### 2019-2020: Engineering Student Success Center Mission

## **Definition of Unit Providing Department:** College of Engineering Student Success Center **Department/Unit Contact:** Harry Ingle **Mission/Vision Statement:** The College of Engineering's mission is to graduate innovative Engineers who solve technological challenges to meet societal needs. The innovative Engineer is also known as a 21st Century Renaissance Engineer. A Renaissance Engineer is an adaptive professional who is inquisitive and creative and makes significant contributions for the betterment of humanity. The mission of the Clay N. Hixson Student Success Center is to recruit a diverse population of well-rounded, academically talented, and creative students; to provide support, encouragement, and resources for our students; and to recognize students' accomplishments as they work toward reaching milestones on the way to becoming 21st Century Renaissance Engineers. **Goal 2: At-Risk Advising Define Goal:** Utilize intrusive advising for at-risk student population on academic probation and students readmitted after suspension. **Intended Outcomes / Objectives:** Increased retention and persistence for at-risk students. DRILL DOWN-----

Assessment for at-risk students

**Frequency of Assessment:** 

RELATED ITEM LEVEL 1

each semester

**Rationale:** 

Advisors will track student progress and academic performance in order to assess the retention and persistence of at-risk students.

**RELATED ITEM LEVEL 2** 

**Results: At-risk advising** 

**Results:** 

Table 1: At-Risk Summary Fall 2019:

Warning	34%
Probation	59%
Suspension	4%
Readmitted after suspension	3%

The table above shows the at-risk students advised by CoE professional advisors fall 2019. The table specifically looks at, out of those who were categorized as "at-risk," which sub-category they belonged to.

Table 2: At-Risk Summary Spring 2020:

Warning	0%
Probation	49%
Suspension	3%
Good standing	49%

The table above shows the academic standing for the same at-risk students from Table 1, but as their standings changed at the end of spring 2020.

#### **Attachments:**

# Goal 2a. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### **Link to Assessment:**

Assessment of at-risk student advising suggests that students who are at-risk receive adequate face-time and contact with their advisor, and we see an increase in students on good standing from one semester to the next.

**RELATED ITEM LEVEL 3** 

# Goal 2b. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### **Link to Assessment:**

Assessment of at-risk student advising suggests that students who are at-risk receive adequate face-time and contact with their advisor, and we see an increase in students on good standing from one semester to the next.

## **Goal 3- Professional Academic Advising summary Define Goal:**

Professional advisors work one-on-one with freshman and early sophomore engineering students to increase retention and graduation rates.

#### **Intended Outcomes / Objectives:**

Students will understand their curriculum and how to proceed through their degree programs, so that they are able to make adequate progress towards their degree. Students will be provided with resources to assist should they need them (such as tutoring or information about student groups).

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RELATED ITEM LEVEL	1

### **Assessment for Advising services**

### **Frequency of Assessment:**

each semester

#### **Rationale:**

Annually each advisor will report their students' academic progress. This will provide information regarding retention for our freshman and sophomore populations.

**RELATED ITEM LEVEL 2** 

### **Results: Professional advising**

**Results:** 

Over the academic year 2019-2020, 18% of engineering students who were advised by professional advisors in the CoE changed degree programs.

75% of engineering students advised by professional advisors in the CoE were on Good Standing in May 2020.

15% of engineering students advised by professional advisors in the CoE were at risk in May 2020.

Remaining students either graduated, withdrew from the university, or changed majors.

As of July 1, 67% of these students had enrolled for fall term (2020). 4% had graduated.

#### **Attachments:**

# **Goal 3. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item**

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### **Link to Assessment:**

Assessment of professional advising shows that students are meeting with their advisors frequently and are persisting from year to the next.

## **Goal 4 - Supplemental Instruction Program**

**Define Goal:** 

The goal of Supplemental Instruction is to support students taking ENGR 1120 and CSC 1300, two classes which have been identified as having high D,F, & W rates.

### **Intended Outcomes / Objectives:**

The intended outcome for the program is for more students to succeed in the aforementioned courses.

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### **Assessment for Supplemental Instruction**

**Frequency of Assessment:** 

On-going

#### **Rationale:**

The Supplemental Instruction program utilizes an assessment tool produced by the International Center for Supplemental Instruction at the University of Missouri-Kansas City. This tool has been validated and is used to show the difference in academic performance between students who attend SI and students who do not attend SI.

### **Results: Supplemental Instruction**

**Results:** 

Following is a longitudinal look at the DFW Rates for SI in the CoE:

	F15-S16	F16-S17	F17-S18	F18-S19
SI	12%	11.00%	10%	9.60%
Non-SI	14%	25%	22%	29.00%
	Math 1910, CSC 2100,	CSC 2100, ENGR	CSC 1300, ENGR	CSC 1300, CSC 1310, ENGR
	CEE 2110	1120	1120	1120

#### **Attachments:**

#### **RELATED ITEM LEVEL 3**

# Goal 4a. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### **Link to Assessment:**

Assessment of the SI program shows that SI participants have higher class GPA's (on average), and are less likely to receive a D,F, or W (on average) than those students who do not participate. We have implemented changes to address SI Leaders' requests for more professional development.

#### **RELATED ITEM LEVEL 3**

# Goal 4b. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### Link to Assessment:

Assessment of professional advising shows that students are meeting with their advisors frequently and are persisting from year to the next.

**RELATED ITEM LEVEL 3** 

# Goal 4c. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### Link to Assessment:

Assessment of the SI program shows that SI participants have higher class GPA's (on average), and are less likely to receive a D,F, or W (on average) than those students who do not participate. We have implemented changes to address SI Leaders' requests for more professional development.

## **Goal 5- Develop Recruitment Plan**

#### **Define Goal:**

Recruit from a wide region; recruit under-represented students for the College of Engineering.

#### **Intended Outcomes / Objectives:**

Intended outcomes:

Increase recruitment events, collaborations with other campus departments, and resources for recruiting

Increase the number of academically talented and of under-represented students to the College of Engineering



### **Assessment for Recruitment Plan**

### **Frequency of Assessment:**

Annually

#### **Rationale:**

Tracking students attending College of Engineering Camp: establishes the usefulness of that activity in regards to recruitment.

Tracking outreach events: assists in providing an overview of where Admissions and the College of Engineering are reaching out to potential students.

**RELATED ITEM LEVEL 2** 

### **Results: Recruitment**

**Results:** 

The Clay N. Hixson Student Success Center, in addition to attending typical recruitment events across the state, also hosted a summer camp (virtually) aimed at increasing diverse students to the College of Engineering. Following is demographic information of the campers:

Race/Ethnicity	Male	Female
Black or African-American	2	4
White	5	3
Total	7	7

The camp assessment showed an increase in engineering as a career. It also received favorable feedback from the campers. This is the third year that the camp has been held. 44% of students who attended the first and second years of the camp have enrolled at Tennessee Tech.

#### **Attachments:**

# Goal 5a. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### **Link to Assessment:**

Recruitment remains a dynamic enterprise; based on feedback from our Advisory Board, we have implemented a stronger focus on recruiting diverse students. Thus, moving forward, we will continue implementing the changes made over the 19-20 academic year.

#### **RELATED ITEM LEVEL 3**

# Goal 5b. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item

**Program Changes and Actions due to Results:** 

No modifications are needed at this time.

#### Link to Assessment:

Recruitment remains a dynamic enterprise; based on feedback from our Advisory Board, we have implemented a stronger focus on recruiting diverse students. Thus, moving forward, we will continue implementing the changes made over the 19-20 academic year.

## **Goal I - Student Ambassador Program**

#### **Define Goal:**

For academically talented, under-represented students to develop leadership, networking, and other "soft skills" while assisting the College in recruitment and alumni events.

#### **Intended Outcomes / Objectives:**

Develop students' soft skills

Increase students' networking

Increase students' professional development

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### **Assessment for Student Ambassador Program**

#### **Frequency of Assessment:**

Annually

#### **Rationale:**

Demographic data: assesses the diversity of the program. Survey: assesses students' perception of the program. Descriptive data: assesses how many professional development, leadership, networking, or recruitment events students are participating in.

**RELATED ITEM LEVEL 2** 

**Results: Student Ambassadors** 

**Results:** 

See attached.

#### **Attachments:**

ambassador program evaluation 2020.pptx

**RELATED ITEM LEVEL 3** 

# **Goal 1a. Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item**

**Program Changes and Actions due to Results:** 

We will increase the range of opportunities for student ambassadors to serve: networking with alumni, recruitment activities, mentoring in the community, and offering engineering outreach.

#### Link to Assessment:

The Student Ambassador Program's assessment shows that Ambassadors are a diverse group actively involved in the opportunities provided to them. To continue meeting our goals of assisting Ambassadors in developing their professional, leadership, and communication skills, we will offer a wider variety of service opportunities in which they may choose to participate.

# **Goal 1b. New Modifications and Continuing Improvement to Goals/Objectives/Outcomes Item**

**Program Changes and Actions due to Results:** 

We will increase the range of opportunities for student ambassadors to serve: networking with alumni, recruitment activities, mentoring in the community, and offering engineering outreach.

#### **Link to Assessment:**

The Student Ambassador Program's assessment shows that Ambassadors are a diverse group actively involved in the opportunities provided to them. To continue meeting our goals of assisting Ambassadors in developing their professional, leadership, and communication skills, we will offer a wider variety of service opportunities in which they may choose to participate.