

**LAMAR UNIVERSITY**  
**COLLEGE OF ARTS AND SCIENCES**  
**Calendar Year 2015**

Department: Computer Science

*Please take a few minutes to reflect on your department/program's progress toward the each of the following:*

1. **IE Plans**—What has the department learned from the assessment data so far? What are your plans as a result of the evaluation? Do you need anything to enhance your plans?

- The department learned that we need to monitor some of the courses as per the yearly ABET assessment report.
- Engaging all the Faculty and Staff members in academic activities meant to accomplish the LU strategic plan at the departmental level.
- Hiring a new Assistant Professor in the area of cybersecurity in 2015-2016.
- Continuing the yearly assessment and preparing the 6-year self-study for the ABET accreditation. All Faculty continued this goal.
- The department acquired some computer equipment, but we need to replace some of the older equipment by new ones.

2. **Strategic Plans**—Which of the following strategic initiatives has your department contributed to this year? What are your plans for next year?

- Firstly, we shall continue to involve students in undergraduate and graduate research, programming competitions, and other academic activities.
- Secondly, we shall maintain our programs accreditation (e.g., ABET, SACS), considering new programs (e.g., Computer Graphics Animation) and improve our effective recruitment and retention practices.
- Thirdly, we shall continue to cooperate for getting support from the higher administration, advisory board, industry (e.g., designing a No Magic Laboratory) and collaborate with other academic departments.
- Fourthly, we shall continue to submit proposals to funding agencies.
- Lastly, we shall continue our cooperation with high schools and community colleges from Golden Triangle and Harris County.

3. **Enrollment**--Review the enrollment (SCH + Student FTE) data for the past three (3) years. Has your SCH/FTE's increased/decreased or remained static? Please provide a rationale for your results.

Enrollment:

		Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
		Female	Male	Female	Male	Female	Male
CIS	White	1	16	1	19	3	20
	Black	6	8	4	7	3	10
	Hispanic	0	0	0	2	0	2
	Asian	0	2	0	2	1	0
	American-Indian	0	0	0	1	1	0
	Multiracial	1	1	0	0	0	0
	Intl	0	1	0	0	0	0
	Unknown	0	2	0	1	0	0
	TOTAL	8	30	5	32	8	32
	<b>GRAND TOTAL</b>		<b>38</b>		<b>37</b>		<b>40</b>
CS	White	11	100	12	90	16	110
	Black	6	19	7	21	6	25
	Hispanic	1	14	1	4	0	9
	Asian	2	6	3	12	3	11
	American-Indian	0	1	0	0	1	0
	Multiracial	0	3	0	0	0	0
	Intl	1	1	0	2	0	2
	Unknown	0	2	0	0	5	2
	TOTAL	21	146	23	129	31	159
	<b>GRAND TOTAL</b>		<b>167</b>		<b>152</b>		<b>190</b>
	<b>UNDERGRADUATE TOTAL</b>		<b>205</b>		<b>189</b>		<b>230</b>
MCS	White	0	2	0	3	1	1
	Black	2	0	0	0	0	0
	Hispanic	0	0	0	0	0	0
	Asian	2	3	19	39	15	32
	American-Indian	0	0	0	0	0	0
	Multiracial	0	0	0	0	0	0
	Intl	11	26	5	28	31	168
	Unknown	0	0	0	0	0	2
	TOTAL	15	31	24	70	47	203
	<b>GRAND TOTAL</b>		<b>46</b>		<b>94</b>		<b>250</b>

Semester  
credit hours:

	Fall 2013	Fall 2014	Fall 2015
CIS	428	413	491
CS	2070	1792	2291
MCS	396	959	2698
<b>TOTAL</b>	<b>2894</b>	<b>3164</b>	<b>5480</b>

The **undergraduate** student enrollment increased in Fall 2015 by **22%** compared to Fall 2014. The semester credit hours increased in Fall 2015 by **26%** compared to Fall 2014.

Regarding the **graduate** studies, the increase is even more significant. The graduate student enrollment increased in Fall 2015 by **166%** compared to Fall 2014. The semester credit hours increased in Fall 2015 by **181%** compared to Fall 2014.

What is your proposed plan of action to increase your SCH/FTE? Do you need any resources to implement this plan of action?

Both the number of students and the SCH increased dramatically in the last academic year. Many of the faculty had to re-adjust their teaching style to accommodate this large number of students.

4. **Graduation Rates**--Compare graduation rates for past three (3) years, has the number increased/decreased or remained static?

The below table indicates the graduation rates for the past three years relative to the last six years:

Graduation rates for the past three years				FY 2013	FY 2014	FY 2015	Three years total
11010100	2	BS	Computer Science	30.4%	19.0%	42.9%	<b>31.3%</b>
11010100	2	BSCISC	Computer Information Science	33.3%	0.0%	20.0%	<b>22.2%</b>
11070100	3	MSCS	Computer Science	47.8%	30.3%	25.0%	<b>36.7%</b>

The below table indicates the number of degrees awarded for the past three years:

Degrees Awarded for the past three years				FY 2013	FY 2014	FY 2015	Three years total
11010100	2	BS	Computer Science	6	12	14	<b>32</b>
11010100	2	BSCISC	Computer Information Science	4	3	3	<b>10</b>
11070100	3	MSCS	Computer Science	17	5	35	<b>57</b>

What does the department need to increase the number of graduates?

### Student Workers

Please indicate how many students are currently employed and how they are utilized:  
Student Workers

Please indicate how many students are currently employed and how they are utilized:  
**SPRING 2015**

Numbers	Undergraduate Students	How Utilized?	Graduate Students	How Utilized?	GRAND TOTAL
2	1	Office Assistant	1	Office Assistant	UG – 3,553.00 G – 1,050.00
1			1	Webmaster	G – 2,525.00
5	2	Technicians	3	Technicians	UG – 4,845.00 G – 9,997.50
36	3	Graders	33	Graders	UG – 3,360.00 G – 23,385.00

### **SUMMER 2015**

Numbers	Undergraduate Students	How Utilized?	Graduate Students	How Utilized?	GRAND TOTAL
1			1	Office Assistant	G – 862.50
1			1	Webmaster	G – 1,847.28
6	1	Technicians	5	Technicians	UG – 726.75 G – 4,289.00
23	1	Graders	22	Graders	UG – 570.00 G – 19,860.00
1		Research Assistants	1	Research Assistants - Andrei	G – 200.00
				Research Assistants –	UG – 704.00

7	1	Research Assistants	6	NSF Grant	G – 6,026.75
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**FALL 2015**

Numbers	Undergraduate Students	How Utilized?	Graduate Students	How Utilized?	GRAND TOTAL
2			2	Office Assistants	G – 868.50
1			1	Webmaster	G – 2,907.00
6	1	Technicians	5	Technicians	UG – 1,296.00 G – 13,680.00
65	3	Graders	62	Graders	UG – 1,143.00 G – 13,779.00
8		Research Assistants	8	Research Assistants	G – 5,457.00

Is your budget sufficient for student workers? If not, provide a plan of action that indicates the needs of your department, estimated costs and benefits.

**Total Costs/Semester and Year**

Total Cost for Spring 2015:	\$48,715.00
Total Cost for Summer 2015:	\$35,086.28
Total Cost of Fall 2015:	\$38,101.50
<b>2015 Total:</b>	<b>\$121,902.78</b>

Is your budget sufficient for student workers? If not, provide a plan of action that indicates the needs of your department, estimated costs and benefits.

We actually struggled to be able to pay the student workers this academic year due to the large number of students willing to work for the department. We have to maintain a balance between helping students and instructors, and at the same to preserve the quality of our program. We will consider approaching the Higher Administration for a budget adjustment, if needed.

**Student Honors, Accomplishments and Recognition**

Identify any honors or recognition that your students have achieved.

**SPRING 2015**

Student	Honors/Accomplishments
Ryan Buckalew	<b>Crawford/Lewis Scholarship</b>
Aaron Lanik	
Joseph Jordan	
Bradley Williams	<b>Bill Nylin Scholarship</b>
Pedro Velez	
Jonathan Hodges	<b>Bobby Waldron Scholarship</b>

**FALL 2015**

<b>Student</b>	<b>Honors/Accomplishments</b>
Matthew Hari	<b>Crawford/Lewis Scholarship</b>
Odessa Henry	
Brock Terry	
Lauren Forse	<b>Bill Nylin Scholarship</b>
Lauren Forse	<b>Bobby Waldron Scholarhsip</b>

**Does your Department have a Mirabeau Scholar?** **Yes** No

1. Timothy Gonzales
2. Cameron Henry
3. Christopher LaChance

All these students were awarded the Mirabeau scholarship in 2012. We didn't have any new students awarded this impressive scholarship to the Computer Science majors in the last couple of years.

**Describe any student mentoring activities undertaken by faculty.**

All faculty do student mentoring and advising in Graduate Project class, course projects, research projects, and more. Most of our faculty have publications co-authored with undergraduate and/or graduate students. STAIRSTEP is our impressive research undergraduate program which has a positive attitude in the department and LU in general.

***Faculty Productivity Measures***

1. Publications

\_6\_ # of Manuscripts submitted not yet published

\_32\_ # of Manuscripts published

\_27\_ Refereed

\_5\_ Non-refereed

\_0\_ # Books published (book chapters)

2. Professional Presentations

\_2\_ Local presentations

\_3\_ State / Regional

\_0\_ National

\_20\_ International

\_25\_ TOTAL #

3. Describe professional development activities undertaken by you or the faculty in your area.

N/A

4. Faculty holding office in national/international professional organization - **Only**

<b>Faculty</b>	<b>Organization</b>	<b>Office</b>
None		

## 5. Faculty Honors

<b>Faculty</b>	<b>Honors</b>
None	

## 6. Any issues/problems with faculty?

N/A

**Budget**

What were your major capital expenditures this year?

<b>Capital Expenditures for 2015</b>	
CDW Government, Inc. - Computer Equipment	192.06
Dell – Laptops for Faculty/External Hard Drives	5,685.18
GHA Technologies – Lab Equipment & Supplies	5,234.46
Global Equipment - Office Supplies	83.45
GOVConnection, Inc. – Office Equipment & Supplies	622.30
Hernandez Office Supplies – Office Supplies for the Department	3,165.02
Kirksey's – Business Cards & CS Notepads	33.50
Mathworks – Contract Renewal	2,014.40
Office Depot – Office Supplies	18.49
Oracle – Contract Renewal	870.20
Presidio – Phone	150.45
Safari Micro – Classroom Equipment & Supplies	2,401.09
Staples – 3D Printer Filament	179.94
<b>GRAND TOTAL:</b>	<b>\$22,380.54</b>

What are your immediate and longer term major capital needs?

<b>Major Capital Needs for 2016</b>	
Linus Machines Linux D1P35AV-3 – Configurable – HP Z230 SFF Workstations	
20 needed	<b>\$19,700.00</b>
Solaris UNIX machines in Room 214 (D8G63AV-1 – Configurable – HP Z1 G2 Workstations	
20 needed	<b>\$35,800.00</b>
Renovation of Labs 214 and 215	<b>\$40,000.00</b>

**Centers/Endowed Chairs or Distinguished Faculty**

Report on the Center(s) in your department (*goals accomplished, problems, and major goals for next year*). How does the Center promote the goals of the department, College and University?

None

Report of activities/accomplishments of Endowed Chairs in your department. How did the individual support the program's goals?

N/A

**Departmental Analysis**

Report any initiatives or special projects under taken this year by your unit.

Most of the Department of Computer Science Faculty are involved in research, publishing papers and writing grants. All of the Department of Computer Science Faculty are involved in teaching, improving their courses and revising their online courses. All Faculty submitted their assessment materials, necessary for the ABET yearly assessment. In addition, Faculty uploaded their assessment results in the online website. All Faculty reviewed publications including journals, books, and conferences.

Identify special projects or initiatives you plan for next year.

Firstly, we shall continue to involve students in undergraduate and graduate research, programming competitions, and other academic activities. Secondly, we shall maintain our programs accreditation (e.g., ABET, SACS), considering new programs (e.g., Computer Graphics Animation) and improve our effective recruitment and retention practices. Thirdly, we shall continue to cooperate for getting support from the higher administration, advisory board, industry (e.g., designing a No Magic Laboratory) and collaborate with other academic departments. Fourthly, we shall continue to submit proposals to funding agencies. Lastly, we shall continue our cooperation with high schools and community colleges from Golden Triangle and Harris County.

What are the major challenges in your department?

1. Hiring an Assistant Professor in the area of cyber-security
2. Renovate Labs 214 and 215
3. Cope with the large number of students that we had in Fall 2015 while maintaining the same quality of learning.

What are the major strengths of your department?

1. We cooperate and help each other to fulfil students, staff, faculty, and higher Administrators requests.
2. Cooperate and help with other departments from the college and university.