

## UNIT REPORT

**Computer Science MS - Final  
Annual Report 2017-2018**

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# Computer Science MS

## CSC Mission Statement

**Start:** 07/01/2017**End:** 06/30/2018**Reporting Year:** 2017-18**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

**Progress:** Ongoing**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

**Progress:** Ongoing**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

**Progress:** Ongoing**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**

**Progress:** Ongoing

**Define Goal:**

We will increase our 5-year average graduation rate to at least five students per year.

**Alumni Surveys**

**Goal/ Outcome/ Objective:** Goals 1–3

**Type of Tool:** Survey

**Frequency of Assessment:** Every year

**Rationale:**

This will be used to assess our program goals that are difficult to measure until after graduation. Survey results and their implications will be discussed at faculty meetings to determine which (if any) corrective actions should be taken.

We are just now getting to point of having enough alumni to provide an adequate assessment of our program in recent years. We will begin administering this survey this year.

**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.

We are still working to pull together this data. It will be assessed and reported once it has been compiled.

**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).

We are working to improve our process of collect this data.

**M.S. Graduation Rate**

**Goal/ Outcome/ Objective:** Goal 4

**Type of Tool:** Tracking Spreadsheet

**Frequency of Assessment:** Annually

**Rationale:**

We need to track this because we have been considered low-producing by TBR.

**Percentage of students passing comprehensive exam**

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

**Type of Tool:** Tracking Spreadsheet

**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:**

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.

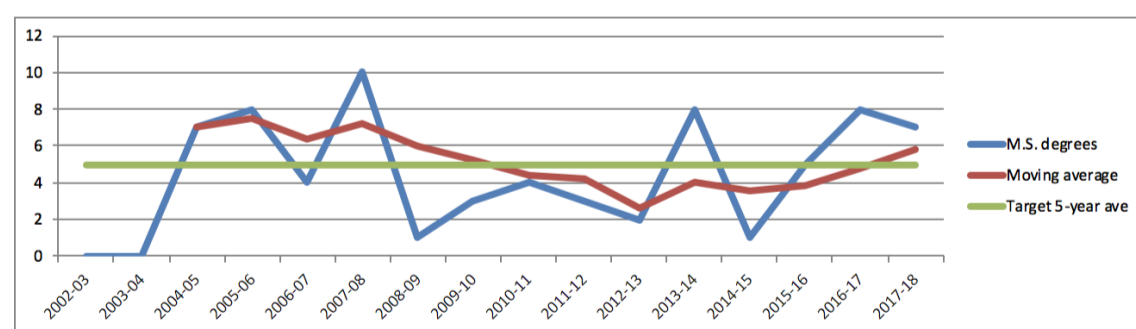
We are working with faculty to compile this information and will assess and report it once it has been compiled.

**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	6.3333333333
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	1	3.6
2015-16	5	3.8
2016-17	8	4.8
2017-18	7	5.8

**Percentage of students passing comprehensive exam**

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

**Results:**

	2013-2014	2014-15	2015-16	2016-17	2017-18
1st attempt pass rate	100.0%	100.0%	100.0%	87.5%	100.0%
2nd attempt pass rate	N/A	N/A	N/A	100.0%	N/A
students taking comps	8	1	5	8	7

**Improve consistency and timeliness of data collection and assessment****Improvements to Assessment Plan:**

The graduate committee will be developing guidelines and tools to support faculty and improve the consistency and timeliness of data collection and assessment.