

UNIVERSITY OF CALIFORNIA, ACADEMIC SENATE

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Mary Gilly  
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Chair of the Assembly of the Academic Senate  
Faculty Representative to the Regents  
University of California  
1111 Franklin Street, 12th Floor  
Oakland, California 94607-5200

July 30, 2015

**AIMÉE DORR**  
**PROVOST AND EXECUTIVE VICE PRESIDENT**  
**UNIVERSITY OF CALIFORNIA**

**Re: Approval of Master of Applied Statistics (MAS) degree program at UC Los Angeles**

Dear Aimée:

In accordance with the *Universitywide Review Processes For Academic Programs, Units, and Research Units* (the "Compendium"), and on the recommendation of CCGA, the Academic Council has approved UC Los Angeles's proposal to establish a new Master of Applied Statistics (MAS) degree program.

Because this is a new degree, and the Assembly of the Academic Senate is not meeting within 30 days of CCGA's approval, the Academic Council must approve the program per Senate Bylaw 125.B.7.

I am enclosing CCGA's report on its review of the new degree, and respectfully request that your office complete the process of obtaining the President's approval.

Sincerely,

A handwritten signature in cursive script that reads "Mary C. Gilly".

Mary Gilly, Chair  
Academic Council

Encl:

Cc: Academic Council  
Executive Director Baxter  
Senate Executive Directors



**COORDINATING COMMITTEE ON GRADUATE AFFAIRS (CCGA)**

Jutta Heckhausen, Chair

[heckhaus@uci.edu](mailto:heckhaus@uci.edu)

**ACADEMIC SENATE**

University of California

1111 Franklin Street, 12<sup>th</sup> Floor

Oakland, California 94607-5200

July 20, 2015

**ACADEMIC COUNCIL CHAIR MARY GILLY**

Dear Mary:

At its July 1, 2015 meeting, the Coordinating Committee on Graduate Affairs (CCGA) voted to approve UC Los Angeles' proposal to establish a new Master of Applied Statistics (MAS) degree program. This is a self-supporting degree program that would cater primarily to part-time students, preparing them for careers in quantitative analysis, data management, and data analysis, and statistics. The proposers anticipate the program reaching a steady-state enrollment of about 25 new students per year.

The external reviewers commented favorably on the quality of the proposed program, and also agreed that the Statistics faculty are well-qualified to teach the core areas. The sizeable advising load placed on some faculty is partially offset by planned collaborations with industry partners. Indeed, industry partner participation in thesis research advising is a key feature of the program. The program budget indicates a potential for achieving self-supporting status after one year of operation. The planned charge of \$22,000 per year is comparable with that of similar competing programs.

The proposers have responded well to the various reviewer comments, and those generated from CCGA's discussions. They made appropriate adjustments to the curriculum in response to the review comments and revised the curriculum to meet the stated objectives of the program. The proposers believe that teaching an additional one course per year, on an overload basis, will not have significant negative effects on faculty research and teaching within state-supported programs.

As you know, CCGA's approval is usually the last stop of the Academic Senate side of the systemwide review and approval process except when the new degree title must be approved by the President, under delegated authority from the Board of Regents. According to the Academic Senate Bylaws, the Assembly of the Academic Senate (or the Academic Council if the Assembly is not meeting within 60 days of CCGA's approval) must approve new degree titles. Given its status as a new graduate program title on the Los Angeles campus, CCGA submits its approval of the UCLA Master of Applied Statistics (MAS) degree program for formal approval by the Assembly of the Academic Senate. For your information, I have included CCGA's final report as an enclosure. If you have any questions, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Jutta Heckhausen".

Jutta Heckhausen, Ph.D.

Chair, CCGA

cc: Dan Hare, Academic Council Vice Chair  
CCGA Members  
Hilary Baxter Academic Senate Executive Director  
Kimberly Peterson, Academic Planning Analysis Manager  
Chris Procello, Academic Planning and Research Analyst  
Linda Mohr, UCLA Senate Executive Director  
Kyle Cunningham, UCLA Senate Analyst

Enclosures (1)

Date: July 17, 2015  
From: John Bolander, Lead Reviewer  
Re: Proposed degree program at UCLA  
Master of Applied Statistics

### **Description of proposed degree program**

The Department of Statistics at UCLA proposes to establish a Master of Applied Statistics degree. This would be a self-supporting degree program that caters primarily to part-time students, preparing them for careers in quantitative analysis, data management and data analysis, and statistics. The Plan I (thesis) option is to be offered within a two-year format. The proposers anticipate the program reaching a steady-state enrollment of about 25 new students per year.

All courses are to be dedicated to the program and taught by regular department faculty. The program features collaboration with industry partners who will share load in advising thesis research projects.

### Relationship to other UCLA programs

The proposed degree program would serve the Department of Statistics in several ways. A fraction of the student enrollment within the department's MS in Statics degree program would transfer to the Master of Applied Statistics degree program. This will allow for the department to offer more focused graduate core courses catering mainly to PhD students and to MS students with interests in theoretical and methodological developments in Statistics; the proposed program will focus on applications and less on theory. Revenues generated by the Master of Applied Statistics program will provide funding for RAships and TAs for graduate students, upgrades to graduate and undergraduate student labs, and the hiring of additional staff or lecturers. Graduate students will have improved access to career placement and advisement staff and services. There are no apparent negative impacts on other programs at UCLA.

### Relationship to other local university programs

The proposed program would be similar to the MA Program in Applied Statistics at UCSB and the Master of Science in Applied Statistics program at California State University, Long Beach. Unlike those programs, however, the proposed program plans for evening classes for part time students and working professionals. UC Berkeley has a two-semester MA program in Applied Statistics that differs from the proposed program, mainly because the UCB program caters to full time students. UC Berkeley also offers a Master of Information and Data Science that targets working professionals. It teaches similar material, but is online and offers a curriculum that places more emphasis on data management.

## Faculty and other resources

The Masters of Applied Statistics program would be housed within the Department of Statistics. The faculty will be responsible for teaching the core and elective courses; the faculty will share thesis advising duties with industry partners. The internal and external review letters comment positively on the strengths of the faculty members and their abilities to deliver this degree program. Whereas some reviewers commented on the heavy additional teaching load of faculty members participating in the degree program, the proposers maintain that the additional teaching duties (on an overload basis) will not negatively impact research productivity and teaching commitments to the undergraduate and PhD programs.

## **Chronology of review process**

From late February to early March, 2015, one external and three internal (UC) reviewers accepted the invitation to review the proposal and were sent copies of the proposal package. The reviewers are:

#1

Prof. Jon Wakefield  
Dept. of Biostatistics/Dept. of Statistics  
University of Washington  
Seattle, WA 98195-4322  
jonno@uw.edu

#2

Prof. Mike Ludkovski  
Department of Statistics and Applied Probability  
University of California, Santa Barbara  
Santa Barbara, CA 93106-3110  
ludkovski@pstat.ucsb.edu

#3

Prof. Ian Abramson  
Department of Mathematics  
University of California, San Diego  
La Jolla, CA 92093-0112  
abramson@ucsd.edu

#4

Prof. Jie Peng  
Department of Statistics  
University of California, Davis  
Davis, CA 95616  
jiejeng@ucdavis.edu

On February 27, 2015, the lead reviewer sent the lead proposer (Rick Schoenberg) a letter of introduction, along with a request to consider changing the degree title from *MS in Applied Statistics* to *Master of Applied Statistics*.

On March 24, 2015, the lead proposer communicated that the change in degree title, to *Master of Applied Statistics*, had been approved by their Graduate Council and would be considered at the next Legislative Assembly for divisional approval.

By April 7, 2015, all internal and external reviewers had provided their reviews of the proposal. These reviews were discussed at the April 8 meeting of CCGA. Redacted versions of the review letters, and a summary of CCGA comments, were sent to the proposers on May 11.

On June 13, 2015, the lead proposer provided a revised proposal, along with an explanation of how the review comments had been addressed within the revised proposal. However, the proposers overlooked some of the review comments. This fact was reported to them on the same day, June 13.

On June 16, 2015, the lead proposer provided an updated version of the revised proposal that considered the full set of review comments.

The latest version of the proposal was discussed at the July 1, 2015, meeting of the CCGA. The CCGA members agreed that the revised proposal satisfies CCGA's criteria for this type of graduate degree program. By unanimous vote of eligible members in attendance, CCGA decided to approve the proposal.

### **Adequacy of proposed program**

Adequacy of the proposed program is assessed with respect to CCGA's review criteria.

### Quality and academic rigor of the program

The external reviewers comment favorably on the quality of the proposed Master of Applied Statistics program. The program will have its own, exclusive set of courses that emphasize applied topics (in comparison to what will be offered within the department's the MS and PhD programs, which will be more theoretical.)

### Adequacy of the size and expertise of the faculty

The external reviewers agree that the Statistics faculty members are well qualified in the core areas of the proposed program. All classes are to be taught on an overload basis by participating department faculty: nine ladder ranked faculty, five lecturers, one adjunct, and one lecturer with security of employment. The sizeable advising load placed on some of these faculty members is partially offset by planned collaborations with industry partners. Indeed, industry partner participation in thesis research advising is a key feature of the program.

### Adequacy of the facilities and budgets

The program budget indicates a potential for achieving self-supporting status after one year of operation. The planned charge of \$22,000 per year is comparable with that of similar competing programs. As an outcome of review process, the charges to program participants now cover access to campus library resources.

### Applicant pool and placement prospects for program graduates

The current MS in Statistics program at UCLA is attracting about 300 or more applicants per year, of which only about 10% are accepted into the program. There are reasons to believe the proposed Master of Applied Statistics program will also be in high demand. The proposal includes material that indicates good placement prospects for program graduates. The collaborations with industry partners on these advising will further facilitate placement of program graduates.

### **Responses of the proposers to potential concerns**

The proposers have responded well to the various reviewer comments, and those generated from CCGA's discussions. Many of the comments have been addressed through additional explanation and detail within the revised proposal. This section summarizes substantial changes that have been made and some points where the proposers held their ground.

1. In response the comments of Reviewer #4, Applied Multivariate Analysis has been made a required core course (in place of Applied Experimental Design, which now becomes an elective.)
2. The MAS students are to be given the same library privileges as other students (i.e., those in state-supported programs). This is stated in Attachment K, Budget Narrative.
3. More than one reviewer commented on the large effort needed to guide students in the thesis requirement. CCGA also recommended that the comprehensive exam option be allowed. However, the proposers maintain that the thesis requirement is not only better pedagogically, but it is also easier to achieve than the comprehensive exam option. They further maintain that all faculty members interested in the MAS program are committed to guiding one or two students through their thesis requirements each year.
4. At least one reviewer and CCGA commented on the heavy teaching load, which comes to one additional course per year on an overload basis (for each participating faculty member on the average.) The proposers maintain this will not be a problem and that no changes or plans need to be made on this point.
5. The proposal extends the involvement of a student affairs officer from 50% to 75% appointment. At least one reviewer suggested a full (100%) appointment. Furthermore, the budget now includes some support for Readers.

## **Summary**

There is a strong market demand for the proposed Master of Applied Statistics degree. The program would attract high-quality students. The proposers made appropriate adjustments to the curriculum in response to the review comments. The revised curriculum meets the stated objectives of the program.

The proposers believe that teaching an additional one course per year, on an overload basis, will not have significant negative effects on faculty research and teaching within state-supported programs.

The program would rely on a long-standing practice of advising many MS degree students in completing the thesis requirement. The proposers do not see any reason why this cannot continue as part of the proposed (self-supporting) Master of Applied Statistics program. They maintain that the thesis option is both pedagogically better and less effort than the comprehensive exam option.

## **Recommendation of CCGA**

CCGA decided to approve the proposal. This decision is based on the unanimous vote of eligible members in attendance at the CCGA meeting on July 1, 2015.

## **Documents supporting this final report (posted to the CCGA web resource, SharePoint)**

### *1. UCLA Master of Applied Stats - ReviewerComments.pdf*

This document includes the letters of the external and internal (UC) reviewers with the information identifying the reviewers redacted.

### *2. 6-20-15 ResponseToCCGA.pdf*

Proposers' response to review comments.

### *3. 6-20-15 MAS Proposal.pdf*

The final version of the proposal.