December 22, 2014

STEVEN ROSS Assistant Dean Jacobs School of Engineering 0403

Subject: Self-Supporting Graduate Programs – Jacob School of Engineering Audit & Management Advisory Services Project 2015-36

The final audit report for Self-Support Graduate Programs, Audit Report 2015-36, is attached. We would like to thank all members of the department for their cooperation and assistance during the audit.

The findings included in this report will be added to our follow-up system. We will contact your staff at the appropriate time to evaluate the status of the corrective actions. At that time, we may need to perform additional audit procedures to validate that actions have been taken prior to closing the audit findings.

UC wide policy requires that all draft audit reports, both printed (copied on tan paper for ease of identification) and electronic, be destroyed after the final report is issued. Because draft reports can contain sensitive information, please either return these documents to AMAS personnel or destroy them. We also request that draft reports not be photocopied or otherwise redistributed.

David Meier Director Audit & Management Advisory Services

Attachment

cc: R. Barile

K. Barrett

J. Bruner

A. DiProfio

F. Kurpanek

K. Le

S. Lepe

D. McGraw

A. Pisano

D. Rico

S. Subramani

S. Vacca



AUDIT & MANAGEMENT ADVISORY SERVICES

Self-Supporting Graduate Programs Jacob School of Engineering

December 2014

Performed By:

Nai Hwang, Auditor Greg Buchanan, Manager

Approved By:

David Meier, Director

Project Number: 2015-36

Table of Contents

I.	Background]
II.	Audit Objective, Scope, and Procedures	
III.	Conclusion	
IV.	Observations and Management Corrective Actions	(
	A. Program Revenue and Expenditures	
ATTA	CHMENT A – Master of Advanced Study Program Major Roles and Responsibilities	
ATTA	CHMENT B – Master of Advanced Study Program Payment Processes	

I. Background

Audit & Management Advisory Services (AMAS) has completed a review of Self-Supporting Graduate Programs in the Jacob School of Engineering (JSOE) as a supplemental audit to the approved audit plan for Fiscal Year 2014-15. This report summarizes the results of our review.

The University of California operates approximately 60 self-supporting graduate degree programs (SSGDP), ten of which were offered and operated at UCSD in FY 2014/15. These programs are intended to provide alternative pathways for academically qualified adults to further their education, upgrade their skills, and obtain professional degrees. As required by UC policy, SSGDPs are expected to become fully self-sufficient within three years of inception, meaning that SSGDP student tuition and fees should be sufficient to cover all direct and indirect costs associated with the program. Any resulting program deficits must be covered by the campus using non-State funds, excluding tuition or fees revenue generated by other programs. Any excess revenue generated from SSGDPs is available to support the University's core academic mission.

For Fiscal Year 2014-15, JSOE operated four SSGDPs, all of which were offered as Master of Advanced Study (MAS) programs focusing on emerging interdisciplinary fields critical to industry's competitive future. These programs were intended for early-and mid-career design engineers who are on a technical leadership track within their companies, or who were interested in learning the specific program designed areas. Each MAS program is co-sponsored by two UCSD departments. Most of the courses are presented on the weekends. The MAS program costs include program instruction, books, course materials, parking, food, and campus required fees. An overview of the JSOE MAS programs and sponsoring departments is as follows:

MAS Program	Sponsoring Departments	Initially Offered	Required No. of Program Units / year
Architecture-based Enterprise Systems Engineering	Computer Science & Engineering / Mechanical & Aerospace Engineering	FY2010/11	42 / 1 year
Medical Devises Engineering	Mechanical & Aerospace Engineering / Bioengineering	FY2011/12	36 / 2 years
Wireless Embedded Systems	Electrical & Computer Engineering / Computer Science & Engineering	FY2011/12	36 / 2 years
Data Sciences & Engineering	Computer Science & Engineering / San Diego Supercomputer Center	FY2014/15	38 / 2 years

Management and administration of the JSOE MAS programs is shared between the Dean's Office Executive Education unit, the Business unit, and co-sponsoring

departments. Attachment A provides a summary of key roles and responsibilities that each of these units provide for management and administration of JSOE MAS programs. MAS program enrollment and financial activity for Fiscal Years 2010-11 through 2013-14 were as follows:

MAS Program ¹	Average Students Enrolled ²	Program Revenues²	Program Expenditures ²	Program Fund Surplus / Loss Balances		
Architecture-base	Architecture-based Enterprise Systems Engineering					
FY2010/11 ³	12	\$308,100	\$360,639	(\$52,539)		
FY2011/12 ³	56⁴	\$1,062,390	\$629,568	\$432,822		
FY2012/13 ³	29	\$757,430	\$631,924	\$125,506		
FY2013/14 ⁵	35	\$1,104,843	\$683,026	\$421,817		
Medical Devises Engineering						
FY2011/12	6	\$93,000	\$106,194	(\$13,194)		
FY2012/13	16	\$249,225	\$218,247	\$30,978		
FY2013/14 ⁵	30	\$458,700	\$406,352	\$52,348		
Wireless Embedded Systems						
FY2011/12	20	\$241,800	\$177,976	\$63,824		
FY2012/13	48	\$758,616	\$541,632	\$216,984		
FY2013/14 ⁵	50	\$752,400	\$631,959	\$120,441		

II. Audit Objective, Scope, and Procedures

The objective of our review was to evaluate JSOE practices for the management of revenue generating graduate programs. In order to achieve our objectives we completed the following:

- Interviewed the JSOE Executive Assistant Dean, Business Officer, Executive Education Program Director, and the Management Service Officers in each of the JSOE departments co-sponsoring the MAS programs;
- Reviewed the Cost Analysis templates that were included as part of the MAS Self-Supporting Program Fee Proposals for the Fiscal Years 2010-11 through 2013-14;
- Evaluated the MAS program major roles and responsibilities (Attachment A);
- Examined the JSOE reconciliation between financial activity posted to the MAS program's Integrated Financial Information System (IFIS) fund and the Cost Analysis

³ MAS program was managed by the UCSD Extension during this FY.

¹ MAS - Data Sciences & Engineering Program started in FY 2014/15 and is not included in this table.

² Source: Annual Cost Analysis Reports submitted to UCOP.

⁴ Of the average students enrolled, 27 were transfers from a UCSD Extension certification program. The remaining 29 students were direct program enrollments.

⁵ Source: Program fund balances as reported in FinancialLink.

templates for Fiscal Year 2012-13 for the three MAS programs that were active at that time;

- Interviewed UCSD Extension staff in regards to program oversight for the MAS Architecture-based Enterprise Systems Engineering program during Fiscal Year 2010-11 and Fiscal Year 2012-13;
- Evaluated MAS program revenue collection and fund allocation processes (Attachment B); and
- Reviewed the proposed SSGDP policy revision and program oversight with the Campus Budget Office Assistant Budget Director.

Because the Architecture-based Enterprise Systems Engineering MAS program was managed by UCSD Extension for the first three years (Fiscal Year 2010-11 – Fiscal Year 2012-13), our review of that program was limited to reconciling the Fiscal Year 2012-13 Cost Analysis Report to the associated IFIS fund.

III. Conclusion

We concluded that the JSOE practices for the management of revenue generating graduate programs were generally adequate to ensure that the programs were fully self-supporting. However, we did identify opportunities for JSOE to improve MAS program oversight and accounting practices to ensure greater accountability for program revenues and expenditures. This observation is discussed in further detail in the balance of this report.

IV. Observations and Management Corrective Actions

A. Program Revenue and Expenditures

MAS program oversight and accounting practices could be improved to ensure greater accountability for program revenues and expenditures.

The UC Policy on Self–Supporting Graduate Degree Programs, dated September 2011, sets forth requirements designed to facilitate the establishment of self-supporting programs while ensuring that State funding sources are not used to support these programs. The following summarizes some of the requirements set forth by this policy:

- 1. Self-supporting programs must be self-sufficient within three years of inception;
- 2. State-supported and self-supporting programs separately account for their use of resources; and
- 3. Any excess revenue generated from the self-supporting programs is available to support the University's core academic mission.

To demonstrate that the program tuition and fees are sufficient to cover direct and indirect expenses related to the program, the UC Office of the President (UCOP) requires that each self- supporting program submit a Cost Analysis Report to the Budget and Capital Resources Office as part of annual program unit fee proposal submission.

Based our reconciliation between Cost Analysis reports submitted to UCOP and the IFIS funds used to account for MAS program financial activity, we identified opportunities for JSOE to improve MAS program oversight and accounting practices to ensure greater accountability for program revenues and expenditures.

Program Revenue

As illustrated in the Attachment A, the Dean's Office Executive Education unit promotes MAS programs, works with sponsor companies for developing program payment plans, prepares billing, and collects payments from sponsor companies. These company sponsorship payments are forwarded to the Dean's Office Business Unit for deposit and allocation to student accounts on a quarterly basis. Executive Education and the Business Unit each prepare their own worksheet to keep track of payments received and funds allocated. However, the worksheet that Executive Education uses to track payments received was never reconciled to the Business Unit fund allocations to ensure all program fees were billed, collected and allocated to the appropriate student accounts. A reconciliation between these records would help to ensure that program fees are properly collected and allocated to the appropriate student accounts.

We also noted that Fiscal Year 2012-13 Medical Device Engineering (MDE) program revenues reported on the Fiscal Year 2013-14 Cost Analysis Report were approximately \$11 thousand less than the program revenues recorded in IFIS. JSOE reported MDE program revenues on the Cost Analysis Report by taking the total number of academic units that MDE students enrolled in for that year, and multiplying it by the per unit registration fee. Due to timing issues attributed to partial enrollment or course cancellations, revenue was underreported on the Cost Analysis Report for that Fiscal Year.

Management Corrective Actions:

The Dean's Office will:

1. Regularly reconcile payments received from students and sponsors to allocations made to student accounts.

2. Provide guidance to departments for how to correctly and accurately report program revenue on the annual Cost Analysis Report submitted to UCOP.

Program Expenditures

Even though the JSOE MAS programs resulted in financial surpluses over the first few years of operation, our review identified some opportunities for JSOE to improve their accounting practices for recording program expenditures. The areas of potential improvement are summarized in the following table:

Current Practice	Best Practice
Each MAS program had their own methodology for allocating and reporting faculty salary and benefit costs.	Faculty salary and benefits for the MAS program courses should be properly reported on the Cost Analysis as "Faculty Costs" and "Faculty and Staff Benefits," respectively. Further, a consistent methodology should be developed for allocating faculty salary benefit costs to MAS program IFIS funds.
Fellowship award expenses were recorded as Cash Receipts – Expenditure Credit or a reduction of the MAS program fees.	Fellowship award should be charged to account 637593 - GRADUATE STDT FEE AWARD EXPENSES.

Management Corrective Actions:

In order to strengthen the accounting practices for the MAS programs, the Dean's Office will:

- 1. Develop an allocation methodology that can be used by all MAS programs to consistently calculate and report on faculty salary and benefits related to the MAS program courses.
- 2. Record fellowship charges to expenditure account 637593, and report these charges on the annual Cost Analysis Report accordingly.

Self-Supporting Graduate Program – Jacob School of Engineering Audit & Management Advisory Service Project 2015-36 Master of Advanced Study Program Major Roles & Responsibilities

Program	Dean's Office	Dean's Office	Department
Processes	Business Unit	Executive Education	(Program Director, Business Office)
Initiating a SSP	Reviews proposals; Submits proposals for approval.	Reviews and works with departments to develop budget and general operation.	Prepares SSP program proposal; Works with Dean's Office to develop budget and general operation.
Academic		 Manages MAS program application processes; Manages MAS Fellowship award processes; Develops and executes general procedures to support Capstone projects; Performs student feedback process quarterly and provides feedback to faculty and TAs; Performs annual academic MAS programs review for program improvement. 	 Academic Assigns course instructors and teaching assistants; Reviews applications and select students; Reviews and determines Fellowship awards; Review/approve required equipment, lab, and/or academic supplies Review student feedback.
General Operation		 Performs marketing for MAS programs and works with potential companies; Develops payment options with sponsor companies and students for program charges and payment plans; Prepares/acquires program materials and equipment approved by the departments; Organizes program meetings, parking permits, food, and other supplies; Prepares program calendar, quarterly courses, and lists of enrolled students/Fellowship award; Prepares a worksheet for payment received for each MAS program and forwards payments to the Business Unit; Develops and maintains internal web site for MAS programs and share with departments. 	

Self-Supporting Graduate Program – Jacob School of Engineering Audit & Management Advisory Service Project 2015-36 Master of Advanced Study Program Major Roles & Responsibilities

Dean's Office	Dean's Office	Department
Business	Executive Education	(Program Director, Business Office)
Determines faculty costs will be onload or offload.	 Prepares billing invoices for option 2 students (with sponsorship and/or installment payment cases); 	Works with other department and Dean's office for academic budget and associated other costs;
 Processes credit card payments; Manages company paid checks; Allocates program fees and Fellowship awards to student accounts quarterly; Reconciles payment received and allocated; (a) Reviews annual Cost 	 Prepares a worksheet for payment received for each MAS program and forward payments to the Dean's Office Business Unit; Works with Business Unit staff to reconcile payment received and allocations; (a) Provides a list of Fellowship award and distribution summary to the Business unit and departments. 	 Reviews faculty costs and associated staff costs; Reviews program revenues and expenditures; Prepares annual Cost Analysis Report.
<u>.</u>	Determines faculty costs will be onload or offload. Processes credit card payments; Manages company paid checks; Allocates program fees and Fellowship awards to student accounts quarterly; Reconciles payment received and allocated; (a)	Determines faculty costs will be onload or offload. Processes credit card payments; Manages company paid checks; Allocates program fees and Fellowship awards to student accounts quarterly; Reconciles payment received and allocated; (a) Reviews annual Cost 1. Prepares billing invoices for option 2 students (with sponsorship and/or installment payment cases); 2. Prepares a worksheet for payment received for each MAS program and forward payments to the Dean's Office Business Unit; 3. Works with Business Unit staff to reconcile payment received and allocations; (a) 4. Provides a list of Fellowship award and distribution summary to the Business unit and departments.

(a) No reconciliation for the payment received and fund allocation to the student accounts was performed for FY 2012/13.

Self-Supporting Graduate Program – Jacob School of Engineering Audit & Management Advisory Service Project 2015-36 Master of Advanced Study Program Payment Processes

