 951-827-4302
Fax: 951-827-2238
To: payne
From: Virginia Bustamante <virginia.bustamante@ucr.edu>
Subject: Re: FW: Online MS in Engineering
Cc:
Bcc:

Attachments:

Dr. Payne:

Dean Childers asked me to respond to your request for comments on the proposed online MS of Engineering degree program. The following is a synopsis of comments made from Dean Childers as well as relevant staff in the Graduate Division. These comments are provided in order to help you address or prepare for any issues that may be questioned by the various Academic Senate committees. You may contact me if you have any questions concerning any of the comments:

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p. 6 -- Administration of the Program --
----- You need to explain how students will apply and pay the application fee.
----- Since you state that the standards for admission are the same as those for ECOE's traditional M.S. degree, does this mean that the GRE will be required? If yes, then a statement about this requirement needs to be made.
----- What about international students -- will you be accepting international students? if yes, will the TOEFL be required. Again, if yes, then a statement needs be made. Along this same line, if international students are eligible, will visas be needed?
----- You also need to reference the need to comply with Graduate Council regulations for admission.
----- Will you be accepting applications for Fall quarter only, or all year round?
----- What about financial support -- will any type of financial support be available?

p. 8 -- Relationship Between the online M.S. in Engineering Program and the Traditional MS/PhD Programs
----- You state that students may switch back and forth between the regular program and the self-supporting program. If admission requirements are going to be exactly the same for both programs, then this may be possible. However, if there is any variance between admission requirements, then we would need to clarify with CCGA whether this switching between programs is permissible.
----- In this same section you state that students who have completed the traditional M.S. or Ph.D. programs may be admitted to the online M.S. in Engineering. However, wouldn't this constitute a duplication of degree, and thus not be allowed?
----- Perhaps it would be best to state that ..."Students who have completed the online M.S. in Engineering program may apply to the Ph.D. program, rather than to state that they may be admitted to the program..."

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----- You state that you want students to take 16 units from a list of courses that includes 400-level courses. Please be aware that only 8 units may be transferred for credit from extension courses. Also 400-level units may not be used towards a 36-unit master's degree.
----- You also state that you want to use Engineering 296A toward the 36 units for the degree. Research units are not counted towards the degree. You would have to request that the Graduate Council approve an exception to have these units counted towards the degree.

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An additional concern is that currently there are no guidelines for online courses. While you list some sample courses that are currently offered on campus, they were not approved to be offered in this format, and thus will likely need to go through the approval process again. You should probably check with the Chair of Committee on Courses to see what guidance they can provide to get any new (or currently offered) courses approved in this new format.

Again, please do not hesitate to contact me if you have any questions concerning any of the issues raised in this email. Thank you.

--
Joseph W. Childers
Dean, Graduate Division
University of California, Riverside
Riverside, CA 92521

phone: 951 827 4302

------ Forwarded Message
From: Joseph Childers <joseph.childers@ucr.edu>
Date: Thu, 07 May 2009 09:54:59 -0700
To: Tom Payne <thp@cs.ucr.edu>
Conversation: Online MS in Engineering
Subject: Re: Online MS in Engineering

Dear Tom,

I spoke with Reza about this last night. As you know, we are short
staffed and in the middle of admissions. However, I, my director of
admissions, and my director of enrolled students are going over the proposal
to find anything we should direct your attention to. I suspect we will be
getting it back to you in a week or so.

Also, as I apprised Reza, this will indeed have to go off campus to
CCGA--primarily because it is a self-supporting program. So even after Grad
Council considers and approves it, it could be as much as a year before
systemwide approves it.

Joe

On 5/7/09 9:46 AM, "Tom Payne" <tphp@cs.ucr.edu> wrote:

> Hi Joe,
> I'm enquiring about the status of and schedule for the proposal to
> establish an online MS in Engineering. Specifically, are there things
> that we at BCoE can and/or should be doing (or be worrying about) to
> expedite its consideration?
> Thanks,
> Tom Payne

---

Joseph W. Childers
Dean, Graduate Division
University of California, Riverside
Riverside, CA 92521

phone: 951 827 4302

------ End of Forwarded Message

Virginia Bustamante
Graduate Division
University of California, Riverside
Phone: 951-827-4302
Fax: 951-827-2238
Date: Fri, 1 May 2009 10:24:27 -0700
To: gdivvb@pop.ucr.edu
From: "Linda G. Scott" <gdivls@ucr.edu>
Subject: MS in Engineering-OnLine Program

Virginia,

The problems I see with this program are:

They want students to be able to take 16 units from a list that contains 400 level extension units. We don't allow students to transfer in anymore than 8 units from Extension. Also we don't allow the use of 400 level units (professional level) towards a 36 unit master's degree.

They want to count the four units of studying for comps (296A-Special Project) towards the 36 units. The Council has said that units like that should not count towards the degree. They would have to make an exception on this one.

Lastly they want to allow students to switch back and forth between the regular program and the self-supporting program. I don't know if that is allowed by CCOA or not.

Linda
--
Linda G. Scott
Director, Graduate Academic Affairs & Postdoc Studies
Graduate Division
136 University Office Building
University of California, Riverside
Riverside, CA 92521
(951) 827-3387
gdivls@ucr.edu
Linda.Scott1@ucr.edu
December 1, 2009

TO:       ALAN WILLIAMS, CHAIR
          GRADUATE COUNCIL

FM:       ANTHONY W. NORMAN, CHAIR
          RIVERSIDE DIVISION

RE:       BCOE PROPOSAL FOR AN ON-LINE ENGINEERING MS PROGRAM

The above proposal has been reviewed by the committee on Educational Policy, Planning and Budget, Courses and Library. Several concerns were raised by the committee members who reviewed the committee. Planning and Budget voted in favor of development of the Online Masters Program contingent on the proposal being approved by other appropriate Senate Committees. Committee on Educational Policy was not convinced that there was enough evidence that this program will deliver quality education required of all UCR programs and they would like this issue to be addressed prior to it being approved by the Committee. The Committee on Library questioned whether the College has adequately addressed issues related to the delivery of the courses and they would like to have a formal response to this question prior to receiving their full endorsement. The Committee on Courses had a number of questions which they would also wish to have addressed prior to the proposal being approved.

I am enclosing all the 4 committee responses for your review and further action. From my perspective, it is clear (4.5 out of 5.0) Senate Committees did not provide approval of the proposed On-Line Engineering Program.

Thanks.

Enclosure
November 4, 2009

TO: ANTHONY NORMAN, CHAIR
RIVERSIDE DIVISION

FR: JOSE WUDKA, CHAIR
COMMITTEE ON EDUCATIONAL POLICY

RE: PROPOSAL FOR AN ON-LINE M.S. PROGRAM IN ENGINEERING

The Committee on Educational Policy reviewed the proposal for an on-line M.S. Engineering program at its October 30 meeting. Though the CEP accepts the possibility that the proposed program might serve UCR well, it was generally felt that, as presented, this proposal was incomplete and too vague in several key aspects to warrant approval.

Among the issues raised during the discussion were the following:

- The proposed program is based on a series of online courses, none of which have been approved. This makes it difficult assess many of the fundamental aspects of the program, such as its educational impact and its viability.
- The CEP believes that the development of effective online courses can proceed only with a significant investment of time and funds, and that this issue must be thoroughly addressed in order for the program to be considered viable.
- Given the existence of competing programs, the Committee was seriously concerned about the impact this program would have. No supporting letters from other UC campuses or institutions were provided to indicate that this would not be a serious problem.
- As described, the assessment methods were considered unsatisfactory. It is unclear whether virtual homework assignments would satisfy the educational need of the students, especially with a potential lack of hands-on experience. It is also unclear whether the assessments process will be adequately protected against dishonesty.
- Given the costs associated with course development and assessment management, and the lack of evidence that this program can successfully attract students, the CEP was concerned about the financial viability of the program.

In summary, the CEP feels that there is no convincing evidence that this program can effectively deliver quality education required of all UCR programs; the proposal must be revised to address this and all related issues before it can be approved by the Committee. This decision should not be interpreted as a rejection of the concept of online instruction: the CEP looks forward to a revised proposal from the BCOE.

cc: Allan Williams, Chair, Graduate Council
October 14, 2009

TO: Anthony Norman, Chair
    Academic Senate

FROM: Carol Lovatt, Chair
      Planning and Budget

RE: Online Engineering Master's Program in the Bourns College of Engineering

UCR Planning and Budget Committee (P&B) reviewed the "Proposal to Establish a Self-supporting, College-wide, Online Master-of-Engineering Degree Program within the Bourns College of Engineering (BCOE)" on October 2, 2009. A resulting set of questions for clarification of information in the proposal was sent to Akula Venkatram, the BCOE member on P&B (Appendix I). At P&B's October 9th meeting, Professors Mark Matsumoto and Thomas Payne provided a set of written responses to P&B's questions (Appendix II) and went over the responses with the committee and answered additional questions.

Planning and Budget voted in favor of the development of the Online Master's Program in the Bourns College of Engineering contingent on approval of the program and proposed courses by the other appropriate Academic Senate Committees.

The financial plan proposed is conservative, requiring an enrollment of only five students per year. Even with an annual student attrition rate of one student at the end of year 1, the Online Engineering Master's is projected to recoup most of its expenses in year 2 and generate net revenue by year 3.

Student enrollment in the campus-based Engineering Master's Program should not be impacted by the online program due to the significantly higher fees charged for the online Engineering Master's Program. Further, the online Engineering Master's at UCR is designed to avoid competition with similar programs at other universities, such as UCLA.

Growth of BCOE's program will have a financial impact on the Graduate Division related to processing applications and maintaining student records. The issue of how to identify non-residents and collect non-resident tuition or limit the course to residents only will have to be resolved.

Overall, there appears minimal cost to the campus and little financial risk to BCOE.
APPENDIX I

October 3, 2009

TO: Akula Venkatram - Mechanical Engineering

FROM: Carol Lovatt, Chair Planning & Budget

RE: Proposal for the On-line Engineering MS Program

For our meeting on October 9, 2009, could you please assist with the following items and provide answers to the following questions.

1) Walk us through the budget in Table 2, page 15.

2) The budget in Table 2 does not seem to cover development of the significant number of course listed on page 8 as part of the MS program.

3) What is the proposed source of funds to develop the first set of on-line courses for year 1 of the program?

4) Will the required additional staff (Programmer, Student Affairs AA) be funded from the revenue generated from the program? Please see the last sentence on page 16.

5) Likewise, will the additional computer server equipment be purchased from the proceeds of the program?

6) The justification for establishing the On-line Engineering MS program is student demand. No supporting documentation is provided. What is the estimated number of students who would enroll in UCR's program? How will the UCR program compete with the UCLA on-line Engineering MS Program? Please provide information about the UCLA on-line Engineering MS Program. How successful is it? Is its enrollment capped, creating a need for a program at UCR? Will there be overlap in specializations offered or will UCR's offerings be distinct from those of UCLA?

7) Have BCOE faculty agreed to teach on-line courses for which they will not receive teaching credit? Is the proposed $400/student/course payment to the faculty teaching on-line courses within University policies and approved by the appropriate committees?

8) How can the inclusion of such a large number of UNEX courses in a UCR program awarding an advanced degree be justified? Please address the issue of reducing the quality of an UCR advanced degree.
APPENDIX II

October 3, 2009

TO: Akula Venkatram - Mechanical Engineering

FROM: Carol Lovatt, Chair Planning & Budget

RE: Proposal for the On-line Engineering MS Program

For our meeting on October 9, 2009, could you please assist with the following items and provide answers to the following questions.

1) Walk us through the budget in Table 2, page 15.

Here is a top-down prose version of Table 2, which is a model of the expected revenue and expenses associated with a single specialization within the online MS in Engineering. We will add specializations as supply and demand dictate, but hope to add on the order of one new specialization per year.

The total fee for the nine-course program is $30,000 or $3,333.33 per course. Each student is expected to take an average of 4.5 courses per year ($15,000 per year) plus a one-time application fee of $70.

Each course is expected, on average, to incur $5,000 in one-time development costs for converting it to an online format, plus another $1,000 per offering in maintenance costs, plus another $500 cost per student per offering in delivery costs. Those costs are exclusive of instructor and TA/reader compensation, which we estimate to be $400 per student per offering in instructor compensation and TA/reader costs per offering of $2,772 in salary plus $3,255 in grad student fees. The following table lays out the cost/revenue breakdown for a course.

<table>
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<th># of students</th>
<th>Course Cost (1st offering)</th>
<th>Course Cost (&gt;1st offering)</th>
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<tr>
<td>Development cost</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>Maintenance cost</td>
<td>$0</td>
<td>$1,000</td>
</tr>
<tr>
<td>Delivery cost</td>
<td>$2,500</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>Revenue</td>
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</tbody>
</table>

We expect to recruit an average of five students per year into a specialization and that on average one of them will drop out after the first year. The program will involve a total of nine courses, implying that on average a student will enroll in 4.5 courses per year, most likely five the first year and four the second. So, the first year we expect five students each taking five courses, for an average enrollment of five per course. In subsequent
years, we expect five new students plus four continuing students for a total of nine students. And we expect to offer roughly nine courses with an average per-course enrollment of 4.5. The revenue implied by this enrollment projection is $75,000 for the first year and $135,000 for each subsequent year.

In terms of one-time costs to convert courses to an online format, it would cost $25,000 to convert five courses the first year, $20,000 to convert four more the second year, and no further conversion costs would be necessary in subsequent years. Those would include at most five of the MGT and XRC courses from the list of course examples on page 9. In terms of annual on-going costs there would be a $15,000 per year marketing cost in addition to the costs, discussed above, associated with the delivery of the online courses.

The bottom line is that, for a single specialization, there would be a modest loss in the first year followed by a modest gain in the second. But the overall investment is fully recouped in the third year. Thereafter, annual cash flow is projected to be positive by about $20,000, which can be used to fund the development of additional courses for that specialization and/or the development of additional specializations. In general, the proceeds of this program go to support the program and to fund Ph.D. students through TAships, readerships, and faculty internal-allocation accounts.

2) The budget in Table 2 does not seem to cover development of the significant number of course listed on page 8 as part of the MS program.

All of the courses listed on page 9 --- there are none on page 8 --- are existing courses. So, what needs to be done in terms of development is translating the current course content to an online format. Specifically, the BIEN and MGT courses are Senate-approved UCR graduate courses. The XRC courses are existing UNEX courses that are possible candidates for cross-listing, which would require course-by-course Academic Senate approval. In Table 2, initial costs for such development of each course are projected as $5,000 per course and another $1,000 for updating the course each subsequent year. As mentioned above, in terms of one-time costs to convert courses to an online format, it would cost $25,000 to convert five courses the first year, $20,000 to convert four more the second year, and no further conversion costs would be necessary in subsequent years. Those courses would include at most five of the MGT and XRC courses from the list of course examples on page 9.

3) What is the proposed source of funds to develop the first set of on-line courses for year 1 of the program?

As mentioned above, development is projected to cost $25,000 much of which will come from the $75,000 first-year revenue. Overall, we are projecting a first-year deficit of roughly $18,000, which we will seek to cover by donations or contracts from local employers such as the Naval Surface Warfare Center at Norco. Otherwise, it will be covered by BCoE discretionary funds.

4) Will the required additional staff (Programmer, Student Affairs AA) be funded from the revenue generated from the program? Please see the last sentence on page 16.
Yes, specifically they would be funded via the “instructional services fee” mentioned in Table 2.

5) Likewise, will the additional computer server equipment be purchased from the proceeds of the program?

Yes, that is the intention. Initially, this server load can be serviced from spare capacity on existing BCoE servers. Also, last year BCoE established an Instructional Media Development Studio that will be used in developing the online version of these and other BCoE courses.

6) The justification for establishing the On-line Engineering MS program is student demand. No supporting documentation is provided. What is the estimated number of students who would enroll in UCR’s program? How will the UCR program compete with the UCLA on-line Engineering MS Program? Please provide information about the UCLA on-line Engineering MS Program. How successful is it? Is its enrollment capped, creating a need for a program at UCR? Will there be overlap in specializations offered or will UCR’s offerings be distinct from those of UCLA?

UCLA’s program, which was initiated in 2006, has had an average of 86 new enrollees per year. We estimate that the UCR program enrollment will reach about 80 students in various specializations in about 5 years. We believe this is a reasonable estimate based on the results of the attached survey of 751 “Southern California Engineering Firms”, conducted by UCR Survey Research Center. However, it should be noted that the program should be self-supporting even at low enrollment of 5 new enrollees per year. Because of its distinctive features, the UCR program will be as good if not better than the UCLA program. The UCR program includes a combination of in-depth specialization that is geared to specific industries and cohorts, and professional engineering components. In contrast, the UCLA program has more technical coverage and no professional engineering components. Specifically, the UCR program includes engineering management and professional development courses, which UCLA’s program does not (see attachment). As such, the UCR program will be distinctive from that of UCLA. Therefore, not much difficulty is envisioned in the competition provided that the program is marketed appropriately. Appropriate marketing allocation of $15k per year has been made for each specialization. Obviously, the marketing cost per specialization will decrease as the program matures and more specializations are established. From the program-profile web site for UCLA’s program, which is to be found at http://www.gdnet.ucla.edu/asis/progprofile/result.asp?selectmajor=00A5, it appears that their program has been quite successful in a short period. It has acceptance rate of 72%, and enrolls 21% women and 17% underrepresented minorities, and with only 4% international students. These numbers are very good for an MS program in engineering. The UCR program will not overlap or duplicate the UCLA program. Moreover, each specialization will be established only after detailed market and demand analysis. The industries surveyed indicated that a relevant curriculum will increase the likelihood of enrollment by their employees.
7) Have BCOE faculty agreed to teach on-line courses for which they will not receive teaching credit? Is the proposed $400/student/course payment to the faculty teaching on-line courses within University policies and approved by the appropriate committees?

UCLA charges the same $15,000 per year per student and about 10% of that goes to the faculty who serve as instructors for their courses. We plan to give the faculty $400 per enrollee for an average of 4.5 courses per student per year, which works out to 12%, which is in the same range. It should be noted that, depending on the faculty’s choice, parts or all of the online lectures may be recorded during regularly scheduled lecture classes, or recorded separately from regular classes. However, the online courses will have different section numbers. That money goes to the faculty member’s BCOE Internal-Allocation Account, which are funds that can be carried forward and have the usual strings attached. Mostly these funds will be spent in support of graduate research assistants. We have not yet recruited individual faculty to cover specific courses. However, the Bioengineering faculty and Chair of the department have conceptually approved the proposed specialization in Bioengineering. Future specializations will similarly require faculty and departmental approvals.

8) How can the inclusion of such a large number of UNEX courses in a UCR program awarding an advanced degree be justified? Please address the issue of reducing the quality of an UCR advanced degree.

The seven MGT courses are already on-the-books AGSM courses, and there are a sufficient number of them to run the program. The seven XRC courses would not and could not be included until and unless they are approved for UCR credit (via cross-listing) by the relevant Academic Senate committees: the Committee on Courses and the Graduate Council. It should be noted, however, that such cross-listing is common practice at other UC campuses.

Attachments:
Appendix I: Memo to Akula Venkatram
Appendix II: Responses from BCOE
October 22, 2009

TO: ANTHONY NORMAN, CHAIR
ACADEMIC SENATE

FR: JOHN BAEZ, CHAIR
COMMITTEE ON LIBRARY & SCHOLARLY COMMUNICATION

RE: Online Master of Science in Engineering Program

The University Committee on Library and Scholarly Communication has just a few
concerns with the proposal for an Online Master-of-Science in Engineering:

1) First, this proposal does not address how distance learning students will obtain
access to library materials. Students in the program will need access to the
electronic library resources on campus. Thus, they will need to be granted access
through WebVPN and Client VPN systems for accessing library materials from
off-campus. However, even with this access, library resources may be restricted
for distance learning students unless the university pays additional licensing fees
or document delivery costs. These resources are already available to all current
students. Therefore, it is crucial that the online students be given the same
privileges in this respect, even if additional expenditures are required. Our
question is whether the College has adequately addressed these issues. We would
like to have a formal response to this question prior to our full endorsement.

2) It is assumed that the online students will need some instruction in how to use the
library, particularly its electronic resources. (This is also not considered in the
proposal.)

3) As the online program develops, its focus on new specializations such as
Bioengineering may require new library materials. Paying for these will require
a new funding source provided to the Libraries by the University or the College.
Even without the current budget reduction, the library budget is insufficient to
absorb the costs of these new materials.
November 5, 2009

TO: ANTHONY NORMAN, CHAIR
RIVERSIDE DIVISION

FROM: THEDA SHAPIRO, CHAIR
COMMITEE ON COURSES

RE: BCOE proposal for an on-line M.S. program in Engineering

At its two most recent meetings on October 12 and 26, 2009, the Committee on Courses discussed the proposal from the Bourns College of Engineering for a new, self-supporting on-line Master of Science in Engineering program. While we are not unfriendly to such a proposal, we wish to comment on what we see as a number of lacunae in the proposal and possible questions and problems raised by the current draft of the proposal.

Rationale for the program at UCR:

1. Since such on-line graduate Engineering programs already exist at UCLA, USC, and perhaps many other prestigious schools of Engineering nationwide, what makes the proposed program distinctive, so that it would attract an additional student body not already "housed" in an existing program? Has the BCOE studied the capacity and current enrollments at the highest-ranking on-line programs and determined need for an additional program? What will UCR's program add that may attract a different clientele?

2. Will international students be a part of the desired clientele for this program, and if so, how will their qualifications, entrance examinations, etc., be certified as authentic? We can imagine the program attracting numerous highly-qualified international students with the ability to pay the fees, so this question should be considered carefully before the request for applications is launched.

Curricular issues:

1. Although the design of the program presupposes that the students to be admitted will be working engineers with ample funding to cover the costs of the program, there may also be highly qualified candidates who live at a distance from UCR, are not currently employed, and will be able to enroll in the program only with the help of financial aid. The federal government has established guidelines for awarding financial aid based on faculty-student contact hours. These guidelines should be studied and the program designed accordingly.
2. How will advising, tutoring, and other services that are usually delivered one-on-one in person be provided?

3. The current proposal does not make clear how examinations and research work for the program will be handled. Will there be periods of in-residence contact between instructors and students? How will the students complete laboratory work under faculty supervision, as is essential for an Engineering degree? Will the ENGR 296A be some sort of a lab, residency, or workshop (perhaps during Summer Session) which will bring students together and/or give them hands-on research experience? Based on a recently-developed UCR on-line graduate program, the MFA in Creative Writing administered by the Palm Desert campus, we recommend that the BCOE faculty consider establishing some period(s) of intensive, short-term residency as an integral part of the program.

4. How will the on-line courses be calendared? Will the program conform at all to UCR's regular academic terms?

5. On-line courses and programs present many issues concerning authentication of students' identities and the honesty of the work they present (homework, exams, research results, etc.). The proposal states that arrangements with trustworthy testing centers will be made to deliver large examinations, but how will periodic homework and other work to be handed in by the students be handled to ensure honesty? The BCOE should contact schools which already have functioning on-line programs to learn how these issues are handled. If international students are to be welcomed into the program, this may compound the possible problems.

6. With respect to the courses for the program, the proposal assumes (1.4, page 5) that the current courses can be offered with simply a separate section for the students in the on-line program. We cannot accept this method, because the activities and assessment methods for the on-line courses will necessarily be different from the in-person versions of the courses. The on-line courses will have to go through the approval process with a specific accounting for the activities required of the students in the new format. Moreover, we strongly recommend to BCOE that a different rubric (for example, ENOL rather than ENGR) be used for the on-line program's courses. This will immediately identify the on-line versions of the courses, and it will facilitate records-keeping and future assessments and reviews of the on-line students' progress, easily differentiated from that of resident students.

Costs and profits:

1. No clear mention of administrative support for this program (clerical handling of applications, clerical correspondence, responses to questions concerning administrative or technical matters, enrollment, etc.), or its cost, is made in the proposal, and, based on our own (admittedly hearsay) knowledge of the design of successful on-line courses, we suspect that the amounts budgeted for production costs are considerably understated. Since the projected net revenue for the first three-year period is very modest, we do not have confidence in the projection of fees compared to costs, at least for the start-up
period of the program. We recommend that these issues, and particularly the question of
the real costs of producing successful on-line courses, be examined in greater detail with
reference to the experience of other institutions, such as UCLA.
## UCR Graduate Council - Order of Reviews for Graduate Programs

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<td>May-93</td>
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<td>Winter 1998</td>
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<td>Jun-05</td>
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<tr>
<td>Materials Science &amp; Engineering</td>
<td>MS, PhD</td>
<td>Fall 2010</td>
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* Internal Review
Proposal to Transfer Review of Graduate Courses out of Graduate Council
Draft - May 17, 2010

Summary

Graduate course proposals and modifications are prepared by the graduate programs and sent to the Courses subcommittee of Graduate Council (GC). After final approval by the whole GC, courses are then sent to the Committee on Courses. Because the vast majority of these are routine approvals, and the Courses & Programs subcommittee is often unable to render informed opinions on course content as not all departments are represented by the GC, there is almost no “value added” by GC review as few if any relate to graduate policy issues. Rather, the GC review is redundant with what Committee on Courses, who is a similarly composed committee, does afterwards. A review procedure for graduate courses that went through the appropriate Executive Councils, and then to the Committee on Courses, would be a more effective structure and leave the GC able to focus on its primary functions.

Background

Current course review procedure. A faculty member prepares a course proposal. Individual programs or departments approve proposal and it is forwarded to GC via the Graduate Division. GC members can view and comment on proposals on UCR’s online Course Request & Maintenance System (CRAMS). The Courses & Programs subcommittee of GC (currently consisting of 4 members) holds a meeting also attended by the two Associate Deans of Graduate Division and the GC Coordinator to discuss the proposals (typically once per month). A summary of all the course proposals is prepared by the GC Coordinator and distributed to GC members prior to the next meeting. At the GC meeting the Courses subcommittee chair presents the course proposals that the subcommittee recommends for approval and the council votes. Approved courses move on to the Committee on Courses, while rejected courses are sent back to the proponents. The meeting dates for the GC are constrained to coincide with those for the Committee on Courses.

The Courses subcommittee of GC cannot provide consistent in-depth review. Because of the large number of graduate programs and the small size of the Courses subcommittee of GC, it is difficult to render informed opinions on the suitability of a proposed course to a particular program (e.g. its depth or content), and on possible overlap with existing courses in related programs. This might occur if one of the subcommittee members or Associate Dean has knowledge, but this typically does not happen. As a result, the main input of GC for most courses has been to confirm completeness of the proposal and units for workload. The type of useful input into the course proposals that should occur does not take place.

Proposed changes

Moving graduate course proposal review to the Executive Committees. We are endorsing a proposal to move routine review of graduate courses out of Graduate Council. Undergraduate courses already go through the Executive Committees (ECs) for approval before being sent to Committee on Courses. For course proposals that are part of inter-departmental graduate programs, multiple ECs would approve the proposals as necessary.
After the ECs have approved courses, they would go on to the Committee on Courses. If there was a need to consult with the GC (for example, if a course proposal needed an exception to policy) the course proposal would be sent to GC for discussion. This scenario would be anticipated for a very small percentage of all courses.

In addition to tasking the ECs with grad course review, for the purposes of maintaining communication between the Committee on Courses and the GC, one member of GC or Committee on Courses could sit as a nonvoting (e.g. *ex officio*) member on the other committee.

*Rationale.* Some ECs review/comment on graduate course proposals informally already although they do not post comments in CRAMS. Because the workload for course review would be distributed among the various ECs, the anticipated increase in workload would not be that great. There would be added value in EC review of proposals because they would be more familiar with the course content and its suitability for their graduate programs, plus they could also relate proposed courses to other similar courses (both graduate and undergraduate).

**What would be required**

The Academic Senate Secretary-Parliamentarian (Dan Ozer) has informed us that this process would require the following:

“[This] would require amendment of at least two Divisional bylaws. First, graduate course approval is routed through Grad. Council by Divisional bylaw 8.14.2.14, which is one item in a list of charges to GC:

‘Recommend and supervise all graduate courses of instruction in the Division. In discharging this responsibility, the Graduate Council presents its recommendations on courses to the Committee on Courses.’

This bylaw would need to be removed. Then the Committee on Courses enabling bylaw would need to be amended. Currently, 8.10.2 states:

‘Subject to the provision of 8.10.3, the Committee has authority for final approval of all courses of the Riverside Division, except those courses in University Extension above the 200 series, giving due consideration to the findings of the Graduate Council, the Committee on University Extension, Executive Committees of the colleges and schools, and officers at Riverside. The committee will report its actions to the next regular meeting of the Division.’

An amendment to remove reference to ‘Graduate Council’ would be required. I do not think that the bylaws/regulations of the individual college executive committees would need to be altered, but this would be their call. Also, I would guess that the Division would want some assurance the Exec. Committees of the schools/colleges were on board with the change. I do not believe this change is problematic with respect to systemwide bylaws pertaining to Graduate Councils, but I have not studied the matter closely, and this is for Rules & Jurisdiction to determine as part of its review.
So, to make this happen, one would need a draft change in at least two bylaws for review and comment by: GC, Committee on Courses, all school/college Executive Committees, and Rules and Jurisdictions. A 2/3 approval at a Division meeting would then be required to pass the amendments.”

As well, the CRAMS portal would need to be modified to allow comments from ECs.

**Additional information**

*Other review structures.* Other options were considered, including having Committee on Courses proceed directly with reviews and routing queries to the GC as needed; and having only new courses come to the GC Courses & Programs Subcommittee (not deletions/changes). In both of these scenarios, the Subcommittee would also be allowed to approve courses without presenting them to full council. However, while these options save some time, they do not produce the benefit to the process that is needed.

*Other UCs.* While the Senate structures differ at the various UCs, the degree to which Divisional Graduate Councils participate in graduate course reviews is highly varied. A summary of results from an informal poll of CCGA representatives (taken April, 2010) is presented below. (Not all reps responded.)

<table>
<thead>
<tr>
<th>campus</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCSB</td>
<td>Proposals go through an intense review by administrative staff, then final approval is up to the Grad Council chair. I routinely approve--if everything is shipshape, I'm not in the business of telling departments what they should be teaching.</td>
</tr>
<tr>
<td>UCLA</td>
<td>We delegate authority for approving graduate courses to the UCLA graduate division.</td>
</tr>
<tr>
<td>UCSC</td>
<td>UCSC GC assigns a small subcommittee of two GC members that work with the registrar to approve graduate course proposals. Sometimes the GC chair approves graduate course proposals (if it is a rush). Course proposals are not considered at the GC meeting.</td>
</tr>
<tr>
<td>UCM</td>
<td>Our &quot;Grad and Research Council&quot; (combined cause UCM is small) reviews and approves grad curriculum. A subcommittee that makes recommendations to the council.</td>
</tr>
<tr>
<td>UCI</td>
<td>The Irvine GC has a two-member Course Action Form Subcommittee. Typically, the GC analyst reviews and logs in the forms coming to the Council and sends the STEM forms to the science member to review and approve and the Social Sci/Arts/Hum forms to the other member for similar actions. We do this through campus mail. Rarely does any such request come up for discussion at a GC meeting, none so far this year.</td>
</tr>
<tr>
<td>UCD</td>
<td>Our GC has delegated course approvals to a courses subcommittee. GC does not review any course submissions, although the subcommittee could choose to bring a specific submission to GC. After the courses subcommittee approves a submission it is forwarded to the divisional Committee on Courses of Instruction (COCI). (There is no presentation of the courses in a Grad Council meeting.)</td>
</tr>
</tbody>
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Ken Barrish  
Chair of Courses Subcommittee of Graduate Council

Morris Maduro  
Chair, Graduate Council
GRADUATE COUNCIL

MEMBERS’ HANDBOOK

2010-2011
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Iryna Ethell (Biomedical Sciences)
Paul Green (Ethnic Studies)
Yingbo Hua (Electrical Engineering)
John N. Medearis (Political Sciences)
Nosang V. Myung (Chemical/Environmental Engineering)
Connie Nugent (Cell Biology & Neuroscience)
Mike Vanderwood (Education)
Deborah Wong (Music)
Shizhong Xu (Botany & Plant Sciences)
(Graduate Student Representative)
(Graduate Student Representative)
Joseph W. Childers, (ex officio)
INTRODUCTION

This handbook has been prepared for the guidance of members of the Graduate Council, a standing committee of the Academic Senate of the Riverside Division. This handbook is a compilation of relevant bylaws of the Academic Senate, various documents and policies prepared by the Graduate Council, and descriptions of common practice. The handbook is intended both to provide new members with an overview of Graduate Council responsibilities and procedures and to assist every member in carrying out the duties and responsibilities of the Council.

Senate Regulations pertaining to the Graduate Council

Senate bylaw 8.14 establishes the duties and membership of the Graduate Council. It is reproduced in full as Appendix 1.

STRUCTURE

A. Composition

The Council is composed of at least 15 members, including the Dean of the Graduate Division. The Council has three officers, a CCGA Representative, and four subcommittee chairs. The officers are Chair, Vice Chair, and Secretary. One member, who may also hold one of the other positions, serves as the Divisional representative to the University Coordinating Committee on Graduate Affairs (CCGA). There are four standing subcommittees: Review A (covering CHASS, Management, and Education), Review B (covering CNAS, the Biomedical Division, and Engineering), Courses and Programs, and Fellowship.

There is also an Administrative Committee composed of the Chair, Vice-Chair, Secretary, Chairs of the four subcommittees, and the Graduate Division Dean and Associate Deans, ex officio.

B. Roles

The Chair of the Council is appointed by the Committee on Committees. The Chair’s responsibilities include conducting the meetings, writing correspondence on behalf of the Council, and representing the Council on the Academic Senate Executive Council.

The Vice Chair of the Council is appointed by the Committee on Committees. The Vice Chair serves as Chair in the Chair’s absence. The CCGA Representative is also appointed by the Committee on Committees.

The Secretary of the Council is appointed by the Chair of the Council in consultation with the Dean’s office. The Secretary is responsible for proofing and finalizing the draft of the minutes produced by the staff.

The subcommittee chairs are also appointed by the Chair.

Separate sections below describe the CCGA Representative duties, and subcommittees and chairs’ roles.
C. Meeting Schedules

The Council normally meets once a month. Meetings are scheduled with consideration of the Academic Senate meeting schedule to prepare business for submission to the Senate. The Academic Senate Executive Council on which the Chair serves, also meets twice a month.

The Courses and Programs subcommittee also meets monthly, a week or so before the Council meeting, to prepare business for presentation to the full Council. The Review subcommittees meet as needed, determined by the schedule of reviews. The Fellowship Committee meets once during Fall & Winter, and twice in Spring. The Administrative Committee meets whenever business needs to be done and the full Council cannot meet, normally in the summer and over holidays, particularly Christmas-New Year's. The CCGA meets monthly. Some of this might change based on our discussions last week.
RIVERSIDE DIVISION REPRESENTATIVE TO THE COORDINATING COMMITTEE ON GRADUATE AFFAIRS

The Coordinating Committee on Graduate Affairs (CCGA) is the systemwide equivalent of the campus Graduate Council. Each campus has a representative to CCGA. The Committee on Committees appoints the Riverside Division Representative to the Coordinating Committee on Graduate Affairs from among the Graduate Council members. This representative serves a two-year term and participates in the activities of the CCGA during that time period. He/She reports on CCGA activities to the Graduate Council each month and leads discussions on topics of interest to it. A handbook on the activities of the CCGA is available from the UCOP for each member. The membership and activities of CCGA are summarized below:

A. Duties

1. Advise the President of the University and all agencies of the Senate regarding the promotion of research and learning related to graduate affairs.
2. Establish basic policies and procedures for coordinating the work of the various Graduate Councils and Divisions.
3. Recommend to the Assembly minimum standards of admission for graduate students.
4. Act for the Academic Senate in the approval of new programs for established graduate degrees, including the joint doctoral degrees with campuses of the California State University.
5. Review proposals from Graduate Councils for the establishment of new graduate degrees that require approval of The Regents, and submit recommendations thereon to the Assembly.
6. Review standards and policies applied by Graduate Councils, and policies concerning relations with educational and research agencies.
7. Report annually to the Assembly concerning its policies and practices.

B. Meeting Schedule and Travel

CCGA meetings are held 9-11 times during the year on the first Tuesday of each month and are held at UCOP. Sarah Miller in the Academic Senate Office makes travel arrangements for the Riverside Division representative.

C. Participants

Meetings are attended by the Chair, Vice Chair, ten additional members from the Divisions, two representatives from the UC Office of the President (UCOP) Planning Unit, two representatives from the UC and campus Graduate Student Associations, one representative from the Council of Graduate Deans, and the CCGA Committee Coordinator. When formal votes are taken, only the 11 CCGA members’ votes are recorded and counted. The student representatives’ votes are recorded but not counted in the final outcomes. All those attending may participate in discussions.
D. Business

Written materials are typically sent out in advance of a meeting. At the meeting matters are discussed, and revised. Subsequent revisions may be made via e-mail or fax and re-discussed at a subsequent meeting. Voting is done as needed and reports are revised and final drafts are communicated. There are seven types of business carried out by the committee:

1. Consideration of proposals for new graduate degree programs
2. Consideration of proposals to transfer, consolidate, disestablish, or discontinue academic programs or academic units or to reorganize them through a combination of two or more actions
3. Consideration of proposals for new ORUs and MRUs
4. Review of and commentary on campus’s five-year perspectives
5. Review of and commentary on other matters including proposed changes in policies or regulations of either the Academic Senate or UCOP, five-year reviews of existing MRUs, establishment or major change of schools and colleges, UCOP think pieces and reports of various sorts
6. Information sharing among representatives of the Divisional Graduate Councils, the CCGA Chair and Vice Chair, the system wide Academic Senate committees, the Planning Unit in the UC Office of the President, the Council of Graduate Deans, the UC and campus Graduate Student Associations, and various guests (ordinarily from the Office of the President)
7. Consideration and development of a position on any new issue that CCGA members themselves believe should be addressed
REVIEW SUBCOMMITTEES

Reviews of graduate programs are conducted by the Graduate Council, usually with the aid of extramural review teams. The process has the approval of the Riverside Division of the Academic Senate. There are two Review subcommittees. Review Subcommittee A is responsible for programs in the College of Humanities Arts and Social Sciences, the Graduate School of Management, and the Graduate School of Education. Review Subcommittee B is responsible for programs in the College of Natural and Agricultural Sciences, the Division of Biomedical Sciences, and the College of Engineering.

The primary aim of the review process is to help improve graduate programs or, if necessary, to close programs found to be undesirably weak.

A. Duties

Each graduate program on the campus is reviewed on a regular 7-9 year cycle. New programs are provided an internal review in the third or fourth year of operation. The Council also may conduct internal follow-up reviews in mid-cycle, if it feels it is necessary.

The Council determines the sequence and schedule of reviews. The program is notified of a proposed review at least six months and preferably a year in advance. The program submits required data to the Graduate Council. Questionnaires are sent to program faculty, current students, and graduates at least two months before the review. The Graduate Council and Computing Center compile the results of the questionnaires.

A normal review involves the use of a three-person team of outside reviewers. The subcommittee, in consultation with the program under review, assembles the review team and schedules the review. The Graduate Council assists in handling the details of team members' travel and schedule. The members of the Review Subcommittee are responsible for studying the program materials (program statistics, faculty and student questionnaire responses) and meeting with the review team at the beginning and end of the campus visit. After receiving the team’s report, the subcommittee meets to develop Findings and Recommendations, which are then drafted by the Graduate Council member in charge (typically the Chair). After approval by the subcommittee, the Findings and Recommendations are submitted to the Council for consideration and approval.

Some interim and special reviews are conducted internally. In these cases the subcommittee itself conducts a streamlined version of the business normally done by the extramural review team. In most cases only the Chair and Graduate Advisor are interviewed, rather than all faculty and many students.

B. Schedule

The Review Subcommittees meet on an as-needed basis. Each Review Subcommittee normally conducts six to eight reviews per year. The sequence of upcoming reviews is discussed at least annually and can be altered by action of the
Council. Normally, six to eight programs are scheduled for review each year. This pattern typically yields a 7-9 year cycle between reviews.

C. Principles and Process

The process of reviewing graduate programs at the University of California, Riverside is conducted by the Graduate Council, a standing committee of the Academic Senate. Through the review process, the Council gathers information from a variety of sources, including information provided by the graduate program, the Council’s own assessments, and the assessments of an extramural review team. After considering all of this information, and corresponding with the program, the Council issues its Findings and Recommendations, which is the only document which contains items for action by the program.

1. The Review Process

A detailed articulation of the procedures involved is found in the document Graduate Program Review Procedures, available from the Academic Senate website. The Graduate Program review consists (in its entirety) of:

Collection of information from the program under review
Graduate Council evaluation of this and related information
Usually, an evaluation of the program by an extramural review team and its report
Synthesis of this information into the Graduate Council’s Findings and Recommendations to the program under review.

The steps involved in the review process are as follows.

1. In Winter Qtr, the Graduate Council should identify 6 programs to be reviewed the following year. New programs should have an internal review at about 4 years. All other programs should be reviewed in a 7-9 year cycle, if possible.
2. Sue Stracener (Academic Senate staff support) then notifies these programs (chair or director, graduate advisors) that they are scheduled to undergo a review the following academic year. As part of the notification, the programs are asked to provide by a certain date a list of potential reviewers with contact information. The program should compile the list with input from all participating faculty members to ensure there are no conflicts of interest. The list should contain multiple UC and non-UC faculty to ensure that a team with at least one UC and one non-UC faculty can be put together. If a program has multiple sub-disciplines that it wishes to have represented on its team, it should provide a list for each sub-discipline.
3. When the list of potential reviewers is received, the Graduate Council member in charge should vet the list with chairs of similar departments at other UCs [see sample letter to chairs]. If there are insufficient numbers of similar UC departments to appropriately vet the list, then chairs of similar departments at non-UCs can be asked. Additional reviewers may be suggested by these chairs.
but these names must be sent to the department/program for approval before any of them can be considered for membership on the team.

4. Graduate Council member in charge should rank the reviewers in each of the disciplinary areas based on the comments received from vetting the list, then the Graduate Council subcommittee should decide on an order to invite. At least one reviewer must be from a UC and at least one must be from outside UC.

5. The Graduate Council member in charge should extend invitations to 3 reviewers [see sample letter to reviewer]. To the extent possible, invitations should be made during spring qtr and early summer to ensure that times for all 6 reviews can be scheduled for the following year. If invitations are declined, work down the list ensuring appropriate representation on the team across disciplines and from within/outside UC.

6. Once three reviewers have agreed to serve, Sue Stracener (Academic Senate staff support) then asks the program to provide dates when a review should not be scheduled, such as when a number of faculty might be away at meetings. The Graduate Council member in charge should then select a number of possible dates and ask the reviewers to identify those dates that are not feasible for them [see sample possible dates letter]. It is advisable to distribute reviews throughout the year. It is often necessary to be very persistent with the reviewers to find a common date.

7. Once a common date is found, the Graduate Council member in charge should confirm date with the three reviewers [see sample confirm dates letter] and introduce reviewers to each other [see sample introduce team letter].

8. Sue Stracener (Academic Senate staff support)
   a. Notifies the program of the identity of the reviewers and the date of the review.
   b. Notifies the program of the dates when specific materials will be required from them.
   c. Schedules the Dean of the appropriate college and the Dean of Graduate Division to meet with the review team (both the first morning and the exit interview).
   d. Makes reservations for the reviewers at the Mission Inn.
   e. Works with C&C to send out student and faculty questionnaires specific to that review about 2 months prior to review. [Important note: the cost to GC from C&C will be greatly reduced if questionnaires for all programs under review (both internal and external) during an academic year are set up with them at once. In order for this to be done, the DATES of all reviews, including the internal reviews, need to be set]. The program should have provided current contact information for its graduated students, and these students should be sent a questionnaire (specific for completed students) by mail.
   f. Contacts reviewers again to remind them about the upcoming review, reminds them to make travel arrangements and lets them know the notebooks will be coming about 1 month prior to review.
g. Collects data for the notebooks with goal to assemble them and send them to team 1 month prior to review. Various reminders may need to go out to the program for information.

h. Finalizes the detailed schedule, including ensuring that the program schedule faculty/students to meet the team, pick up and return team to airport/hotel/campus etc. Blocks of time should be designated for faculty/student interviews which are then filled-in by the program (i.e., staff does not schedule individual interviews).

i. Invites chairs of related programs, normally suggested by the program, to have lunch with the review team on the first day of review.

j. Plans for light breakfast (coffee/bagels etc) for day 1 of review. Plans for lunch for day 1 and for the team members to order their meals for day 2 on day 1.

k. Plans for providing guest wireless accounts, copies of any recently revised documents (e.g., schedule), and note taking materials for team members. Assists with parking arrangements on campus should team members seek to drive onto campus on day 2.

2. Purpose and Scope of Graduate Program Reviews

The Graduate Council uses the reviews to monitor the quality of graduate programs at UCR and to focus its attention on how programs may evolve in quality in their curriculum, course offerings, graduate instruction (including teaching and creative activities), and degree administration (including admissions, advising, etc.).

The primary scope of the Graduate Council’s concern is with academic matters, including but not limited to program structure, course offerings, program quality and competitiveness, adequacy of facilities and resources, and program administration.

3. Unity of the Review Process

No document generated during the review process, nor any part of the review process, should be considered independently, or considered outside the context of the entire review process.

In particular, the extramural team report, commissioned by the Graduate Council, is not intended for use outside the review process. This report is intended for use by the Graduate Council in formulating its Findings and Recommendations. The extramural team report may contain errors of fact, interpretation or omission which must be corrected during the review process before the preparation of the Findings and Recommendations. For this reason, the focus of the review process should be the conclusions and findings of the Graduate Council.

4. Matters for Action Resulting from the Review

During the review process, the Graduate Council may decide to require or recommend actions by the program. Matters requiring attention by the program, together with recommended actions, are communicated by the Graduate Council in its
Findings and Recommendations. The Council integrates its knowledge of the history and status of each program, together with the information and material generated by the program during the review process, into a cohesive plan of action (the Findings and Recommendations) for improvement of each program. This plan takes into consideration the material and interviews in the entire review process, together with the correspondence and dialogue with the program under review.

5. Confidentiality

The review is conducted by the Graduate Council on behalf of the Academic Senate. The review documents generated by the program, Council, and extramural review team are treated as confidential during the review process. This confidentiality extends to information copies of such documents which may be distributed by the Council to members of the program under review, the Academic Senate, and the campus administration. These documents should not be used, discussed or distributed except for the purpose of accomplishing the Graduate Program Review by Graduate Council.

The review process is not complete until it has concluded with Step. 8 above, by formal memorandum from the Chair of the Graduate Council. After closure of the review process, copies of documents generated during the review, including the Council’s Findings and Recommendations, are placed on file in the Academic Senate office.

One exception to this confidentiality is recognized. If a program wishes to distribute confidential documents generated during the review process, either prior to the closure of the review process or at any other time, it may request permission to do so from the Graduate Council. The Council, upon consultation with the Graduate Division, may grant or withhold permission for such exceptional distribution on a case-by-case basis.

6. Limitations of the Graduate Review Process

The review of a graduate program is not a review of the home department of a departmental or interdepartmental graduate program. Academic departments have resources, strengths, and responsibilities that may lie outside the scope of a graduate program and hence outside the scope of a graduate program review.

D. Specific Procedures

1. Preparation for Council Review

The graduate program is notified approximately 6-12 months prior to the scheduled review. At the time of this notification the program is asked to prepare the following information regarding its program for submission to the Graduate Council and to outside reviewers (see attached formats):
1. A brief (approx. 2-5 pages) statement concerning the program’s strengths and weaknesses, long-range goals, major changes since last review, and anything the program wishes to bring to the attention of the visiting team or the Graduate Council.

2. Program material distributed to graduate students (handbook, program description, procedures, statement, etc.).

3. A list of faculty members with digested biographies (abbreviated version of full biography).

4. Placement data for all Ph.D.s awarded since the last review, arranged by date of award of degree, listing dissertation director, first position and current position.

The Graduate Division gathers statistical information from sources around the campus. The Office of Institutional Planning provides:

1. Departmental expenditures.
2. Faculty (ladder and budgeted) as of Fall (current year).
3. All courses taught per year (ladder FTE and headcount) for past three years.
4. Graduate courses offered during past three years and enrollment in each.
5. Non-faculty instructional personnel for (current year).
6. Staff personnel for (current year).
7. All course enrollments for last three years.
8. Student workload FTE and faculty FTE justified for last two years.
9. Headcount majors for last two years.
10. Courses taught by faculty from other departments for last three years.
11. Summary of degrees for last three years.

The Graduate Division provides:

12. Admissions profiles, enrollment data, degrees awarded (and time to degree), dropout rate, and historical statistics including fraction of UCR undergraduates and international students admitted to each program.
13. Summary of financial support provided all graduate students for last two years.
14. A report on grant information for all faculty.
15. Catalogue copy of all graduate courses taught by the program.

Items 1-15 are sent to the program before dissemination to anyone else so that any differences concerning the statistics can be resolved.

A questionnaire dealing with academic program quality matters including space for written comments is sent to each faculty member. A separate questionnaire is sent to present graduate students and Ph.D. awardees since the last review (masters awardees in the case of a masters only program). Statistical summaries are provided where appropriate, and a compilation of all comments, copied verbatim, is included in the review materials.
2. Composition of Extramural Review Team

When first notified of the pending review, the program is asked to provide a list of distinguished, neutral reviewers as shown in the following excerpts from a letter of request:

. . . 15 names of distinguished potential extramural evaluators. Please include names from the following categories: 1) faculty from other UC campuses; 2) faculty from other institutions throughout the U.S. If you could arrange these names in groups which cover your program’s major areas and include their specialties, it would be helpful. Please indicate research areas that should be covered in the appointment of reviewers…. The Graduate Council Review Subcommittee asks that it be assured in writing that the proposed extramural reviewers can carry out an “arms-length” review in the sense that they are not closely allied to UCR members in the program under review. The Graduate Council Review Subcommittee is specifically concerned about the following indicators: (1) personal friendships; (2) visitor and UCR faculty member present in same graduate (or postdoctoral) program at the same time; (3) graduate research advisors or postdoctoral mentors; and (4) cooperative research efforts or joint textbook writing. If any of these four items apply to a proposed Reviewer, the individual should be eliminated or the Graduate Council Review Subcommittee should be informed of the facts of the relationship. This paragraph is inserted in all requests for nominations from programs under review; it is not pointed specifically at your program.

The Graduate Council obtains published biographies from standard sources, communicates with related programs elsewhere to ask about scholarly reputation and probable utility in the review process. Other names may arise from these queries; they are sent to the program for comment. The combined lists are examined by the Graduate Council Review Subcommittee, and (typically) a list of three names is selected by the subcommittee, along with a list of alternate names for each area of expertise selected. The Graduate Council typically contacts and assembles the review team and coordinates their travel arrangements. Team members receive travel expenses and an honorarium.

The Graduate Council formulates a ‘standard’ set of questions that the Extramural Team may (not “must”) use to guide its deliberations; most of the questions are used for all programs, but some are program specific. The program examines the questions before they are sent to the Extramural Team.

About thirty days ahead of the scheduled visit, the information above and a current catalog are sent to each member of the Extramural team (contents of package follow
below). An identical information package is provided the members of the Graduate Council Review Subcommittee. The Program, College Dean, and Executive Vice Chancellor receive a copy of the package from which the questionnaire responses have been deleted for purposes of student/faculty confidentiality.

The following items are included in packets sent to extramural review team members:

1. Tentative schedule/campus map.
2. Questions for reviewers and Table of organization.
3. Program review statement.
4. Graduate program handbook and other publications related to the graduate program.
5. A list of faculty members with digested biographies (abbreviated version of full biography).
6. Faculty grant activity.
7. Graduate Council admission data/program history.
8. Graduate student support for last year.
9. Graduate student placement data.
11. Questionnaires.

3. Extramural Review Team Visit and Report

A typical team visit begins Monday morning with a briefing by the Graduate Council Chair and the Graduate Council Review Subcommittee. The team then meets with the Graduate Dean. The briefing includes discussion about the strengths and weaknesses of the program being reviewed and any particular areas of concern. The team then meets separately with the relevant College Dean. The reviewers are asked to provide an assessment of the quality of faculty, students, and the program; areas of strength and weaknesses; advice on areas to remove or strengthen; adequacy of facilities, morale, and any other issues they wish to address. They are asked to participate in an exit interview and to furnish a written report of 10-15 pages within 30 days of their visit.

Following the morning meetings, the Team meets to organize itself and select a chair, and then meets the program chair and graduate advisor, after which the Team begins to meet with faculty and students in the program. At noon the Team usually meets with chairs of closely related programs. These chairs are chosen by the Associate Dean in consultation with the Chair of the program being reviewed. After lunch, the team meets with faculty/students and examines the physical facilities. The second day of the visit continues with more interviews with faculty and students. The reviewers have a working lunch on this day. The last on-campus activity is the exit interview. At 4:00 p.m. on Tuesday, the Team meets together with the College or School Dean, Graduate Dean, Associate Dean, Graduate Council Chair and Graduate Council Review Subcommittee to discuss their findings. In this meeting Team members usually present their findings, followed by free questioning by Graduate Council Review subcommittee members and members of the administration. Sometimes the whole session is devoted solely to question-and-answer. The Chair of the Graduate Council chairs this exit interview.
When the Team report is received, the honoraria are sent. The Team report is reviewed by the Graduate Council for matters of confidentiality, and the report (redacted if necessary) is sent to the Program with a three week response deadline for preliminary comment about factual inaccuracies and misperceptions.

4. Graduate Council Findings and Recommendations

The Graduate Council Review Subcommittee integrates its knowledge of the history and status of each program, together with the information and material generated by the program during the review process (including the extramural team report), to formulate a draft of the Findings and Recommendations -- a cohesive plan of action for improvement of the program. The writer of the first draft is usually the Graduate Council Subcommittee Chair or designate, with revisions or redrafting by the Graduate Council Review Subcommittee. If the draft Findings and Recommendations appear to be seriously detrimental to the program under review, the Graduate Council Review Subcommittee usually meets with the Chair and/or graduate advisor of the program to discuss the matters in the preliminary document. On occasion, the Graduate Council Review Subcommittee has met with the College Dean and limited numbers of faculty members to discuss the Findings and Recommendations. Where the Findings and Recommendations appear to be non-controversial, the Graduate Council Review Subcommittee does not usually meet with program chairs or other representatives. When the Graduate Council Review Subcommittee has prepared a draft set of Findings and Recommendations that meets with its approval, the document is sent to the Graduate Council for its approval.

For its consideration of the draft Findings and Recommendations, the Council is provided with copies of the extramural team report and the program’s preliminary response to the extramural team report. Not usually sent to all individuals on the Council, but available to members upon request, are all other data available to the Graduate Council Review Subcommittee. If substantial problems are anticipated, arrangements are made to have all members of the Council become familiar with the entire data set. When a draft acceptable to the Council is achieved, it is sent to the program as a working document with a request for a detailed response, either outlining plans for implementing the recommendations or detailing reasons for not doing so. The Findings and Recommendations are a policy document, and failure to comply or to provide justification for noncompliance can lead to a moratorium on graduate admissions or other actions.

When the Graduate Council is satisfied that changes are being implemented by the program as provided by the Findings and Recommendations, Graduate Council will close the review and provide the program with a letter so stating.

Copies of the unedited extramural team report, the program preliminary response, the Graduate Council Findings and Recommendations, and program final response are sent to the Chancellor, Executive Vice Chancellor, College or School Dean and
Academic Senate office. A brief summary of the programs reviewed and Graduate Council actions are included in the Graduate Council Annual Report to the Riverside Division of the Academic Senate.

The review of the master’s level programs follow the same format, but the Graduate Council Review Subcommittee may play the role of the extramural team at the option of the Council.

Graduate programs may be asked to provide Graduate Council with a progress report 3 to 4 years after a review has been closed.

Each year the Graduate Council may query programs that have been reviewed recently to ensure compliance with Council requests.

COURSES & PROGRAMS SUBCOMMITTEE

A. Duties

The main responsibilities of the Courses & Programs subcommittee are to review:

Graduate course forms for new courses, course changes, and deletions
Graduate program changes
Proposals for new graduate programs
Proposals for new centers

B. Schedule

The Courses and Programs Subcommittee meets monthly, in advance of the Council meeting, to prepare recommendations on courses and programs for the Council.

C. Business

1. Graduate Course Forms

One of the primary responsibilities of this subcommittee is to review graduate course forms (courses to be offered only once, new courses, deletions, changes and restorations). A copy of the General Rules and Policies Governing Courses of Instruction issued by the Academic Senate will be distributed to subcommittee members. Guidelines that pertain in particular to graduate course forms have been extracted from these guidelines.
Graduate course forms are routed (electronically) from the department to:

- Courses office
- Dean of the College (or Division)
- Graduate Council
- Committee on Courses

Graduate courses are numbered 200-299 and are ordinarily open only to students who have completed at least 18 (or 12 semester) upper division units basic to the subject matter of the course. Graduate courses must be approved by the Graduate Council and by the Divisional Committee on Courses. Professional courses for teachers are numbered 300-399. Other professional courses are numbered 400-499. Individual study or research graduate courses are numbered 500-599 if they may be used to satisfy minimum higher degree requirements, otherwise they are numbered 600-699 (500-699 courses are not in common use in Riverside).

200-285 Lecture and Seminar courses
286-289 Interdisciplinary courses
290 Directed Studies (1-6 units)
291 Individual Study in coordinated areas
292 Concurrent Studies in department/program (1-4, repeatable for credit; concurrent enrollment by graduate student in undergraduate course, with credit for additional graduate level participation).
297 Directed Research (1-6 units)
298G Internship, Group (1-12, repeatable to 16 units)
298I Internship, Individual (1-12, repeatable to 16 units)
299 Research for the Thesis or Dissertation (1-12 units)
300-399 Professional Courses for teachers
301 “Teaching of ___________ at the College Level” or “Directed Studies in the Teaching of ___________” (to be graded S/NC. Units most accurately reflect hours of training.)
302 “Apprentice Teaching” or “Teaching Practicum,” variable (1-4 units). Open to TAs with units assigned to accurately reflect individual teaching activity time during the applicable quarter. To be graded S/NC.
398G Internship, Group (1-12, repeatable to 16).
398I Internship, Individual (1-12, repeatable to 16)
400-499 Other Professional courses.

Number of hours: the number of hours per week proposed by the department should be specified as to lecture, seminar, discussion, workshop, colloquium, laboratory, practicum, scheduled research, outside research, studio, screening, consultation, field, internship, individual study, extra reading, term paper, or other. Under the designation “other,” the nature of the activity must be specified. Hours per week per unit of credit may not be less than but may exceed those listed in the following guidelines:

One unit for each hour per week of lecture, seminar, discussion, workshop, colloquium or consultation. Discussion is assumed to mean that the class meets regularly each
week for the purpose of group consideration of course materials as distinct from lecture. The designation of one hour for “consultation” implies a regularly assigned meeting of one hour with each student each week. If such consultation is less, the unit assignment must be appropriately adjusted.

One unit for each two to three hours per week of studio, which includes performance or individual practice.

One unit for each three hours per week of laboratory, practicum, individual study, scheduled and outside research, field work, extra reading, term paper or written work, screening, internship, and similar assigned problems.

2. Graduate Program Changes

Any change to a graduate program should be submitted to the Graduate Council for review and approval. We request that departments/programs submit the change in “catalog copy style” which lists the current requirement on the left side of the page, and the proposed changes on the right side of the page. We also request that a memo be attached to the copy that briefly describes the requested change as well as the justification for the change. It is the subcommittee’s responsibility to review the requested change to insure that the change is appropriate.

3. New Program Proposals

The format for new program proposals follows that specified by CCGA (see documentation on web site at http://www.universityofcalifornia.edu/senate/reports/ccgahandbook.pdf). The campus review process is as follows.

Development of the Preliminary Proposal

The preparation of new graduate programs should be initiated by the interested faculty members in consultation with the College Dean and Associate Dean(s). As soon as a decision is reached by the College Dean that a new graduate program should be developed, the Chancellor should be notified so that this new program can be listed in the 5-year prospectus for the College and Campus – a document sent annually to the Office of the President by the Chancellor.

The proposing faculty are advised to meet early on with the Associate Graduate Dean and Council Chair and to consult the current guidelines dictated by the Coordinating Committee on Graduate Affairs (CCGA) as well as any other pertinent information which will help the faculty in drafting this document. The proposal must be prepared according to the CCGA guidelines and format. In addition, the final proposal should also include the proposing faculty’s responses to the California Postsecondary Education Commission (CPEC) questionnaire (found in Appendix D of CCGA guidelines).
During the preparation of this proposal, various drafts of the document should be reviewed with the College Dean or his/her designee, and if desired, with the Graduate Dean and/or Associate Graduate Dean. These consultation sessions should provide constructive criticism and advice that would make the proposal more likely to garner campus approval after official submission.

**Development of the “Final” Proposal**

After these consultations have been completed and a “final” draft of the proposal is ready, the proposal should then be sent to the following individuals/groups:

- **The College Dean** - who should review the proposal and prepare a written statement endorsing the proposal and committing appropriate resources to ensure the success of this proposal once approved and initiated.

- **The College Executive Committee** - who should render their review and endorsement of this proposal before being submitted to the campus for formal review.

- **Related Campus Department Chairs** - who should review the proposal and prepare a written statement concerning the proposal and delineating whether this new program positively or negatively impacts on his/her own programs and what level of interaction between the 2 programs are likely to occur.

*(optional step)* **The Graduate Council Courses and Programs Subcommittee** - who will provide their initial review and comments concerning the proposal [Note: the comments of this subcommittee should be considered as advisory only and should not be appended in any way to the proposal; the proposing faculty may or may not elect to incorporate the subcommittee recommendations into the final draft of the proposal].

**Submission of the Proposal to the Campus for Review**

Once these additional documents are secured and added to the proposal, and any modifications to the proposal suggested by these individuals/groups completed, the final proposal should be forwarded electronically in a pdf format to the Graduate Council to initiate the formal review process. The attached flowsheet (Appendix 2) demonstrates the progression of the proposal through the campus and off-campus administrative channels.

**Suggested Timelines for New Program Review**

Various stages of proposal preparation = indeterminate [depends on the proposing faculty] – between 6 – 12 months is probably typical.

Graduate Council approval process = 2-3 months if the proposal is well-prepared and strongly supported by the College Dean and Academic Senate Committees; longer
if the proposing faculty need to address serious concerns raised by the Graduate Council.

Campus approval process = after approval by the Graduate Council, the proposal is forwarded to Planning and Budget Committee, Committee on Educational Policy, and the Library Committee for review at its next quarterly meeting (if the proposal reaches the Senate in time for the Call – if not, it must await another academic quarter before being voted on).

Off-Campus approval process = usually 6 months to 1 year.

4. Proposals for New Centers

Proposals for new Centers are sent to the Graduate Council for review and comments. Such proposals are sent first to the Courses and Programs subcommittee for analysis and suggestions for the full Council concerning their impact on graduate education.
FELLOWSHIP SUBCOMMITTEE

A. Duties

The Fellowship Subcommittee is responsible for allocating Dissertation Research Grants and Masters Thesis Research Grants. The committee allocates a limited pool of funds on a competitive basis. One goal of the program is to promote and reward effective proposal writing.

In Spring quarter, the Fellowship Subcommittee also reviews and ranks Diversity Fellowships (DYF, GRMP, and C&CDF). In addition, they review and select awardee(s) for the Advisor/Mentoring award.

B. Schedule

The Fellowship Subcommittee meets once in Fall & Winter quarters and twice in Spring quarter.

C. Business

Committee members are primarily responsible for evaluating proposals from students in their college/school and related colleges/schools. Normally, members rate the proposals, first individually, on a 1-5 scale as follows:

5 Excellent: Based on clarity of the research strategy, effectiveness of the presentation, and adequate justification of the budget. Recommend full funding

4 Very Good: recommend full or partial funding

3 Good: wait for full discussion

2 Poor: recommend no funding and defer with suggestions for improvement

1 Reject: serious problems with the proposal or maximum award has been exceeded

At the committee meeting, the individual ratings are posted and discussed until agreement is reached. The total commitments are then assessed with respect to the funds available for subsequent quarters and the year to establish a maximum for full funding.
D. Guidelines

1. Dissertation Research Grants

Awards for graduate student expenses directly related to dissertation research are funded for a maximum of $1,000. (A copy of the Application Form is included in Appendix 3.)

Deadlines are quarterly, on the first working day after the third week of classes. Applicants are notified in writing about their competition results. Only registered graduate students who have advanced to candidacy for the Ph.D. may be in the competition for Dissertation Research Grants and utilize grants.

A recap of the dissertation is not needed, but the applicant must describe the research questions to be answered, the data to be collected and the method(s) employed. They must also explain how the research will contribute to the academic discipline. The applicant should include or append a list of references or a bibliography of research work that relates to the topic. The committee will evaluate all proposals primarily on the merit of the proposal.

Research proposals using Recombinant DNA, humans or animals require special approval by designated campus committees. If it is appropriate to the research, it is the applicant’s responsibility to provide protocol numbers and approval dates or indicate this is pending. If approvals are pending, this may increase the time required for the release of funds.

Requests for general assistance, such as lab helpers, are routinely denied when the work can be done by the applicant.

Permanent equipment is rarely funded. Reusable supplies, books, etc. remain the property of the university.

Limited per diem expenses are allowed during travel. All travel expenses are processed through the student's department. Funding is not likely granted for travel in southern California. Foreign travel requests must include documentation from a host institution, facility, or individual that the student has the access needed to do the research. Travel to professional society conventions is not funded.

School district research must have written permission from the proper authorities submitted with the application.

Research grants are not for stipends nor for the actual preparation of thesis copy such as typing, charts or photos.
Budgets that exceed $1,000 will not be considered. Funds are available during a specified award period. Extensions of grant periods should be requested in writing. Awards terminate upon leaves of absence or filing fee status. Expenditure reports are due two weeks after the termination of award period.

Expenditures must be within the categories budgeted in the application. Written permission is required for adjustments prior to spending funds.


Awards for graduate student expenses directly related to thesis research are funded for a maximum of $500.

Deadlines are quarterly, on the first working day after the third week of classes. Applicants will be notified in writing about their competition results.

Only registered graduate students enrolled in Anthropology (M.S. degree), Art History, Creative Writing and Writing for the Performing Arts, Experimental Choreography, and Visual Art may receive and utilize grants.

Research proposals using humans or animals are reviewed and approved by designated committees. Funds are released after such approvals are obtained.

Requests for general assistance, such as lab helpers, are routinely denied when the work can be done by the applicant.

Permanent equipment is rarely funded.

Reusable supplies, books, etc. remain the property of the university.

Limited per diem expenses are allowed during travel. All travel expenses are processed through the student's department. Funding is not granted for travel in southern California. Foreign travel requests must include documentation from a host institution, facility, or individual that the student has the access needed to do the research. Travel to professional society conventions is not funded.

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period. Expenditures must be within the categories budgeted in the application. Written permission is required for adjustments prior to spending funds.

3. Diversity Awards (forthcoming)

4. Advisor/Mentor Awards (forthcoming)
The Graduate Division

The Graduate Division provides administrative leadership on graduate affairs and acts as the executive branch to the Council as legislature. It supports the EVC, College and School Deans, senior administrators, and departments/programs in managing graduate education. The Dean, Associate Deans, and staff of the Graduate Division implement the policies and guidelines established by the Council.

The Graduate Division is currently organized as follows:

- Administration
- Academic Preparation and Outreach
- Admissions
- Graduate Academic Affairs
- Financial Support
- Teaching Assistant Development Program

Administration

Dean: **Joseph W. Childers**

Head of the Graduate Division. Provides leadership in promoting graduate education at UCR. Responsible for seeing that Graduate Council policies are implemented. Oversees all of the functions of the Division described below. Represents the Graduate Division on campus, system-wide, and national committees. Appoints Graduate Advisors. Has final approval on graduate admissions. Works with colleges and schools to construct Fellowship and financial aid packages for new graduate students.

Associate Dean: **Ken Baerenklau**

Liaison with Colleges/Schools for all matters related to graduate student education. Responsible for Academic Student Employees collective bargaining issues and the TA Development Program. Advises program staff on contract compliance. Holds workshops for all graduate programs on Academic Student Employee labor relations practices. Provides support for program reviews and Fellowship subcommittee.

Associate Dean: **Leah Haimo**

Liaison with all Colleges/Schools for all matters related to graduate recruitment and outreach activities. Provides support for program reviews and Courses and Programs subcommittee. Advises Dean and program Staff on graduate admissions and financial aid packages for new graduate students.

Assistant Dean, Budget Control: Bette Quinn

Chief staff officer. Manages staff employment, payroll, and all other accounting functions. Manages graduate student financial aid.
Graduate Student Cohort Funding: Yung Phung.
Monitors cohort funding for the various colleges and schools.

Graduate Council Coordinator: Sue Stracener
Manages administrative matters for the Graduate Council, including program reviews, new graduate program proposals, graduate program changes, catalog copy, and course proposals. Prepares minutes of Council meetings for the Secretary of the Council.

Graduate Recruitment and Outreach: Maria Franco-Aguilar, Director
Partners with schools, divisions, and colleges to enhance the number, quality and diversity of the graduate population across the campus. Develops and assists programs in developing publications and internet promotions. Participates in statewide and national recruitment fairs. Promotes and develops special undergraduate outreach programs to assist in the recruitment and enrollment of a diverse graduate student body (MSRIP, AGEP, UC LEADS, NIH Bridges Programs, etc.). Works closely with the Graduate Dean in identifying candidates for the allocation of Diversity Fellowship funds.

Admissions: Victoria Long, Director; Patti Fagan, Kim Bryson, Elisa Gutierrez, Assistants
Receives and processes applications, enters applicant data into SIS and Graduate Division data bases, and monitors implementation of admissions criteria. Assists the Graduate Dean and College Deans in constructing competitive financial support packages for admitted students. Develops statistical reports on applicants and admits. Provides training and support for department/program staff. Monitors state, national, and international educational policy changes that impact graduate admissions.

Graduate Academic Affairs: Linda Scott, Director; Kara Oswood, Karen Smith, Assistants
Oversees adherence to Graduate Council and Senate regulations concerning employment, academic matters, fellowships, and graduation. Monitors progress of enrolled students: degree requirements, dissertation and qualifying exam committees, advancement to candidacy and awarding of degrees, filing fee requests, transfer units, and dissertation format requirements. Processes student petitions. Monitors student employment and fellowships for enrolled students. Oversees graduate student discipline and dismissal for both academic and non-academic reasons. Provides workshops on thesis preparation and handles the filing of dissertations. Conducts training for Graduate Advisors and program assistants. Produces written support documents such as the Graduate Division Calendar, the Graduate Student Handbook, the Graduate Adviser’s Manual, and the Student Employment Handbook. Provides statistical information and surveys concerning graduate students and post docs to programs, the campus, the Office of the President, system-wide committees, and outside agencies.
Financial Awards Processing

Processes all graduate student awards that are non-payroll, including fellowships, grants, department block fellowship awards, Partial Fee Remission (PFR), Graduate Student Health Insurance Program (GSHIP), Non-Resident Tuition Remission (NRTR), Dissertation and Masters Thesis Research Grants, and Humanities Graduate Student Research Grants. Maintains resource materials on extramural funds for graduate students. Audits and reconciles graduate student financial aid accounts.

Teaching Assistant Development Program: Kim Palmore, Coordinator

Responsible for campus TA training program. Administers quarterly evaluations of TAs.
Chapter 8. Committees of the Division

8.14 GRADUATE COUNCIL

8.14.1 This committee consists of at least fifteen members of the Division, including at least one member from each school and college. The Dean of the Graduate Division serves ex officio, and may not serve as Chair or Vice Chair of the Council. One member of the committee will serve as the Divisional representative to the University Coordinating Committee on Graduate Affairs. (Am 5 Nov 87) (Am 29 May 97) (Am Nov 02)(Am 17 Feb 09)

8.14.2 The Graduate Council exercises regulative and coordinating functions in the Graduate Division of the Riverside campus except for the final approval of new programs leading to established graduate degrees and the final recommendation to the Assembly of the Academic Senate on new graduate degrees. It is the duty of the Graduate Council to:

8.14.2.1 Make recommendations to the Coordinating Committee on Graduate Affairs, with the prior approval of the Division, concerning (a) the qualifications of departments and graduate curricula for initiating new programs leading to existing graduate degrees, and (b) the establishment of new graduate degrees;

8.14.2.2 Coordinate the procedures in the Division relating to the conferring of degrees higher than the Bachelor's Degree;

8.14.2.3 Set policies and standards for admission to graduate status; (En 20 Mar 75)

8.14.2.4 Set standards for appointment of graduate students to be Teaching Assistants, Teaching Fellows, Research Assistants, and recipients of University Fellowships; (En 20 Mar 75)

8.14.2.5 Admit qualified students to candidacy for graduate degrees;

8.14.2.6 Recommend the award of fellowships and graduate scholarships, including honorary traveling fellowships, according to the terms of the various foundations;

8.14.2.7 Appoint committees in charge of candidates’ studies, who shall certify that every candidate recommended for a higher degree has fulfilled the requirements of the University pertaining to that degree;(Am 21 Nov 06)

8.14.2.8 Supervise the conduct of public and other examinations for higher degrees;
8.14.2.9 Make final report to the Division on the conferring of graduate degrees;

8.14.2.10 Conduct periodic peer reviews (internal or extramural) of continuing graduate degree programs; and regulate in other ways the work of the Graduate Division, with a view to the promotion of research and learning; (Am 29 May 97)

8.14.2.11 Report and make recommendations to the Division on matters pertaining to graduate work;

8.14.2.12 Advise the Chancellor concerning relations with educational and research foundations; Limit at its discretion the number of credit hours of students who are employed; (Am 29 May 97)

8.14.2.13 Make rules governing the form of presentation and the disposal of dissertations;

8.14.2.14 Recommend and supervise all graduate courses of instruction in the Division. In discharging this responsibility, the Graduate Council presents its recommendations on courses to the Committee on Courses. (Am 26 Apr 79)

8.14.2.15 Set policy and standards for appointment of postdoctoral scholars or their academic equivalent and for their enrollment by the Graduate Division. (Am 21 Nov 06)
New Graduate Program Proposal Review Process

Development of the Preliminary Proposal

The preparation of new graduate programs should be initiated by the interested faculty members in consultation with the College Dean and Associate Dean(s). As soon as a decision is reached by the College Dean that a new graduate program should be developed, the Chancellor should be notified so that this new program can be listed in the 5-year prospectus for the College and Campus – a document sent annually to the Office of the President.

The proposing faculty are advised to meet early on with the Graduate Dean and Associate Graduate Dean to acquire a copy of the current guidelines dictated by the Coordinating Committee on Graduate Affairs (CCGA) as well as any other pertinent information which will help the faculty in drafting this document. The proposal must be prepared according to the CCGA guidelines and format. In addition, the final proposal should also include the proposing faculty’s responses to the California Postsecondary Education Commission (CPEC) questionnaire (found in Appendix D of CCGA guidelines).

During the preparation of this proposal, various drafts of this document should be reviewed with the College Dean or his/her designee, and if desired, with the Graduate Dean and/or Associate Graduate Dean. These consultation sessions should provide constructive criticism and advice that would make the proposal more likely to garner campus approval after official submission.

Development of the “Final” Proposal

After these consultations have been completed and a “final” draft of the proposal is ready, the proposal should then be sent to the following individuals/groups:

- The College Dean - who should review the proposal and prepare a written statement endorsing the proposal and committing appropriate resources to ensure the success of this proposal once approved and initiated
- The College Executive Committee - who should render their review and endorsement of this proposal before being submitted to the campus for formal review
• Related Campus Department Chairs - who should review the proposal and prepare a written statement concerning the proposal and delineating whether this new program positively or negatively impacts on his/her own programs and what level of interaction between the 2 programs are likely to occur

• (optional step) The Graduate Council Courses and Programs Subcommittee - who will provide their initial review and comments concerning the proposal [note the comments of this subcommittee should be considered as advisory only and should not be appended in any way to the proposal; the proposing faculty may or may not elect to incorporate the subcommittee recommendations into the final draft of the proposal]

**Submission of the Proposal to the Campus for Review**

Once these additional documents are secured and added to the proposal, and any modifications to the proposal suggested by these individuals/groups completed, the final proposal should be bound and photocopied and 50 copies forwarded to the Graduate Division to initiate the formal review process. The attached flowsheet demonstrates the progression of the proposal through the campus and off-campus administrative channels.

**Suggested Timelines for New Program Review**

• Various stages of proposal preparation = indeterminate [depends on the proposing faculty] – between 6 – 12 months is probably typical
• Graduate Council approval process = 2-3 months if the proposal is well-prepared and strongly supported by the College Dean and Academic Senate Committees; longer if the proposing faculty need to address serious concerns raised by the Graduate Council
• Campus approval process = after approval by the Graduate Council, the proposal is forwarded to the Academic Senate committee for review at its next quarterly meeting (if the proposal reaches the Senate in time for the Call – if not, it must await another academic quarter before being voted on)
• Off-Campus approval process = usually 6 months to 1 year

Approved by Graduate Council on 12/08/00
August 25, 2010

ACADEMIC SENATE CHAIR POWELL

Dear Harry,

I am writing to request input from the Academic Senate on the attached proposal to rename certain University of California “fees” as “tuition.” The proposal is consistent with a recommendation submitted by the Access and Accountability Working Group to the University of California Commission on the Future. The proposal describes the underlying rationale for the name change, the challenges that would be associated with its implementation, and the consultative process that we are pursuing.

Our goal is to present the proposal as an action item for The Regents when the board meets in November. To that end, I would appreciate receiving feedback from the Academic Senate by Friday, October 22.

Sincerely,

Lawrence H. Pitts
Provost and Executive Vice President,
Academic Affairs

Attachment

cc: Executive Vice President Brostrom
    Vice President Sakaki
“Fees” and “Tuition” at the University of California

Recommendation:

- To accurately describe the University of California’s charges used for instructional purposes and make them more easily understood by the general public, Budget and Capital Resources (BCR) recommends that student charges be renamed at the November 2010 Regents’ Meeting as follows:
  - The “Educational Fee” will be renamed “Tuition”;
  - “Fees for Selected Professional School Students” will be renamed “Professional Supplemental Tuition”; and
  - “Nonresident Tuition” will be renamed “Nonresident Supplemental Tuition.”
- The Office of General Counsel has identified no legal prohibition on UC charging “tuition” instead of “fees.” (See “Legal Perspective” section below.)
- The Student Services Fee, formerly the Registration Fee, would remain a separate charge and would not be renamed. The Funding Strategies working group of UC’s Commission on the Future (COTF) recommended that UC’s Student Services Fee be folded into “Tuition” with the Educational Fee, but the Access and Affordability working group recommended retaining it as a separate fee. The Student Services Fee provides revenue for non-instructional student programs and services and is appropriately labeled as a “fee.”

Background and Rationale:

- The State and UC have long held the position that adequate State support for the University’s instructional mission enabled the University to avoid charging “tuition.” This view originated in the Organic Act which established the University of California and was enshrined in the 1960 Master Plan.
- Historically, the University established modest “fees” for specific, limited purposes that supplemented the instructional mission.
- Since the State’s fiscal crisis of the 1990s, however, the University has been forced to increase fee levels significantly and expand the uses of student fee revenue to include instruction and instructional support activities. Several of these fees are equivalent to tuition charged by other universities. These include the Educational Fee and professional school fees.
  - The general distinction between “tuition” and “fees” at many institutions of higher education is that “tuition” covers instructional costs, while “fees” pay for services not related to instruction. Under these definitions, UC has essentially charged “tuition” since the mid-1990s. (More information about the history of “fees” and “tuition” at UC is available in the Appendix.)

1 This briefing paper was developed using materials provided by staff in UCOP’s Office of General Counsel and the Student Affairs division, and by working groups of the UC Commission on the Future.
• Claiming to be a “tuition-free” institution is no longer meaningful.
  o The goal of remaining “tuition-free” as expressed in the Organic Act and the Master Plan has traditionally been to avoid a requirement that California students cover any portion of their educational expenses. However, all three higher education segments in California now charge California students for educational and instructional costs.
  o While the concept of financial accessibility inherent in the Organic Act and the Master Plan remains relevant and vital, financial accessibility is achieved through financial aid in the context of the student’s total cost of attendance (including books, living costs, etc.), not just tuition and fees. Moreover, UC’s Blue and Gold Opportunity Plan assurance that students with parent incomes below $70,000 will have their “systemwide fees” covered by gift aid will be more easily understood if it refers to the more commonly used nomenclature of “tuition and fees.”
  o UC’s current use of the term “fees” is misleading, implying that the fees pay for specialized or optional services. The term “tuition” more accurately describes the actual use of the revenue, which is to support academic programs, student services, student financial aid, and administrative services. If UC used the terms “tuition” and “fees” as typically understood by the general public, students and families could more easily understand UC’s costs and compare them to those at other institutions.

• Labeling student charges for instruction as “fees” instead of “tuition” is inconsistent with other institutions of higher education, as well as entities to which UC reports its student charges.
  o UC’s public comparison institutions name their charges as follows:
    ▪ SUNY Buffalo charges “Tuition,” a “Student Activity Fee,” and a “Comprehensive Fee” (components of which fund technology, transportation, campus life, athletics, health, colleges, and transcript services).²
    ▪ The University of Illinois at Urbana-Champaign charges “Tuition,” ”Campus Fees” (e.g., a “Transportation Fee”) and “Course Fees.”³
    ▪ The University of Michigan charges “Tuition” (which includes a “Health Service Fee” and an “Infrastructure Maintenance Fee”) and a few mandatory fees (e.g., a “Registration Fee” of $80).⁴
    ▪ The University of Virginia charges “Tuition” and required fees, as well as a school-specific student activities fee which varies from $8 to $85, depending on the school of enrollment.⁵
  o UC participates in both voluntary and mandatory surveys of institutional costs (e.g., IPEDS, AAUDE, and U.S. News & World Report), and these surveys often require schools to report “tuition” and “fees” separately. Historically UC’s charges were reported solely as fees, misleading the public about the actual cost of attending UC. In the wake of the 2009 problems associated with GI Bill payments, noted below, UC has begun reporting the Educational Fee and professional school fees as “tuition” on national surveys.

• Problems have arisen because UC describes key charges as “fees” instead of “tuition.”

² Fee information for SUNY Buffalo is available at http://src.buffalo.edu/financialaid/cost.shtml.
³ Fee information for the University of Illinois at Urbana-Champaign is available at http://registrar.illinois.edu/financial/tuition.html.
⁴ Fee information for the University of Michigan is available at http://ro.umich.edu/tuition/.
⁵ Fee information for the University of Virginia is available at http://www.virginia.edu/Facts/Glance_Tuition.html.
Issues vis-à-vis federal financial assistance programs: In 2009, GI Bill payments to California’s student veterans attending private institutions were threatened. GI Bill payments are tied to the level of “tuition” that state colleges charge to in-state residents. Because in name UC does not charge tuition, in California the amount of tuition charged by state colleges is technically $0. Consequently, each GI Bill student attending a private institution was threatened with the loss of thousands of dollars in financial assistance. Labeling the Educational Fee as “Tuition” avoids this problem.

Two working groups of UC’s Commission on the Future (COTF), Access and Affordability and Funding Strategies, have recommended that UC change the name of the Educational Fee to “tuition.” The Access and Affordability working group advised UC to “develop a more specific proposal for implementing the name change.” The Academic Council agreed with the Access and Affordability working group’s overall recommendation; see “Consultation Process” section below.

Legal Perspective:

The Office of General Counsel at the Office of the President has determined that there is no legal prohibition on UC charging “tuition” instead of “fees.”

“Tuition” has no legal definition either in California or federal law. In fact, “tuition” can readily be defined as a type of “fee”; said another way, “fees” encompass “tuition.”

The California Education Code, which authorizes Cal Grants, does not define “fee” or “fees,” nor does it differentiate between “tuition” and “fee.” In fact, the statute indicates that “the amount of any individual award is dependent on the cost of tuition or fees, or both, at the qualifying institution at which the student is enrolled.” Therefore, UC may change the name of the Educational Fee to “Tuition” without affecting the awarding of Cal Grants to UC students.

Changing the name of the Educational Fee to “Tuition” would not require changes to the Budget Act, the Education Code, or to the California Code of Regulations.

Implementation Challenges:

Coordination with other segments: Renaming UC’s Educational Fee “Tuition” requires coordination with CSU and, possibly, the CCCs, who also describe as “fees” those student charges that provide revenue for instructional expenses. It may be confusing to the general public and other entities if UC were to make the name change without similar changes occurring in the labeling of student charges at CSU and the CCCs.

Coordination with relevant parties in State government: Renaming UC’s Educational Fee “Tuition” requires coordination with State government officials to ensure all understand that the name change does not represent any shift in the use of the fee revenue, in the level of the fee, or in the state’s responsibility to provide adequate funding to UC for its instructional costs or for Cal Grants.

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7 Education Code Section 69434(a) for Cal Grant A and similar language in Section 69435(a)(2) for Cal Grant B.
The Office of General Counsel at the Office of the President has determined that no statutory changes are necessary where there are specific references to UC's "fees" (see "Legal Perspective" section above).

- Public relations impact: Even though the change in terminology would have no impact on the level or use of UC's student charges, some constituents may perceive the adoption of the term "tuition" as an abandonment of UC's efforts to strive for a tuition-free university where the State fully covers instructional costs.

- Changing the name of the Educational Fee to "Tuition" should be combined with vigorous advocacy efforts to protect and increase state funding, as well as the reduction of operating costs through academic and administrative restructuring efforts.

- Administrative processes and systems would need to adapt to the new terminology. Campus registration systems, billing systems, and financial aid systems would need to be modified in order to accommodate the proposed change in terminology. The cost of these changes is not known; however, campuses have recent experience implementing the name change of a major UC fee as the Regents changed the name of the Registration Fee to the Student Services Fee in May 2010. A generous timeframe for implementation will give campuses more than enough time in which to change the name of the fees in question.

Consultation Process:

- OP's Budget and Capital Resources and Student Financial Support units have already consulted with the Office General Counsel about changing the name of the Educational Fee to "Tuition." The Office of General Counsel has determined that there is no current prohibition on the University charging "tuition" instead of "fees" (see "Legal Perspective" section above).

- OP Academic Affairs will consult with the Academic Senate about this proposal; the Senate needs 60 days to review the appropriate materials (i.e., this briefing paper).

- The Academic Council has already agreed with the Access and Affordability working group's recommendation to rename the Educational Fee and professional school fees (but not the Student Services Fee) as "Tuition":
  - "Council agrees with this recommendation, noting that all state universities underwrite a portion of the costs of their student bodies. They nevertheless charge 'tuition,' which in California has been called 'fees.' Technically, 'fees' include other specialized costs for diverse programs that not all students are required to pay. To be consistent with other higher education institutions, UC should call these required payments by their proper name, 'tuition' (UCSD, UCEP). Renaming 'fees' as tuition will minimize confusion sometimes involved with securing federal funding for student aid."^8

- OP BCR and Academic Affairs will discuss this proposal with the appropriate campus constituents.

- OP Student Affairs will consult with the University of California Student Association (UCSA) about the proposed changes.

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• BCR will consult with Department of Finance representatives about this proposal; see “Implementation Challenges” section above.

• OP Student Affairs will consult with the California Student Aid Commission (CSAC) about the proposed changes.

• BCR has consulted with CSU executives about making parallel name changes. CSU executives are interested in making the change and Chancellor Reed has endorsed the concept.

• BCR will consult with the CCCs about their interest in making parallel name changes.
  o If CSU and the CCCs decide to go forward with the name changes, OP will coordinate the November item, characterization of the change, and any specific language with CSU and the CCCs.

• OP will bring the proposed name changes before the Regents at their November 2010 meeting. The item will go before the Finance and Educational Policy Committees and will propose changes to the University of California Student Fee Policy, which describes UC’s mandatory systemwide charges. The items for the November Regents’ meeting are due on October 28.

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9 The University of California Student Fee Policy is available at http://www.universityofcalifornia.edu/regents/policies/3101.html.
APPENDIX

History of “Fees” and “Tuition” at UC

- The State and UC have long held the position that State support for the University’s instructional mission enabled the University to avoid charging “tuition.” This view originated in the Organic Act which established the University of California and was enshrined in the 1960 Master Plan.
  - When the University of California was established by State Statute in 1868 (i.e., the Organic Act), tuition was charged to resident students; however, “as soon as the income of the University shall permit, admission and tuition shall be free to all residents of the State.”\(^\text{10}\) Thus “three months after opening the University, the Regents abolished tuition”\(^\text{11}\) for resident students.
  - The 1960 Master Plan for Higher Education in California, however, describes “The distinction between ‘tuition’ and ‘fees’: ‘tuition’ is defined as student charges for teaching expense, whereas ‘fees’ are for charges to the students for services not directly related to instruction, such as health, counseling other than that directly related to the students’ educational program, placement services, housing, recreation, and the like.”\(^\text{12}\)

- In 1994, the UC Regents approved a new policy permitting the Educational Fee to pay for the cost of educational instruction. Policy excerpt:
  - “The Educational Fee is a Universitywide mandatory charge assessed against each resident and nonresident registered student... In addition to funding programs and services supported by the Educational Fee (such as student financial aid and related programs, admissions, registration, administration, libraries, and operation and maintenance of plant), income generated by the Educational Fee may be used for general support of the University's operating budget. Revenue from the Educational Fee may be used to fund all costs related to instruction, including faculty salaries.”\(^\text{13}\)

- Thus according to the definition provided in the 1960 Master Plan and the description in the University of California Student Fee Policy, UC has charged tuition for over a decade.
  - Prior to the 1990s, “fees” at the University of California were intended to cover only the extra costs related to attending a UC campus; at that time, the State covered the costs of direct instructional programs. That changed in the early 1990s, when the University began to experience dramatic shortfalls in State funding. As a result the State subsidy per student has declined significantly – by more than 50% over the past 19 years.
  - As the State subsidy for UC declined, student fees began to rise significantly and their use expanded to cover instructional costs and other costs. The Educational Fee supports core instructional costs such as faculty salaries and is essentially interchangeable with “tuition” at other institutions.

\(^\text{10}\) Statutes of California, Chapter CCXLIV, Approved March 23, 1868.
\(^\text{13}\) The University of California Student Fee Policy; available at http://www.universityofcalifornia.edu/regsents/policies/3101.html.
• As a point of interest, a 1972 revision to the Master Plan notes that there have long been legal grounds for UC and CSU to charge tuition. Relevant excerpt:
  
  o “At the time the Master Plan recommendations were made (1960), and since that time, there have been legal grounds for tuition in the University of California and the California State University and Colleges, despite widespread impressions to the contrary. The [UC] Regents have the authority to impose tuition by virtue of their constitutional powers... For each of the two senior segments there appears to be no legislative or constitutional prohibition against tuition.”14

• The Master Plan authors and subsequent plan revision teams have reaffirmed the principle of tuition-free higher education for California residents; however, a tuition-free policy has never been enacted into statute.

August 11, 2010

SENATE DIVISION CHAIRS
SENATE COMMITTEE CHAIRS
UNIVERSITY OF CALIFORNIA

Re: Request for Systemwide Review of Council Recommendation and UCLA Statement on the Future of the University

Dear Senate Division and Committee Chairs:

As you know, at the June 16, 2010 meeting of the Academic Assembly, the Assembly voted to send for systemwide review and comment two documents regarding the future of the University of California. The first was a recommendation from the Academic Council to the UC Commission on the Future, which was narrowly approved by Council. The second is a Statement of Academic Senate Values and Recommendations, which was developed by the UCLA division. These documents will be part of an ongoing process of reflection engaged in by the Senate over the course of the next academic year. We hope to fashion a comprehensive statement of values with specific recommendations for charting the next several years. If we are successful, the Senate will help steer the University through these difficult times in a way that maintains its commitment to the faculty and to excellence.

We ask that you submit comments to SenateReview@ucop.edu by November 10, 2010. Please do not hesitate to contact me or, after September 1, incoming Council Chair Dan Simmons, if you have any questions.

Sincerely,

Henry C. Powell, Chair
Academic Council

Copy: Academic Council
Martha Winnacker, Academic Senate Executive Director
PROPOSED COMMISSION RECOMMENDATION FROM THE ACADEMIC COUNCIL

Recommendation: The Commission on the Future should adopt as a guiding priority the maintenance of the quality of the University of California research and teaching faculty, which is the driving force of the University of California’s contribution to the State of California. Implementation of this recommendation includes the following elements:

1. The University of California is one of the world’s premier research universities. The value and prestige of all of its degree programs stems from the high quality research faculty at each of the University’s ten campuses. At the undergraduate level, the University of California uniquely offers an undergraduate education at a high quality research university to qualified students from the diverse public of the State. The University must not be reduced to an institution focused solely on the throughput of undergraduates to a bachelor’s degree regardless of quality, nor shall the University of California strive to be a competitor of for-profit universities that enroll large numbers of students in online courses with high fees.

2. The maintenance of a quality faculty requires remuneration that is competitive with peer institutions. Competitive remuneration consists of a combination of current compensation, current health and welfare benefits, deferred compensation that offers secure retirement income to faculty who have maintained a long career with the University, and adequate retirement health programs.
   a. A competitive world class research faculty also requires a highly qualified professional staff, with competitive compensation, to assist in teaching and research endeavors and provide direct administrative support to the teaching and research missions.

3. In the face of the current financial shortfalls:
   a. The University should take all possible steps to increase revenues. The sources are State funding, federal funding, increased research contracts and grants (including indirect cost recovery), and fees imposed on the recipients of all aspects of the educational program. As painful as it may be, increased fees are the only source of revenue under UC’s direct control that is available to replace shortfalls in other available funding sources.
   b. The University must operate at a size that is affordable. This means downsizing the University over the short term by reducing the size of the faculty and reducing administrative and other staff. Downsizing includes limiting replacement of faculty lost due to retirements, terminations or other separations.
   c. Until stable revenues are secured, the University should forego new building and capital projects that are not absolutely essential for safety. Where state bond funding is available for projects that are necessary to maintain the core academic program of the University the projects should be pursued. However, in
undertaking any capital project, the campuses must be required to assure that operational funding is available for the support and maintenance of space and that operational funding is available for activities undertaken within expanded space.

d. In the event new academic programs are established, the Chancellor of the campus must identify a funding stream that guarantees stable and appropriate funding and specify how diversion of funds will affect existing programs, or identify offsetting cuts in positions or programs that are required to fund a new program.

4. These measures are a tactical response to a short term economic crisis, but should not distract the University and the State of California from understanding the strategic need for growth in response to growth of population whose needs for higher education, consistent with the Master Plan, can only be effectively met by a state supported public sector.

**Rationale:**

- In the absence of research quality the University's contribution to the economic well-being of California through 140 years of discovery and innovation will be lost.

- In the absence of the high quality research faculty, the value of the UC degree in comparison with other public and private institutions will be vastly diminished.

- The quality of education at the University of California is fundamentally derived from two key components: the background and expertise of the faculty and students; and the rich research-based environment inherent in the system of ten top-tier public land-grant research institutions. To maintain quality at the highest level the quality of faculty must be assured.

- The current shortfall in budget support from the State of California is forcing the University into difficult choices, all of which require adjustment to the three pillars that have sustained the University over its 140 year history: A high quality teaching and research faculty, access to a high quality education program for the diverse student population of California, and access to an affordable high quality education at a campus of a leading research university.

- The loss of affordability or access can be remedied over a short period, either through increases in financial aid, fee reductions, re-opening classroom space, and hiring additional faculty.

- If the quality of the faculty is lost, the prestige of the University, the quality of the University, and its continued research productivity will not be recoverable for decades, if ever.

- The problem with expansive capital projects, even those funded from external sources, is that capital budgets do not provide for the salaries of persons hired to occupy new
facilities, they do not provide for the equipment necessary to use new facilities, nor do they cover the increased costs of service and maintenance for new facilities. In the absence of stable revenue sources to eliminate these strains on operational budgets, capital projects must be rejected.

**Impact on Quality:**

- This recommendation is focused on protecting in the long-term the quality of University of California teaching and research programs by maintaining a high quality faculty.

- A reduction in the number of creative faculty supported to do first class research will have an economic impact as fewer new discoveries come to a market that is dependent on technology now that industrial manufacturing has migrated overseas.

**Impact on Access:**

- This recommendation focuses on maintaining access to a high quality educational program at one of the world’s top research universities.

- Maintaining the size of faculty that the University can afford in terms of competitive remuneration may require reducing the size of the University and may also result in a reduction in the number of students who have access. A reduction in faculty while maintaining current enrollment levels reduces the value of the access for enrolled students by reducing the quality of the education.

- Maintaining the quality of the University, through maintenance of the quality of the teaching and research faculty means that in the future there will still be a high quality and prestigious university to which California students may have affordable access should the State of California once again recognize support for higher education as a budget priority.

- Failure to maintain the quality of the University will mean that if the people of the State of California once again recognize support for higher education as a budget priority, there will no longer be a high quality prestigious university to which students could be provided affordable access.

**Fiscal Implications:**

- This recommendation requires that in making budget decisions, adequate funds be directed to maintaining competitive remuneration for faculty.

**Challenges:**

- Advocacy for the maintenance of faculty quality with competitive remuneration forces the faculty to place itself in competition with other deserving elements within the University. The Academic Council has historically taken positions consistent with the maintenance of a single university that provides competitive compensation for all of its
employees. Nonetheless, in making choices through a period of budgetary turmoil, protection of the quality of the UC faculty must remain a paramount priority.

- Downsizing faculty numbers in order to maintain competitive remuneration means downsizing and/or eliminating academic programs that are important and productive parts of the academic environment. The elimination of programs has never been easy for the University and mechanisms for making those choices must be developed.

- The State needs are defined by the requirement for an adequate workforce poised for employment with minimal further training and instruction. The State needs are also driven by demographic growth and the historic framework of the Master Plan.

**Next Steps for Implementation:**

- Recommendations from the Commission should maintain a focus on their impact on the quality of the University teaching and research programs through their impact on retention and recruitment of the University’s research faculty.

- Budgetary decisions on both the expenditure and revenue sides must include overall competitive faculty remuneration as a first priority.

- In order to assure academic cohesion in a difficult fiscal environment, budgetary decisions should be jointly made by administration and the Academic Senate.
4 June 2010

Henry Powell
Chair, Academic Council
University of California

In Re: Statement of Academic Senate Values and Recommendations 2010

Dear Harry,

During this particularly difficult year in the history of the University of California, the Academic Senate has been called upon to reflect on the University of California's mission and future. We have written, critiqued, and endorsed numerous position papers and have opined on the first-round recommendations of the Commission on the Future. Most recently, the Academic Council supported a resolution to the Commission that emphasized the importance of total remuneration for maintaining the quality of our faculty and recommended four measures that should be taken to address the current financial shortfalls.

The UCLA Division has approved a statement that we now ask the Academic Assembly to endorse and forward to President Yudof. This statement expresses the fundamental values shared by all UC campuses, including excellence, diversity, access, affordability, breadth and sustainability. The statement also synthesizes many consensus recommendations that have emerged through discussions at the campus and system-wide levels. It incorporates key points that were affirmed in the May Council resolution, as well as views expressed in the Council discussion that were not reflected in that resolution.

The Senate has its greatest impact when it speaks with one voice, clear and strong. We recommend that the statement attached herewith be endorsed as our framework for formulating policies and plans in this era of scarce resources.

Thank you for your consideration.

With best regards,

Robin L. Garrell
Chair, UCLA Academic Senate

Cc: Martha Kendall Winnacker, Executive Director, Systemwide Academic Senate
Jaime R. Balboa, Chief Administrative Officer, UCLA Academic Senate
UC Academic Senate Statement of Academic Senate values and recommendations, 2010

The University of California has entered an era of scarce and diminishing fiscal support. The available resources are insufficient to maintain the current size of our faculty, provide educational opportunities for an increasing number of eligible students, or grow campuses and programs in ways envisioned even five years ago.

These changed circumstances compel the UC to focus on its highest priorities. We must examine the basic assumptions that underlie our resource allocation decisions. We must have the courage to make difficult choices, recognizing that change is essential and must be led and planned.

People are the #1 asset of the University of California. Their talents and diversity are central to fulfilling the UC's tripartite mission of teaching, research and service.

1. **To attract and retain extraordinary and diverse faculty, total remuneration (salary, post-employment benefits, access to affordable housing, family-friendly policies) must be a top priority.**

2. To attract and retain the best staff, UC must offer competitive salaries and benefits.

3. To fulfill our commitment to the State of California, we must sustain and improve access for qualified resident students at all levels (freshman, transfer, graduate and professional) to education and research opportunities in the UC. At the same time, we recognize the value of providing greater opportunities for nonresident students.

4. To ensure student access and student diversity, we should aim to sustain current enrollments. If the state cannot support high quality education of those students, however, consideration must be given to reducing enrollments.

5. Affordability is a core value. We must make all efforts to re-build the state support that will ensure access to the UC as a public institution and economic engine. We must provide adequate financial aid to UC students through Pell grants, competitive CalGrants, return-to-aid, and financial aid to undocumented students.

The size of the University must be commensurate with its resources. In the short term, this means that the faculty and staff must shrink and academic programs must be reshaped. Even so, sustaining academic excellence and creating opportunities for innovation must remain top priorities. The long-term plan for capital projects needs to be critically reassessed, taking into account the current economic climate and a realistic multi-year budget outlook.

Implications for faculty and staff:

6. Each campus should develop a realistic plan for reducing the size of its faculty and staff by attrition and hiring at a slower pace, while sustaining efforts to increase diversity.

7. Special scrutiny should be given to management and administrative positions, both academic and non-academic, to avoid proliferation and redundancies, and to ensure that all core-funded positions are essential to providing support for the academic enterprise.
8. **Implications for capital programs:**
   a. There should be a 1-year moratorium on approving major new buildings that rely on university and state funds and borrowing capacity. For renovations, the highest priority must be placed on those that are essential for safety, leveraged by external resources, and address the needs of core academic (teaching and research) programs.

   b. There should be a commensurate moratorium on new funding commitments for the design and construction of major buildings that were conceived to accommodate new programs and enrollment growth, but which realistically cannot be actualized within the next 5 to 10 years.

   c. In undertaking any capital project, whether funded by the state or other sources, the campuses must be required to ensure that operational funding is available for the support and maintenance of that space, and for activities within expanded space.

   d. In the special case of the Merced campus, it may be appropriate to consider exceptions to (a) and (b), but not (c).

9. **Implications for academic programs:** The Senate and Administration must work aggressively, in the spirit of shared governance, to:
   a. Modify or disestablish academic programs that are moribund;

   b. Identify courses that are critical to students' degree progress and direct instructional resources accordingly; where possible and appropriate, modify degree requirements to increase flexibility and reduce demand on limited-capacity courses.

   c. Develop innovative curricular approaches, which might include distance and online instruction and multi-campus collaborations, in support the UC's goals of ensuring access, affordability and excellence in education;

   d. Sustain our capacity for curricular innovation as a key element of academic excellence. Because resources are highly constrained, however, growth in some areas needs to be offset by pruning in others. Decisions about academic programs should continue to be made through shared governance at the divisional level, keeping in mind potential systemwide consequences.

   e. Suspend commitments to creating new schools and institutes, especially if their long-term viability depends on identifying substantial, stable resource streams.

   An adequate, stable funding base is essential for the UC to fulfill its mandate and mission. Available funds should be directed toward the core missions of teaching, research and service to the maximum extent possible.

10. The University should take all possible steps to increase revenues from the State, federal programs, contracts and grants and private philanthropy.
11. Fees are a necessary component the funding base. Increases should be gradual and predictable, but this is predicated on the stability of other revenue streams.

12. Administrative redundancies on individual campuses and at UCOP divert resources from the UC’s core research and teaching missions. Efforts to eliminate duplication, streamline processes and achieve efficiencies should be accelerated.
DIVISION AND COMMITTEE CHAIRS
UNIVERSITY OF CALIFORNIA

Re: Systemwide review of the report of the Post-Employment Benefits Task Force

Dear Division and Committee Chairs:

The University has released the recommendations of the President’s Task Force on Post-Employment Benefits, as well as a dissenting statement from the faculty and staff members of the PEB Task Force work groups. The dissenting statement proposes a third option that was discussed, but not endorsed, by the Steering Committee. At the request of the faculty and staff members of the Steering Committee, President Yudof has agreed to consider the third option (Option C), so we are requesting comments on the two options forwarded by the Steering Committee and the additional option highlighted in the dissenting statement.

We anticipate that the Board of Regents will discuss the recommendations at its meeting in November, and is likely to render a decision at a special Regents’ meeting in December. Therefore, the Academic Council will have a preliminary discussion it at its October 27 meeting to provide guidance to Bob Anderson and myself prior to the November Regents meeting and will formulate a formal position at its November 22 meeting.

For your convenience, we are providing links to the following documents:

1. Executive Summary of the report of the PEB Task Force
2. Final Report of the PEB Task Force
3. Appendices
4. Dissenting Statement, including Option C, from faculty and staff members of the PEB Steering Committee (see page 7 for a description of Option C)
5. Letter from UCFW to former Chair Powell regarding the report of the PEB Task Force

Please pay particular attention to Appendix H, “Update to 2009 Total Remuneration Study for New Tier Options,” which begins on page 145 of the Appendices. We have asked the administration to provide the same analysis for Option C, and to provide information on Option C in a chart side-by-side with the other proposed options to facilitate comparison.
Please send your formal comments by **Monday, November 8** to senatereview@ucop.edu. In addition, if you can provide comments in advance of the October Council meeting, we will circulate your comments to the Council to inform the October discussion. We will need any such comments by October 22 in order to include them with the October agenda materials. I realize that this review is requested just as your committees begin to meet, and we appreciate your effort to opine on this matter of vital importance to the future of the University.

Sincerely,

![Signature]

Daniel L. Simmons, Chair  
Academic Council

Copy: Academic Council  
  Martha Winnacker, Academic Senate Executive Director  
  Divisional Senate Directors