Texas Tech University - Costa Rica

Standard 8.2.a: Student Outcomes: Educational Programs

The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results in the areas below: student learning outcomes for each of its educational programs. (SACSCOC Principles of Accreditation: Foundation for Quality Enhancement, 2018, Standard 8.2.a)

Texas Tech University is in compliance with Standard 8.2.a. All Texas Tech University – Costa Rica (TTU-CR) degree programs have identified expected learning outcomes, assessed the outcomes with appropriate measures, and analyzed data to develop and implement actions for improvement in subsequent assessment cycles. The Office of the Provost is responsible for monitoring and ensuring the quality of the academic programs at TTU-CR.

The Framework Agreement between Texas Tech University (TTU) and Edulink, S.A. states, “TTU and Edulink will consult upon the disciplines, the types of degrees to be offered at TTU-CR, including undergraduate and select graduate programs, and the period of time during which any such programs should be phased in, subject in all cases to TTU’s unfettered authority over all TTU-CR Academic Affairs.”

Texas Tech University has a comprehensive process to assess institutional effectiveness for all degree programs and support operations, whether at the main Lubbock campus or at its off-campus sites, which is consistent with Standard 8.2.a. Systematic and regular evaluation of degree program assessment is a requirement per TTU Operating Policy 10.13, which mandates that all academic programs complete an assessment cycle that leads to improvements in the respective outcomes.

I. TTU-CR Academic Degree Programs

The TTU-CR degree program learning outcomes and assessment plans will be the same as those currently in place at the main TTU campus for the degree programs offered at the off-campus site. Each degree program determines how its students at TTU-CR will be evaluated. Assessment results will be reported to the respective degree program coordinators for inclusion in the overall degree program assessment plan.
Below are the degree programs currently offered at Texas Tech University – Costa Rica.

**Electrical Engineering (BSEE)**
- *Description:* The field of electrical engineering deals with the study and application of electricity, electronics, and electromagnetism. Students may gain a concentration in one of the following areas: Analog Very Large-scale Integration, Micro-electromechanical systems, Power Systems, Signal Processing, Communication Systems, Digital Systems, and Electromagnetics.

**Industrial Engineering (BSIE)**
- *Description:* The field of industrial engineering is a combination of basic engineering knowledge and quantitative analysis techniques to support the optimization of complex processes, systems, or organizations.

**Computer Science (BS)**
- *Description:* Computer science is a field that deals with the study of computers and computer-based systems, hardware, software, networking, and all processes that allow a machine to perform tasks and actions.

**Mathematics (BS)**
- *Description:* The simplest description of the abstract field of mathematics is the study of numbers and their operations. Broadly speaking, mathematics is often described as “pure,” meaning mathematics for the development of mathematical knowledge, and “applied,” meaning mathematics for a real-world purpose.

**Restaurant, Hotel, and Institutional Management (BSRHIM)**
- *Description:* The Restaurant, Hotel, and Institutional Management program is the study of hospitality management organizations to prepare students for management opportunities in the hospitality and retail businesses.

**Computer Science and Mathematics (Dual BS)**
• **Description:** Students in the dual program typically utilize applied mathematical techniques as they relate to computational techniques and/or the development of computational algorithms.

II. **Degree Program Assessment Process**

Texas Tech University uses Nuventive Improve for assessment reporting requirements. As part of TTU's degree program assessment process, each degree program is expected to meet the following assessment-related requirements on a regular, systematic schedule:

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<th><strong>Student Learning Outcomes</strong> – All programs are required to have three to five outcomes that specifically measure student learning. Two outcomes are satisfactory, contingent on the quality of the outcomes documented.</th>
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<td>1</td>
<td><strong>Assessment Methods</strong> – Each outcome requires at least two methods of assessment that are measureable and related to the outcome. Assessment methods must reflect a balance of direct and indirect assessment methods.</td>
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<td>2</td>
<td><strong>Results</strong> – All programs are required to document results of the assessment methods. It is important that the results demonstrate critical reflection, so they can be used to improve student learning.</td>
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<td>3</td>
<td><strong>Actions for Improvement and Follow-up</strong> – Each program is required to document how results were used (or are planned to be used) to make improvements to student learning within the program. OPA does not require Actions for Improvement or Follow-up for every result, but there should be evidence that quality improvements are regularly made.</td>
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TTU degree program coordinators are responsible for uploading student learning outcomes, revising student learning outcomes, reporting assessment evidence, and documenting actions for improvement. Training on how to best utilize the Nuventive Improve software is regularly available to department chairs, degree program coordinators, associate deans, directors, assistant directors, administrative assistants, and other support staff. Furthermore, staff from
the Office of Planning and Assessment (OPA) have led an informal group of faculty and staff called the Tech Assessment Network (TAN) to exchange and discuss information about assessment initiatives, ideas, and solutions. The Office of Planning and Assessment also publishes resources for strengthening degree-program assessment in a handbook titled *Assessing Student Learning in Degree Programs*. In addition, the Office of Planning and Assessment maintains a small collection of print materials available for check-out that can assist degree program coordinators with their own assessment initiatives. Finally, the Office of Planning and Assessment has created an online video library with several instructional videos on how to use assessment tracking software. This video library is routinely updated with relevant and helpful assessment-related material. These ongoing and routine efforts to provide faculty and staff development training on academic assessment methods and techniques have resulted in continuous improvement in the quality of student learning outcomes, the use of assessment methods, and actions for improvement.

The Office of Planning and Assessment provides several resources as well as a set of guidelines to support the assessment planning process. Overall, TTU faculty members have broad autonomy to determine how they assess student learning within degree programs and how they document actions for improvement within degree programs. They also have broad license to select appropriate assessment methodologies specific to the discipline and specific to the level of the degree program.

All active degree programs are required to submit program level assessment plans for the upcoming academic year and assessment data for the previous academic year by October 1 of each academic year to the Office of Planning and Assessment (OPA) through Nuventive Improve. A sample 4-column assessment report is included below highlighting components of the assessment report.
Below are the degree programs currently offered at Texas Tech University – Costa Rica with hyperlinks to the corresponding 4-column assessment report.

**Electrical Engineering (BSEE)**
**Industrial Engineering (BSIE)**
**Computer Science (BS)**
**Mathematics (BS)**
**Restaurant, Hotel, and Institutional Management (BSRHIM)**

The graphic below illustrates TTU’s annual assessment process, offered training opportunities, and internal deadlines for degree program assessment for the 2017-2018 academic year.
Timeline of Annual Degree Program Assessment Process

**SEPTEMBER**
- TRACDAT TRAININGS
- LAUNCH LEARNING SERIES VIDEO
- LEARNING SERIES: IMPROVING ASSESSMENT PLAN

**OCTOBER**
- OCT. 1: TRACDAT PROGRAM ASSESSMENT DEADLINE
- RUN ALL 4-COLUMN REPORTS AND SAVE TO COMMON

**NOVEMBER**
- NOV. 20: DEGREE PROGRAM REVIEWS COMPLETED

**DECEMBER**
- CLEAN EXCEL DOCUMENT
- BEGIN ACTION REPORT
- FINALIZE DEGREE PROGRAM REPORTS

**JANUARY**
- JAN. 10: SEND ELECTRONIC PAR REPORTS
- CHAIR VISITS THROUGH APRIL

**FEBRUARY**
- DEGREE PROGRAM COORDINATOR VISITS THROUGH APRIL

**MARCH**
- LEARNING SERIES: METHODS PRESENTATION
- LAUNCH LEARNING SERIES VIDEO

**APRIL**
- ACTIONS FOR IMPROVEMENT REPORT COMPLETE

**MAY**
- EXECUTIVE SUMMARY COMPLETED

**2017-2018 REVISED PAR**
III. Degree Program Review Process

As part of the assessment review process, OPA utilizes an in-depth degree program assessment rubric, schedules annual departmental chair visits to deliver feedback, and offers comprehensive assessment training to department chairs and program coordinators.

The Program Assessment Rubric (PAR) was designed to measure evidence of student learning outcomes assessment as well as to provide departmental feedback to improve assessment processes. The purpose of the PAR is to clearly communicate TTU’s expectations for degree program assessments and to provide consistent, substantive, and constructive feedback to strengthen assessment and help move all academic programs toward best practices and continuous improvement.

There are four components to the rubric, each reflecting key assessment expectations. The maximum available score is a cumulative score of 16, which reflects a 4.0 for each of the 4 components. PAR reports also provide qualitative feedback for improvements from OPA staff and comparative data by program, department, college, and TTU. A sample PAR report is included below highlighting the data that is collected as part of the feedback process.
A PAR evaluation summary report is hyperlinked below for each of the degree programs offered at TTU-CR.

**Electrical Engineering (BSEE)**
**Industrial Engineering (BSIE)**
**Computer Science (BS)**
**Mathematics (BS)**
**Restaurant, Hotel, and Institutional Management (BSRHIM)**

This feedback is provided during annual departmental chair visits. The purpose of meetings with Chairpersons is to review findings and provide them with a report of evaluation results. The report provides a brief description of the requirements, a component area score, qualitative feedback, and two charts that provide comparative data. OPA additionally provides recommendations for improving future reporting, an analysis of findings, and, when appropriate, directions to ensure compliance.
Conclusion

Texas Tech University is in compliance with Standard 8.2.a. The breadth of evidence provided in this narrative demonstrates Texas Tech University’s commitment to documenting and improving academic assessment activities at all campus and instructional sites.