



## Office of Internal Audit

**Audit of the College of  
Engineering & Computing**

**Report No. 18/19-03**

**November 6, 2018**



FLORIDA  
INTERNATIONAL  
UNIVERSITY

OFFICE OF INTERNAL AUDIT

## MEMORANDUM

**DATE:** November 6, 2018

**TO:** John Volakis, Dean, College of Engineering and Computing

**FROM:** Trevor L. Williams, Chief Audit Executive

A handwritten signature in blue ink that reads "Trevor L. Williams".

**SUBJECT: Audit of the College of Engineering and Computing**

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We have completed our audit of the College of Engineering and Computing ("College"). The audit included the College's financial transactions for the period July 1, 2016, through December 31, 2017, and an assessment of the College's current practices through July 2018. The objectives of the audit were to determine if the established controls and procedures relating to revenues, payroll administration, procurement of goods and services, travel, and property accounting are: (1) adequate and effective; (2) being adhered to; and (3) in accordance with University policies and procedures, and applicable laws, rules and regulations.

The College total enrollment for the academic year 2017-18 totaled 5,592, which included 4,754 undergraduate and 838 graduate students. For the fiscal year 2016-17, the College's operating revenues totaled approximately \$55 million while operating expenditures totaled approximately \$54 million. The major operating revenues and expenditures consisted of the Educational and General (E&G), Contract and Grant, and Auxiliary funds.

Our audit concluded that the College's financial controls were generally adequate and in accordance with University policies and procedures. Nevertheless, we found opportunities for improvement in internal controls, particularly pertaining to: (1) the payroll and extra compensation process; (2) the expenditure process related to student fees, auxiliary programs, parking permits, and credit cards; (3) financial management; and (4) asset management. The audit resulted in 15 recommendations, which management agreed to implement.

We would like to take this opportunity to express our appreciation for the cooperation and courtesies extended to us during this audit.

### Attachment

C: FIU Board of Trustees  
Mark B. Rosenberg, University President  
Kenneth G. Furton, Provost and Chief Operating Officer  
Kenneth A. Jessell, Chief Financial Officer and Senior Vice President  
Javier I. Marques, Chief of Staff, Office of the President

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## **OBJECTIVES, SCOPE AND METHODOLOGY**

Pursuant to our approved annual plan, we have completed an audit of the College of Engineering and Computing (“College”). The objectives of our audit were to determine whether financial controls and procedures relating to revenues, payroll administration, procurement of goods and services, travel, and property management were adequate and effective, being adhered to, and in accordance with University policies and procedures, and applicable laws, rules and regulations.

Our audit included the College’s financial transactions for the period July 1, 2016, through December 31, 2017, and an assessment of the College’s current practices through July 2018. The audit was conducted in conformance with *the International Standards for the Professional Practice of Internal Auditing*, and included test of the accounting records and such other auditing procedures, as we considered necessary under the circumstances. Audit fieldwork was conducted from February to July 2018.

During the audit, we:

- Reviewed University policies and procedures, and applicable Florida Statutes and Board of Governors (BOG) regulations;
- Observed current practices;
- Interviewed responsible personnel; and
- Tested selected transactions.

Sample sizes and transactions selected for testing were determined on a judgmental basis.

As part of our audit, we reviewed our internal audit reports of Contracts and Grants Administration (Report No.11/12-03, dated October 10, 2011) and School of Computing and Information Sciences (Report No. 13/14-15, dated June 26, 2014). We then identified any applicable recommendations from these reports related to the scope and objectives of this audit that required follow-up. The test results for these prior recommendations are noted in the Implementation of Prior Audit Recommendations section of this report.

## **BACKGROUND**

The College of Engineering and Computing at Florida International University (FIU or “University”) offers Bachelor’s, Master’s and Doctoral programs in a wide number of disciplines. The degree programs include Biomedical Engineering, Civil Engineering, Computer Engineering, Computer Science, Construction Management, Cybersecurity, Data Science, Electrical Engineering, Engineering Management, Environmental Engineering, Information Technology, Internet of Things, Logistics Engineering, Material Science and Engineering, Mechanical Engineering, Professional Degree Programs and Telecommunications and Networking.

The College’s enrollment (student headcount) for the academic year 2017-18 was 5,592, which include 4,754 undergraduate and 838 graduate/post graduate students.

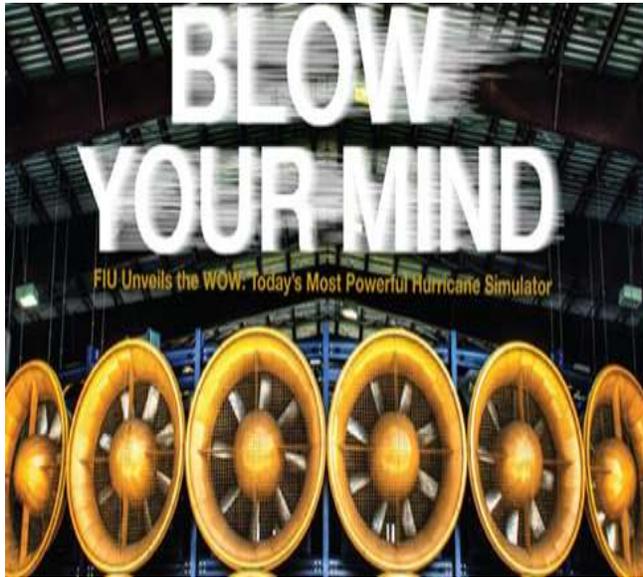
The College is composed of four departments and three schools, namely:

- Department of Biomedical Engineering;
- Department of Civil and Environmental Engineering;
- Department of Electrical and Computer Engineering;
- Department of Mechanical and Materials Engineering;
- School of Computing and Information Sciences;
- Moss School of Construction, Infrastructure and Sustainability; and
- School of Universal Computing, Construction and Engineering Education (newly established in fall 2017).

The main facilities are located at the FIU Engineering Center situated on West Flagler Street, less than two miles from the Modesto A. Maidique Campus (MMC). The School of Computing and Information Sciences building is located at the MMC.

Research is an integral part of the College’s mission and its success. For example, working with Florida Power & Light (FPL), the solar research facility was created at the FIU Engineering Center. The solar research facility comprises more than 4,400 solar panels on canopy-like structures that provide clean electricity to FPL’s grid and shade for about 400 parking spaces. The facility is used by Engineering faculty and students from the Energy, Power & Sustainability (EPS) program at FIU to conduct important research that will help FPL advance solar energy in the state.

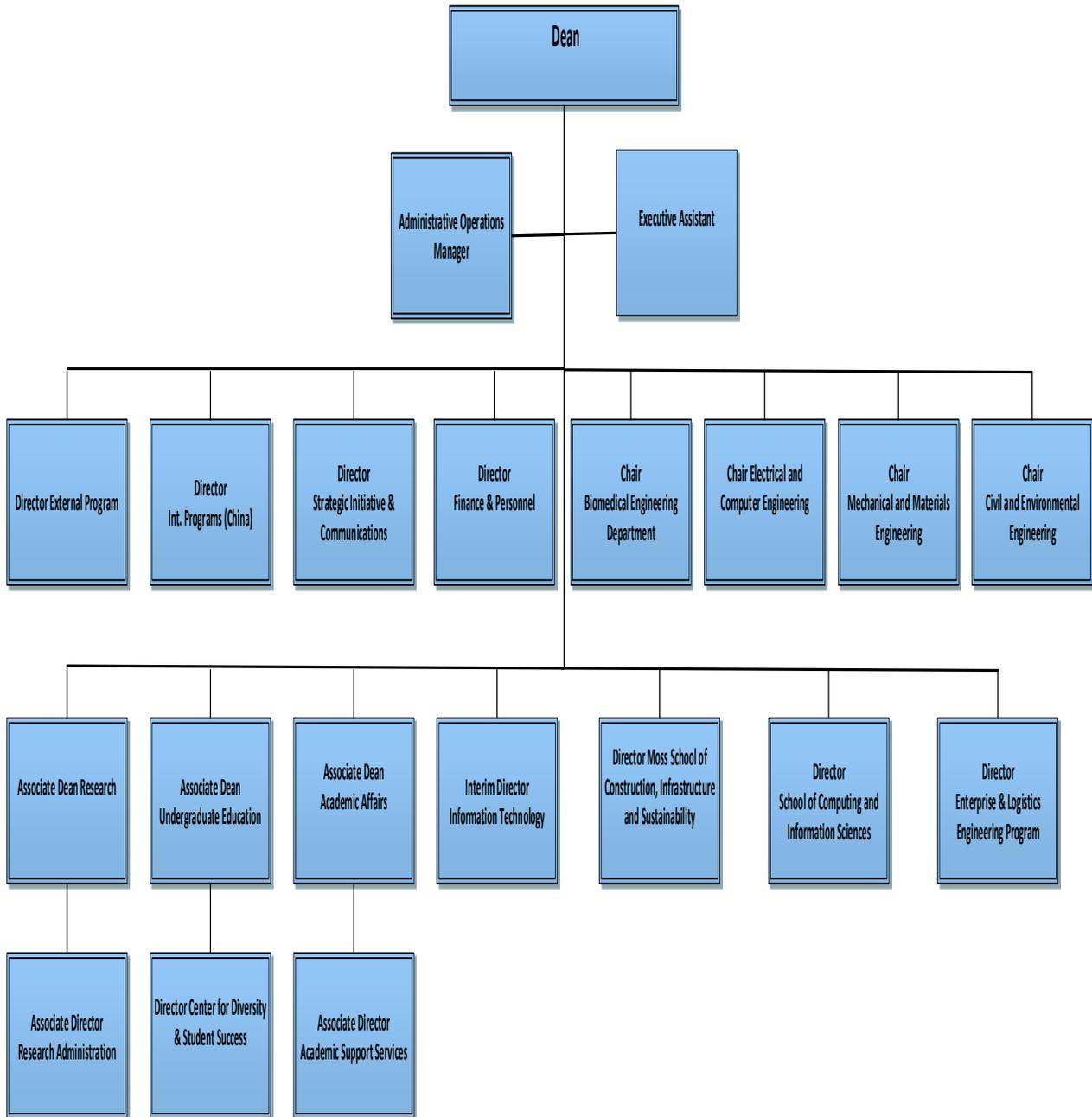




The full-scale Wall of Wind (WOW) facility, a signature achievement of the College, is located at the FIU Engineering Center and was constructed by the wind engineering team at the College and the International Hurricane Research Center. Funded by federal and State programs, as well as private industry, WOW can test the impact of hurricanes on various structures such as manufactured housing. The facility enables testing of entire structures at full-scale, leading to performance-based design for hurricanes through direct correlation of wind speed with performance and damage levels.

## Personnel

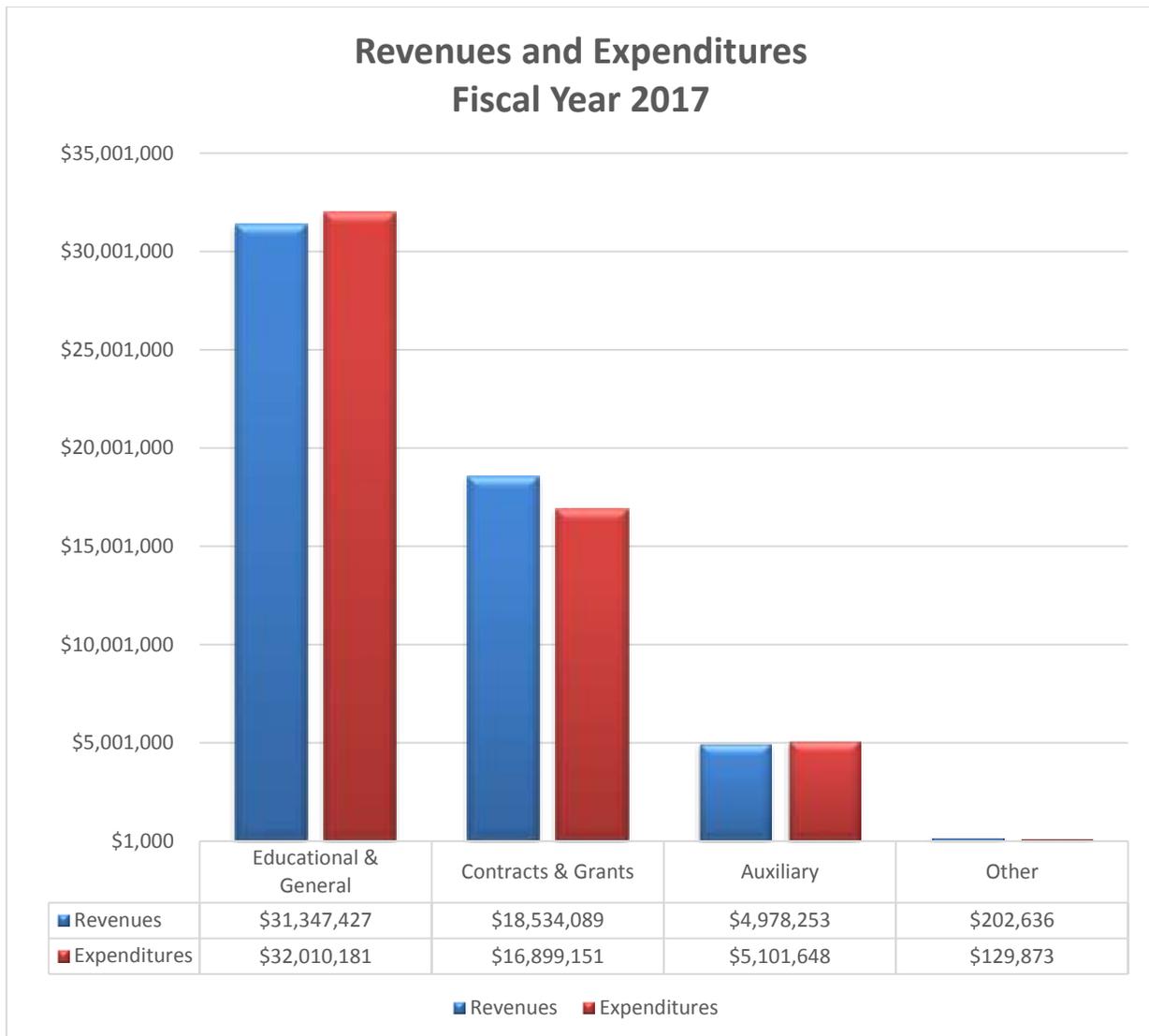
In July 2017, the University appointed a new Dean to the College. As of January 2018, the College had 181 faculty members, 10 faculty administrators, and 101 staff members. The College's high level organizational chart is shown below.



## Financial Information

During the fiscal year 2016-17, the College's operating revenues totaled approximately \$55 million while operating expenses totaled approximately \$54 million. The major operating revenues and expenditures were comprised of the Educational & General, Contracts and Grants, and Auxiliary funds.

The following chart provides the College's total revenues and expenditures by fund.



Note 1: Other represents monies from the FIU Foundation and donors.

Note 2: The chart is based on the fiscal year instead of the audit period and is presented for information purposes.

For the fiscal year 2016-17, the College expended approximately 54 million, which included \$32 million from the Educational & General (E&G) fund, \$17 million from the Contracts & Grants (C&G) fund, and \$5 million from the Auxiliary fund. The major expenditures were related to compensation and employee benefits, representing 79% of the total expenditures.

The College's total expenditures by major category are noted in the following table:

<b>Expenditures by Category Fiscal Year 2016-2017</b>				
<b>Category</b>	<b>E&amp;G</b>	<b>C&amp;G</b>	<b>Auxiliary</b>	<b>Total</b>
<b>Salaries and Benefits</b>				
Faculty	\$ 15,590,499	\$ 3,301,703	\$ 1,347,925	\$ 20,240,127
Administrative	2,815,200	902,446	528,559	4,246,205
Staff	565,205	210,540	60,508	836,253
Adjunct Faculty & Graduate Assistants	3,398,397	2,734,268	201,968	6,334,633
Temporary Employees	976,249	1,451,683	219,245	2,647,177
Fringe Benefits	6,432,911	1,684,888	471,450	8,589,249
<b>Total Salaries and Benefits</b>	<b>\$ 29,778,461</b>	<b>\$ 10,285,528</b>	<b>\$ 2,829,655</b>	<b>\$ 42,893,644</b>
<b>Other Operating Expenditures:</b>				
Professional Services	\$ 215,036	\$ 1,803,413	\$ 729,648	\$ 2,748,097
Material & Supplies	745,467	1,128,380	718,271	2,592,118
Capital Outlay	420,663	1,265,543	64,543	1,750,749
Travel	405,085	580,962	89,913	1,075,960
Scholarships	57,294	1,455,297	190,350	1,702,941
Shared Fees	-	2,213	278,505	280,718
Telephone Equipment	184,199	13,879	19,681	217,759
Miscellaneous	203,977	363,936	181,082	748,995
<b>Total Other Operating Expenditures</b>	<b>\$ 2,231,721</b>	<b>\$ 6,613,623</b>	<b>\$ 2,271,993</b>	<b>\$ 11,117,337</b>
<b>Total Expenditures</b>	<b>\$ 32,010,182</b>	<b>\$ 16,899,151</b>	<b>\$ 5,101,648</b>	<b>\$ 54,010,981</b>

(Note: Total expenditures do not include \$129,873 as they came from the Scholarship Fund and the Foundation Fund.)

## FINDINGS AND RECOMMENDATIONS

Overall, our audit concluded that the College’s financial controls were generally adequate and in accordance with University policies and procedures. Nevertheless, opportunities for improvement exist in the following areas: (1) the payroll and extra compensation process; (2) the expense process related to student fees, auxiliary programs, parking permits, and credit cards; (3) financial management; and (4) asset management.

Our overall evaluation of internal controls is summarized in the table below.

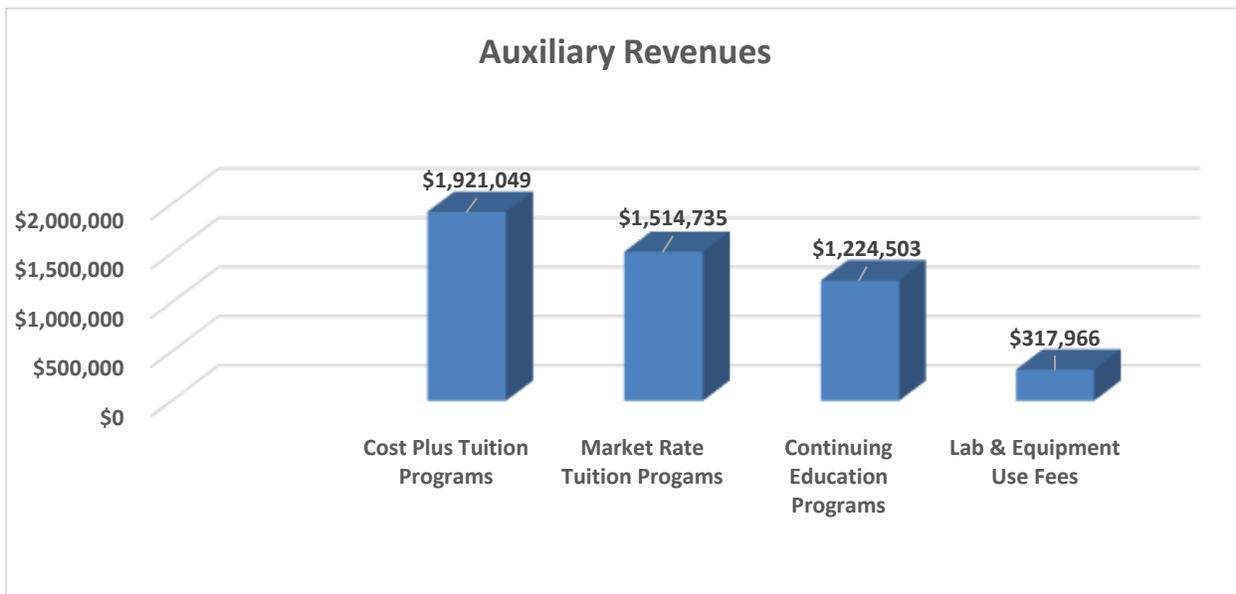
<b>INTERNAL CONTROLS RATING</b>			
<b>CRITERIA</b>	<b>SATISFACTORY</b>	<b>FAIR</b>	<b>INADEQUATE</b>
Process Controls		X	
Policy & Procedures Compliance		X	
Effect		X	
Information Risk		X	
External Risk		X	
<b>INTERNAL CONTROLS LEGEND</b>			
<b>CRITERIA</b>	<b>SATISFACTORY</b>	<b>FAIR</b>	<b>INADEQUATE</b>
Process Controls	Effective	Opportunities exist to improve effectiveness	Do not effectively safeguard assets
Policy & Procedures Compliance	Non-compliance issues are minor	Non-compliance Issues may be systemic	Non-compliance issues are pervasive, significant, or have severe consequences
Effect	Not likely to impact operations or program outcomes	Impact on outcomes contained	Negative impact on outcomes
Information Risk	Information systems are reliable	Data systems are mostly accurate but can be improved	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions
External Risk	None or low	Medium	High

The areas tested during the audit and our observations and conclusions are detailed below.

**1. Controls Over Revenues**

For the fiscal year 2016-17, the College’s auxiliary revenues totaled approximately \$5 million, which were generated from the following programs: (1) Cost Plus Tuition, (2) Market Rate Tuition, (3) Continuing Education, and (4) Lab & Equipment Use Fees.

The table below presents the total revenues from each program.



During the audit, we reviewed the supporting documents for 15 revenue transactions, totaling \$1,027,966, and determined that they were appropriate, properly assessed and collected, timely deposited, and recorded to the appropriate activity number and account. No exceptions were noted in this area. The College has done a commendable job in this area.

**Recommendation**

The College of Engineering & Computing has:	
1.1	No recommendations in this area.

## **2. Payroll and Extra Compensation Controls**

During the fiscal year 2016-17, the last completed fiscal year during our audit period, salaries and fringe benefits were approximately \$42.9 million, representing 79% of the College's total expenditures. Our review of payroll expenditures focused on ensuring that payroll and extra compensation are processed and approved in a manner consistent with University policies and guidelines.

### **a) Payroll Approval Process**

The University's payroll guidelines require managers/proxies to have first-hand knowledge of the employee's work and/or leave hours or obtain written confirmation from the employee's supervisor of the hours being reported prior to approving the payroll.

We examined time and attendance records comprising 70,987 transactions during the period July 1, 2016, through March 5, 2018. Our examination disclosed the following:

- An appropriate level supervisor with first-hand knowledge of the employee's work and/or leave hours approved 59,596 transactions (84%).
- Various other conditions that put the University at risk of paying employees for time not worked and not maintaining accurate payroll records because payroll approval occurred without first-hand knowledge of the employee's work and/or leave hours taken, as detailed below:
  - 9,907 transactions (14%) were automatically approved by the University's Payroll Department;
  - 779 transactions were "mass approved" by the College's designated back-up approvers;
  - 684 transactions were automatically self-approved by the system because the employees were the designated proxy approvers on behalf of their respective supervisors; however, there were no supporting documents maintained for leave hours taken;
  - A former employee of the College of Engineering & Computing who transferred to the College of Business approved 18 transactions after the transfer. The employee had the capability to approve the College's payroll for up to two months after the transfer;
  - Two (2) transactions, which consisted of 16 hours, were approved by a Principal Investigator who is the father of the employee. This presents an obvious conflict of interest; and
  - One (1) transaction, which consisted of 6 hours, was approved by a subordinate who was given payroll approval delegation, which allowed her to approve leave hours taken by her direct supervisor.

## **b) Extra Compensation Approval Process**

University Policy No. 1710.110, *Dual Employment and Compensation*, states that, “All employees may be approved for secondary employment which constitutes dual employment provided such employment does not interfere with the regular work of the employee, does not result in any conflict of interest between the two activities, and is determined as being in the best interest of the University. Approval must be requested and granted by Human Resources prior to commencement of the secondary employment.” The University requires the electronic Request for Additional Compensation (eRAC) to be created when an employee who has a full-time job, works in excess of the full-time equivalency in another job within the University. Moreover, the secondary job should not be performed during the employee’s primary job work schedule, unless taking vacation or adjusting work schedule.

We reviewed 283 secondary employment contracts, totaling approximately \$1 million, processed by the College for the period July 1, 2016, through March 31, 2018, and noted the following:

- An application for dual employment was properly executed and approved per University Policy No. 1710.110 for 174 (61%) of the secondary employment contracts tested; however;
- Approvals for 66 contracts (23%) were processed between seven (7) and 109 days after commencement of the secondary employment;
- 43 contracts (15%) were approved two (2) to 297 days after completion of the secondary employment; and
- Employees’ primary job work schedule was not always adequately adjusted to cover the time used while performing their secondary job. Seven of the 11 eRACs for five employees whose secondary job were conducted during their primary job work schedule who elected an adjusted work schedule in lieu of taking vacation resulted in a shortage of time ranging from 8 to 40 hours.

Delays in the extra compensation process and the lack of verification of adjusted primary job work schedule could adversely impact on the College’s budget and expenditures.

## **Recommendations**

The College of Engineering & Computing should:	
2.1	Ensure that managers/proxies have first-hand knowledge of the employee's work and/or leave hours taken and approve payroll in a timely manner.
2.2	Ensure that electronic Request for Additional Compensation (eRAC) is approved prior to the commencement of the secondary employment.
2.3	Ensure that the employee's adjusted working hours are sufficient to compensate for the time taken while performing secondary job during their primary job work schedule.

## **Management Responses/Action Plan:**

2.1 A memorandum will be distributed to all managers and proxies in the College to maintain record of authorization from Supervisors when approving payroll that is delegated to them.

Implementation date: Immediately

2.2 A memorandum will be distributed to all Departments and Schools Chairs/Directors to alert them of the audit findings and to remind them of the importance of submitting additional compensation requests prior to the commencement of a secondary assignment.

Implementation date: Immediately

2.3 The memorandum noted in 2.2, will also emphasize that when a secondary appointment overlaps with regular working hours, an adjusted schedule must be coordinated to provide sufficient adjusted working hours. When an adjusted schedule is not possible, then the employee must report leave for his/her regular employment while performing the secondary employment.

Implementation date: Immediately

### **3. Non-Payroll Expenditures Controls**

We scanned all of the College's activity numbers, which included optional student fees and auxiliary programs, and examined a sample of 189 transactions, totaling \$639,255, related to purchases of goods/services and travel expenses. In addition, we tested 439 credit card transactions, totaling \$208,575.

Except as noted in the following subsections, our audit disclosed that the College's expenditures tested were appropriate, allowable, and in accordance with University policies and procedures, and applicable laws, rules and regulations.

#### **a) Use of Student Fees**

BOG Regulation 7.003(7) allows the University to assess Material and Supply Fees (optional student fees), not to exceed the amount necessary to offset the cost of materials or supply items, which are consumed in the course of the student's instructional activities, excluding the cost of equipment and equipment repairs and maintenance. Also, BOG Regulation 7.003(18)(e) authorizes state universities to assess fees and fines relating to the use, late return, and loss and damage of facilities and equipment.

Accordingly, FIU's Division of Academic Affairs developed Instructional Fees Guidelines, which requires submittal and approval of a Material and Supplies and/or an Equipment Use form(s) prior to fee assessments. Both the Material and Supplies Use and the Equipment Use fee request forms state, "justification must be included on how the material and supply (or equipment) is integral and required to the instruction of the course and how they will be used directly by the students."

During our expenditure testing, we noted that the proceeds from the optional student fees (material and supplies fee or equipment use fee) did not always conform to the BOG Regulations. For example, the College spent student fees, totaling \$27,313, for the following expenses, which were not used for the instruction of the course and directly by the students.

Department	Type of Student Fee	Activity Number	Type of Expenses	Total Expense
Construction Management	Material and Supplies	2123030001	Telephone	\$ 6,205
			Lab renovation	\$ 6,011
			Office renovation	\$ 5,181
Electrical and Computer	Equipment Use	2124030002	Electrical work of utility room 2965	\$ 5,180
Mechanical and Material	Equipment Use	2126030006	Electrical work of utility room 3275	\$ 3,970
	Material and Supplies	2126030002	Screen protector for Program Specialist	\$ 766
Total				\$ 27,313

Additionally, we noted that as of June 30, 2017, five optional student fee programs had a large fund balance, ranging from \$70,894 to \$216,786, although the FIU Instructional Fees Guidelines require student fees to be expended during the term collected. Their fund balance also has grown over the past four years.

The following table provides the five student fee programs' fund balances for fiscal years 2014-2017.

Student Fee Programs Fund Balance as of				
Description	6/30/14	6/30/15	6/30/16	6/30/17
Equipment Use Fees - School of Computer Sciences	\$ 89,063	\$124,920	\$173,886	\$216,786
Material and Supplies Fees - School of Computer Sciences	\$162,040	\$166,201	\$162,016	\$164,217
Equipment Use Fees - Mechanical and Material Engineering Department	\$ 26,260	\$ 42,820	\$ 56,318	\$ 78,447
Equipment Use Fees - Electrical and Computer Engineering Department	\$ 47,459	\$ 68,403	\$ 82,995	\$ 74,001
Material and Supplies Fees - Mechanical and Material Engineering Department	\$ 34,518	\$ 38,629	\$ 52,509	\$ 70,894

We were informed that these student fees were not periodically reviewed although the Instructional Fees Guidelines require a yearly evaluation of the student fees.

An annual evaluation of the student fees along with the related expenses will improve the College's controls related to appropriate use of the fees and maintaining proper fund balances.

#### **b) Use of Auxiliary Program Funds**

BOG Regulation 9.013, *Auxiliary Operations*, states, "Each auxiliary service is an individual entity and shall be accounted for as such... all pertinent institutional revenues and costs shall be assigned to each auxiliary and the consequent financial results of operations determined." Accordingly, the College established each auxiliary service and activity number to account for its revenues and expenses.

During our test of expenditures, we noted that expenses, totaling \$10,828, were not charged to appropriate activity numbers as noted below.

- Promotional items such as monogrammed zipped padfolios and umbrellas costing \$2,602, meals for a faculty meeting costing \$195, and 40% of the cost of an airline ticket to India (\$1,941) for a faculty's research trip were charged to the Online Master of Science in Computer Engineering Program account. It was unclear how these expenses were related to the program.
- Food purchase costing \$844 for faculty retreat, rental space costing \$2,400 for PhD students retreat, and food purchase costing \$914 for a conference on Developing Resilient and Sustainable Engineering were paid from the Dual Degree Program account. However, PhD students were not part of the program, as only undergraduate and master degree programs were offered. In addition, the conference was not part of the program, but the students were encouraged to attend according to management.
- Meals costing \$822 were charged to the Professional Master in Science in Engineering Program account although the purpose for the meals was unrelated to the program. Of this amount, \$744 was for meals provided to students enrolled in the SAP TERP10 Certification Exam Workshop and \$78 was for an advisory board meeting for establishing a new program, Master of Science Logistics Engineering Program.
- Furniture costing \$1,110 for the faculty lounge was paid from the Florida Department of Transportation Construction Training Qualification Program account although the program participants are not using or having access to the lounge.

Without properly matching expenses to related revenues, the financial condition and results of operations give a distorted view of management's decision.

### **c) Parking Permits Purchase**

Several departments in the College purchase virtual parking permits from the FIU Parking, Sustainability & Transportation Department ("Parking") for guests/visitors, including continuing education students and conference attendees. Each department must register their guest vehicle with Parking using its portal. Through the portal, the department simply enters the guest's license plate number, then selects the date and permit type. Parking then generates a smart internal billing to the department at the end of the month.

To determine if parking permits purchased were for official university business, we selected and reviewed 14 parking permit transactions from eight out of 14 smart internal billings, totaling \$3,200. Our review disclosed that eight permits were issued to the vehicles owned by employees of the College and the remaining six permits were issued to unknown individuals because of invalid license plate numbers or a rental car. The effective period for the permits issued ranged from 10 days to one semester. After discussion with management, the College was unable to provide evidence of the business purpose for issuing the permits to the employees and individuals because the College did not maintain any records except for entering information such as the license plate number, the date and permit type through the Parking portal. There were no information such as the guest's name and the purpose of permit purchased.

The purpose for buying permits for College employees was not clear, as all employees are required to register their vehicles and purchase a permit according to University Traffic and Parking Regulation (FIU-1105). The lack of controls over the purchase of parking permits can result in abusive use of parking permits and unnecessary spending of the College's funds.

### **d) Credit Card Purchase**

We tested 439 credit card transactions, totaling \$208,575, and determined that they were related to the operations of the College and in accordance with University policies and procedures, except as noted below.

- Twenty-one transactions, totaling \$11,621, were for food purchased without a list of attendees. The list of participants is required for all food purchases according to the University's Credit Card Solutions Program Manual.
- Two transactions, totaling \$2,460, were for promotional giveaway items such as T-shirts and a sound bar using the E&G fund. The University's Expenditure Guide by Fund prohibits the purchase of promotional items using the E&G fund.

- Four transactions, totaling \$1,426, were for supplies delivered to two employees' residence. The University's Credit Card Solutions Manual prohibits the shipping of items purchased with the credit card to an employee's home address.
- Two transactions, totaling \$448, were for personal items: one for a ticket purchased for a black tie gala; and another for two FIU T-shirts purchased by a professor. The personal items are not allowed according to the University's Expenditure Guide and Credit Card Solutions Manual.
- Two transactions, totaling \$ 151, were for Amazon Prime membership fees. The purchase of Amazon Prime membership is not allowable according to the University's Credit Card Solutions Manual.

In addition, we reviewed the approver/cardholder relationship for 67 credit cards issued to employees at the College. Our review disclosed that two approvers are subordinates of their assigned cardholders, contrary to the University's Credit Card Solutions Manual. However, our examination of the approved credit card transactions for the audit period disclosed that the subordinates did not approve any of the transactions made by their respective supervisors.

#### **e) Investigation of Credit Card Transactions**

Based upon a suspicion of irregularities brought to our attention, we investigated transactions made on a University credit card issued solely to the employee. The questionable purchases made by the employee were identified by the College's Budget Manager, while approving credit card transactions, who immediately notified the Credit Card Solutions Administrator who then informed to the Office of Internal Audit. The Budget Manager's discovery of the questionable purchases indicates that the credit card approval process at the College is generally effective.

Our investigation concluded that the employee used the credit card to make unallowable purchases, totaling \$8,269, in September and October 2017. As a result of our investigation, the College worked with Human Resources and terminated the employee immediately. We commend the Budget Manager for identifying the initial possible fraud and for immediately reporting the incident.

#### **f) Travel Authorizations and Expenses**

We reviewed 93 Travel Authorizations (TAs), totaling \$133,157, to determine if they were authorized prior to travel and for official University business. Our review disclosed that all of them were related to official university business. However, we found that 33 TAs, totaling \$44,626, were approved after travel began or completed. For example, 12 TAs were approved after travel commenced and 21 TAs were approved after the travel completed.

University Travel Expense Policy No. 1110.060 states, “Travelers are not to make commitments to travel or to incur travel expenses without first obtaining the appropriate approval.”

In addition, we found one instance where a first class round-trip ticket from Miami to Orlando costing \$760 was purchased using a University credit card. Our flight search indicated that it would cost between \$231 and \$274 if a coach/economic class ticket was used. According to the University Travel Expense Policy, the University only allows coach/economic class airline travel other than exceptional circumstances due to medically necessary. In order to upgrade to business or first class, a request must be submitted to the University Chief Financial Officer or designee for prior approval.

The Controller’s Office discovered that the first class ticket was purchased without prior approval and forwarded this information to the Chief Financial Officer (CFO), who then immediately contacted the cardholder for clarification. As a result, the College reimbursed the cost of the first class ticket using FIU Foundation fund although it took about one hour from Miami to Orlando. FIU Foundation Procedure No. 1530.035a states, “Business class travel or one upgrade may be reimbursed for the University President, Vice President, and Deans only if the travel time exceeds four hours. If any other employee wishes to fly business class for international travel exceeding four hours, approval is required prior to ticket purchase from Vice President. If business class is available, first class travel is not reimbursable through the Foundation.”

Approving a TA prior to travel improves the College budgetary controls; and closely monitoring travel expenses prevents unnecessary spending of the College’s funds.

**Recommendations**

The College of Engineering & Computing should:	
3.1	Ensure that all expenses from optional student fees collected are only limited to equipment or supplies and materials used directly by the student for their course.
3.2	Annually review optional student fees structure to ensure that the fees are appropriately assessed and expended during the term collected.
3.3	Ensure that each auxiliary operation is charged only for their related costs.
3.4	Implement controls to ensure that parking permits purchased are for official university business.

3.5	Establish proper segregation of duties between the cardholders and the approvers, so that designated approvers are not subordinates of the cardholders.
3.6	Ensure that all funds using University credit cards are spent in accordance with the University's policies and procedures.
3.7	Ensure that all employees obtain Travel Authorization prior to travel and use the most efficient and economical means of travel.

**Management Responses/Action Plan:**

3.1 This information is being communicated verbally with reference to University policy when new department coordinators are hired. However, this audit revealed that our efforts have been insufficient. Thus, the university policy will now be included in the College's internal operations manual to ensure compliance with the audit recommendations.

Implementation date: February 28, 2019

3.2 A memorandum will be drafted and distributed to all Departments and Schools requesting that an annual review of optional fees be conducted. A report of the annual assessment will be sent to the Associate Dean of Undergraduate Studies with copy to the Director of Finance.

Implementation date: Immediately

3.3 As part of the Operations Manual, a section will be included concerning the management of auxiliary programs, specifically a guideline on what type of expenses can be charged depending on the nature of the fees.

Implementation date: February 28, 2019

3.4 Training will be provided to all departments/areas within the College to show everyone where to enter the necessary tracking information in the system including name of guest and purpose of parking permit purchase. At the same time, we strongly request that these fields be required by the system to process the electronic parking permit request.

Implementation date: December 14, 2018

- 3.5 The College will reach out to the Office of Procurement Card to correct the two instances where subordinates had the authority in the system to approve PCard charges for their supervisors even though someone else was the official approver. Changes will be made in those cases to correct the situation.

Implementation date: Immediately

- 3.6 We will be emphasize this issue with written documents and with internal training to be provided to Department Coordinators and Program Assistants to address this and other findings in the audit. Power Point slides for the presentation will be shared with the internal audit team.

Implementation date: December 21, 2018

- 3.7 We will emphasize in a memo the importance of getting travel pre-approvals and the risk of not being paid for trips not pre-approved. Internal training will be also provided to Department Coordinators and Program Assistants to address this and other findings in the audit. Power Point slides for the presentation will be shared with the internal audit team.

Implementation date: December 21, 2018

#### **4. Financial Management**

During the audit, we observed that the College generally had adequate processes in place to monitor its fiscal activities. Notably, the College's Fiscal Planning staff members conduct monthly reviews of each department's revenues and expenditures. In addition, the Director of External Programs performs a financial overview of each continuing education program to evaluate financial performance. However, the deficit operating fund balances noted in three out of eight self-supporting continuing education credit programs managed by the College indicate that opportunity for improvement in managing these three programs' financial operations exists. The noted deficits ranged between \$23,274 and \$122,907, as described below.

- The Professional Masters in Science Engineering Management (PMSEM) program had a deficit fund balance of \$122,907. To ease the deficit, a cash transfer of \$141,858 was made from another program prior to the fiscal year ended June 30, 2017.
- The Online Master in Science in Computer Engineering program had a deficit fund balance of \$28,644, which, according to the Program Coordinator, was due to low enrollment.
- The Professional Master in Science in Information Technology (PMSIT) program had a deficit fund balance of \$23,274. According to management, the program is being phased out due to low enrollment.

BOG Regulation 8.002 (2) requires that college credit courses and programs offered through continuing education shall be self-supporting through tuition and fees. Therefore, the College is required to operate the continuing education, degree-awarding programs by establishing a fee structure geared toward recovering the costs associated with these course offerings.

As reported in the Expenditure Control section of this report, the student fee programs need to be better managed to avoid a large fund balance and spend appropriately. We also found several instances where unrelated costs were charged to the academic auxiliary programs. The Director of External Programs informed us that the department's practice of charging unrelated expenses to the program account makes it difficult to determine the program's actual financial position.

#### **Operating Manual**

According to the University's Auxiliary Enterprises Operating Guidelines, every auxiliary must have written policies and procedures that guide the day-to-day operations of the activity. The College currently does not have any such written guidelines, i.e., an operating manual.

A comprehensive operations manual provides direction and clarification of responsibilities to all employees and helps to assure consistent application of management's expectations. Since many of the unique tasks are assigned to only one employee to perform, a manual would serve as a valuable guide in cases of employee substitution and/or turnover.

A similar finding related to the nonexistence of an operations manual for the administration of grants was reported in our prior audit. Please refer to Recommendation No. 6.2 in the Implementation of Prior Audit Recommendations section of this report for our follow-up and conclusion.

**Recommendations**

The College of Engineering & Computing should:	
4.1	Evaluate its academic auxiliary programs to eliminate negative fund balances and ensure that they are self-supporting.
4.2	Develop, disseminate and periodically update an operations manual.

**Management Response/Action Plan:**

4.1 Notably, faculty and staff support several market-rate and self-supporting programs. Therefore, the College administration is currently reviewing all auxiliary programs to ensure that only well-funded programs are retained. All new self-supporting and market rate programs will continue to go through the approval process required by the Office of Academic Planning and Accountability. We will also schedule a meeting with the Office of Auxiliary and Enterprise Development before new programs are initiated. This Office is responsible for the strategic financial management of non-E&G university resources.

Implementation date: February 28, 2019

4.2 The College of Engineering and Computing will be putting together an operations manual. A section for the College's research administration will be incorporated into this manual.

Implementation date: February 28, 2019

## **5. Asset Management**

The University has various categories of personal, tangible property and policies and procedures for managing them. Two of these categories are “Accountable Property” and “Attractive Property.”

### **Accountable Property**

Accountable property is defined as tangible, non-consumable, non-expendable, movable, personal property with a cost of \$5,000 or more and a normal expected life of one year or more. According to the University’s Asset Management System, as of March 31, 2018, the College had 144 pieces of accountable property with associated cost totaling \$2.9 million.

Our audit found that the College’s accountable property inventory as recorded in the system is up to date. We also confirmed with the Assistant Controller for Asset Management that none of the inventoried accountable property was missing while taking their annual physical inventory in early 2018.

However, during our physical observation, we found that two items—an HP workstation costing \$6,476 and a Dell workstation costing \$6,807—were not tagged and recorded in the Asset Management System (i.e., inventoried). A College staff member incorrectly coded these two items as equipment costing less than \$5,000. Therefore, the Asset Management Department did not inventory the items. We also noted that a flow meter costing \$5,127 was shipped to a company for repairs in July 2017, but remained with the company as of June 30, 2018. According to management, there are insufficient funds to pay for the estimated repair cost of \$1,600.

### **Attractive Property**

The University Property Manual defines attractive property and provides related guidance as follows: “... Attractive property is University property costing less than the threshold amount of \$5,000, but which are particularly vulnerable to theft and misuse. “Attractive” items will vary from department to department, but might include such things as laptops, iPads, or video recorders. Departments should evaluate “attractiveness” in the context of their own environment. Factors they should consider include the security of the property location, the size and portability of the item, and its potential resale value if stolen. These items should be marked as University property and catalogued by the user department. Special property tags are available upon request from Property Control.”

Through our audit, we found that two of the College’s functional units—the School of Computing and Information Sciences and the Department of Electrical and Computer Engineering—complied with the stated guidelines by maintaining their own attractive property list. However, the College’s other four legacy units, namely: 1) Moss School of Construction, Infrastructure and Sustainability; 2) Department of Biomedical Engineering;

3) Department of Civil and Environmental Engineering; and 4) Department of Mechanical and Materials Engineering, did not catalogue and track their attractive property.

The lack of accountability over attractive property increases the likelihood of University property going missing, waste, fraud, and abuse.

**Recommendations**

The College of Engineering & Computing should:	
5.1	Work with the Asset Management Department to ensure that all accountable property are tagged and recorded in the University's property records.
5.2	Implement the guidelines delineated in the University's Property Manual for identifying, cataloging, and tracking its attractive property.

**Management Response/Action Plan:**

5.1 We understand and appreciate the importance of this audit finding. We will work with ORED and ensure that Department Coordinators and Program Assistants are aware of the importance of property tagging and tracking University property. Power Point slides for the presentation will be shared with the internal audit team.

Implementation date: December 21, 2018

5.2 The University's Property Manual guidelines for identifying, cataloging and tracking attractive property will be emphasized via written memorandum. Internal training will be provided to Department Coordinators and Program Assistants to address this and other findings in the audit. Power Point slides for the presentation will be shared with the internal audit team.

Implementation date: December 21, 2018

## 6. Implementation of Prior Audit Recommendations

The prior audit reports on the College’s operations—*Contracts and Grants Administration – College of Engineering & Computing*, dated October 10, 2011, and *the School of Computing and Information Sciences*, dated June 26, 2014—contained 23 and 21 recommendations, respectively. Management reported that all 44 recommendations were fully implemented. During this audit, we followed up on the 19 recommendations that are applicable to the scope and objectives of this audit.

Our test of the 19 recommendations disclosed that 17 (89%) were fully implemented and 2 (11%) were either partially or not implemented. The test results for each recommendation examined are noted below.

#	Recommendation	Implementation Status		
		Fully Implemented	Partially Implemented	Not Implemented
<b>Audit of Contracts and Grants Administration</b>				
<b>Pre-Award Controls</b>				
1.1	Work more closely with the College’s Principal Investigators to ensure that all Internal Clearance Forms are submitted within required timeframe.		✓	
<b>Time and Effort Reporting and Certification</b>				
2.1	Ensure that all sponsored activities are accurately reflected in salary allocations.	✓		
2.2	Work with Principal Investigators to reduce payroll errors and initiate payroll adjustments on sponsored projects in a timely manner.	✓		
2.3	Work with Division of Research to adequately capture cost-shared efforts committed by its employees in their effort report.	✓		
2.4	Work with Principal Investigators to ensure that their salaries are properly charged for all programs.	✓		

#	Recommendation	Implementation Status		
		Fully Implemented	Partially Implemented	Not Implemented
2.5	Encourage Principal Investigators and researchers to attend effort reporting training.	✓		
<b>Cost Sharing/Matching</b>				
3.1	Work with Division of Research to ensure that the committed cost share for the program above meet the program requirement.	✓		
<b>Administrative Costs</b>				
4.1	Establish procedures to ensure that F&A costs are not directly charged to grants without approved Direct Exemption Form.	✓		
4.2	Work with Division of Research to determine the propriety of the salaries of all administrative and clerical staff charged to the program noted above.	✓		
<b>Other Expense Controls</b>				
5.1	Ensure that credit cardholders do not share their card information with others and strengthen University credit card controls over gasoline purchase and SunPass operations.	✓		
5.2	Ensure that its employees do not make unnecessary bulk purchases.	✓		
<b>Financial Management Control</b>				
6.1	Reconcile project ledgers at least monthly.	✓		
6.2	Develop, disseminate, and periodically update an operations manual giving due consideration to relevant University policies and procedures.			✓

#	Recommendation	Implementation Status		
		Fully Implemented	Partially Implemented	Not Implemented
<b>Close Out Controls</b>				
7.2	Timely identify and resolve issues, which otherwise delay the closeout process, in order to facilitate project close-out procedures.	✓		
<b>Audit of the School of Computing and Information Sciences</b>				
<b>Student Fees</b>				
7.1	Ensure that all expenditures for Equipment Use are limited to items used directly by the students.	✓		
<b>Foundation Expenses</b>				
8.1	Remind employees to disclose the participation of their spouse on business meal expense reports along with an explanation of the benefit to the University of their participation.	✓		
<b>Asset Management</b>				
9.1	Review all purchases to ensure that attractive property is properly accounted for.	✓		
<b>Credit Card Controls</b>				
10.1	Ensure that all credit card purchases are properly classified and comply with University credit card policies and procedures.	✓		
<b>Travel Authorization and Expenses</b>				
11.1	Ensure that employees obtain Travel Authorization prior to incurring travel expenses or traveling.	✓		

The following are two prior recommendations that were determined to be not implemented, along with our current observations.

## **Audit of Contracts and Grants Administration - College of Engineering & Computing**

- 1.1 Work more closely with the College's Principal Investigators to ensure that all Internal Clearance Forms [now called Electronic Proposal Routing Approval Forms] are submitted within required timeframe.

### **Current Observation:**

According to University Policy No. 2320.025, completed proposals together with their signed and fully routed Electronic Proposal Routing Approval Forms (ePRAF) must be received by the Office of Research and Economic Development (ORED) at least five business days prior to the sponsor's deadline.

During this audit, we reviewed the ePRAF for 30 active projects, totaling \$12.1 million. Our review disclosed that the ePRAF for 29 projects (97%) were not timely submitted. The ePRAF for 24 projects were delayed from 15 to 66 days and the remaining 5 projects were delayed from 1 to 11 days.

Timely submission of the ePRAF enables ORED to thoroughly and properly review all aspect of the proposed grant to ensure they are favorable to the University's interest or strategic initiatives prior to making a commitment.

- 6.2 Develop, disseminate, and periodically update an operations manual giving due consideration to relevant University policies and procedures.

### **Current Observation:**

We observed that the College does not have an operations manual related to contracts and grants administration. During this audit, we have a similar finding that the College does not have a comprehensive operations manual to guide the day-to-day operations.

## **Recommendations**

The College of Engineering and Computing should:	
6.1	Continue to work closely with its Principal Investigators and ORED to ensure that all the Electronic Proposal Routing Approval Forms are submitted within required timeframe.
6.2	See Recommendation No. 4.2 of this report.

## **Management Response/Action Plan:**

6.1 The College of Engineering and Computing will continue to communicate with the Principal Investigators to ensure that all required documents are sent to ORED in a timely manner. In addition, the College will establish its own guidelines pertaining to research administration, to be included in the Operations Manual. The guideline for proposal submission will state that “the Principal Investigator needs to submit all documents to the College’s Research Administration Team in a timely manner prior to the submission deadline.” In addition, the College will send periodical reminders to the faculty that ‘all required documents need to be sent to ORED in a timely manner.

Implementation date: December 21, 2018