UNIT REPORT
Computer Science MS - Final
Annual Report
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CSC Mission Statement

Start: 07/01/2017

End: 06/30/2018

Providing Department: Computer Science MS

Department/Unit Contact: Doug Talbert

Mission/Vision/Goal Statement:

The mission of the Computer Science Department is

"To graduate computer scientists and information technologists who contribute to society, their community, and the world by solving technical challenges with professionalism and creativity."

This mission is consistent with the University's mission to "provide leadership and outstanding programs in engineering, the sciences, and related areas that benefit the people of Tennessee and the nation" and with the University's commitment to the life-long success of students and to enrich the lives of people and communities in the Upper Cumberland region of Tennessee.

It is also consistent with Flight Plan, the University's strategic plan, and it's focus on improving student experience, transforming technology, and creating distinctive programs.

Goal 1: Global competitiveness

Define Goal:

To provide industry, academia, and society with highly qualified graduate Computer Scientists who possess state-of-the-art knowledge in the field of CS, as well as the research, critical-thinking, and leadership skills necessary to be globally competitive

Intended Outcomes / Objectives:

1. The student should gain breadth of knowledge in the discipline and depth in the specific area of his/her specialization.

3. The student should demonstrate knowledge of the techniques, methods, and disciplines of computer science research.

Goal 2: Life-long learning

Define Goal:

To inspire students to pursue a high level of education and research experience, and to make a lifelong commitment to continuous learning and personal contribution in their chosen field of research, teaching, and/or industry

Intended Outcomes / Objectives:

1. The student should gain breadth of knowledge in the discipline and depth in the specific area of his/her specialization.

2. The student should learn and gain experience in doing independent academic work.

Goal 3: Quality research

Define Goal:

To establish and foster a culture of curiosity, excitement, collaboration, and engagement in the global research community, with a commitment to quality and academic integrity

Intended Outcomes / Objectives:

1. The student should gain breadth of knowledge in the discipline and depth in the specific area of his/her specialization.

2. The student should learn and gain experience in doing independent academic work.

Goal 4: Increase graduation rate

Define Goal:

We will increase our graduation rate to an average of at least five per year.

Alumni Surveys

Goal/ Outcome/ Objective: Goals 1–3

Type of Tool: Survey

Frequency of Assessment: Every year

Rationale:

used to assess program goals since our program goals can only be measured after graduation. There are no other mechanisms available to us to measure goal attainment. Survey results and their implications will be discussed at faculty meetings to determine which (if any) corrective actions should be taken.

Average GPA in coursework

Goal/ Outcome/ Objective: Goals 1-3/Learning Outcome 1

Type of Tool: Other

Frequency of Assessment: Annually

Rationale:

Tracking average GPA will help us track how well our students are learning the course material.

Exit surveys

Goal/ Outcome/ Objective: Goals 1-3/Learning Outcomes 1-3

Type of Tool: Survey

Frequency of Assessment: Every time a student graduates

Rationale:

These surveys provide an opportunity to get graduating students to reflect on their experiences at TTU and ask several questions related to student learning outcomes. We must wait until this point to ensure that the student can reflect on all of his or her experiences. The results are summarized, and the faculty discuss the summary and identify corrective steps (if needed).

M.S. Graduation Rate

Goal/ Outcome/ Objective: Goal 4

Frequency of Assessment: Annually

Rationale:

We need to track this because we are currently considered low-producing by TBR.

Percentage of students passing comprehensive exam

Goal/ Outcome/ Objective: Goals 1-3/Learning outcomes 1–3

Type of Tool: Other

Frequency of Assessment: Annually

Rationale:

Passing the comprehensive exam is an indication of having learned the appropriate material at an adequate breadth and depth.

Quality of research component in independent experience

Goal/ Outcome/ Objective: Goals 1-3/Learning Outcomes 1-3

Type of Tool: Other

Frequency of Assessment: Once a year

Rationale:

These publications provide a mechanism through which we can get both internal and external review of student research and communication skills. Each student's graduate advisor is responsible for keeping track of the appropriate data and sharing it with the graduate program committee for discussion.

Alumni survey

Goal/Objective/Outcome Number: Goals 1-3/Learning Outcome 2

Results:

The survey measures perceived attainment of each goal (from 0 - "not at all" to 3 - "to a great extent").

Results from initial recent alumni survey (N=5 of 11)

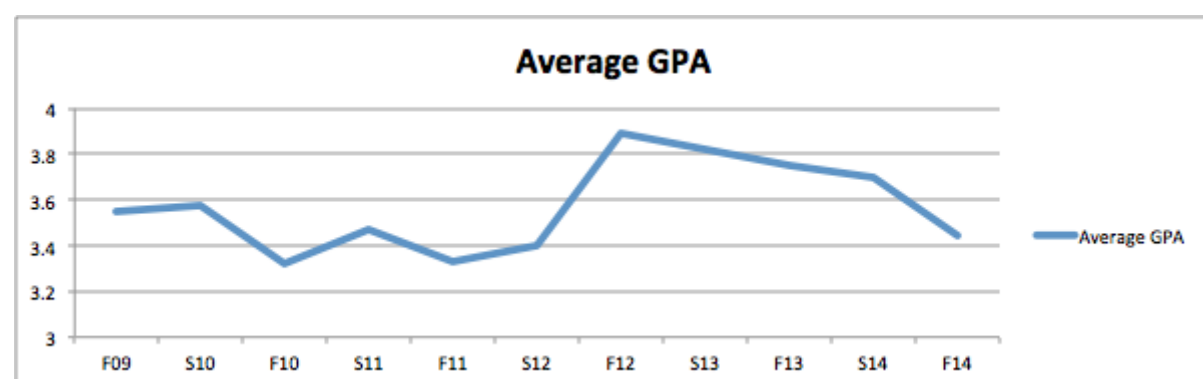| Goal	Average score
Global competitiveness	3
Life-long learning	2
Quality research	3

In order for the survey to used for evaluation, we need to define what constitutes a satisfactory level of attainment.

Average GPA by semester

Goal/Objective/Outcome Number: Goals 1-3/Learning Objective 1

Results:

Semester	Average GPA
F09	3.55
S10	3.58
F10	3.32
S11	3.47
F11	3.33
S12	3.4
F12	3.89
S13	3.82
F13	3.75
S14	3.7
F14	3.44

Exit survey

Goal/Objective/Outcome Number: Goals 1-3/Learning Outcome 2

Results:

Results from MS exit
survey (N=1 of 2)

Outcome	Score
Outcome 1	3
Outcome 2	3
Outcome 3	3

The survey measures perceived attainment of each learning outcome (from 0 - "not at all" to 3 - "to a great extent"). The survey is very new and needs more responses to be of use.

Graduation rate

Goal/Objective/Outcome Number: Goal 4

Results:

	M.S. degrees	Moving average
2002-03	0	
2003-04	0	
2004-05	7	7
2005-06	8	7.5
2006-07	4	6.333333333
2007-08	10	7.25
2008-09	1	6
2009-10	3	5.2
2010-11	4	4.4
2011-12	3	4.2
2012-13	2	2.6
2013-14	8	4
2014-15*	4	4.2

* Anticipated number of degrees