1.

e. Provide an overall description of your program (s) including a list of the measurable goals and objectives of the program (s) (both programmatic and learner centered). Have they changed since the last review?

☐ Yes ☒ No

If yes, describe the changes in a concise manner.

Undergraduate Programs

The BS in Engineering Technology program focuses on the design, hands-on engineering technology fundamentals, instrumentation, mathematics, science, and practical design principles needed to equip students for employment or further education. Engineering technologists bridge the gap between management and engineering operations while focusing on engineering applications. Currently, the BS in Engineering Technology program includes a minimum of 131 credit hours of required course work. The program is designed such that the students can complete their degree in 4 years. The program consists of general education, core areas in engineering, required courses in the engineering technology, and five 3-credit hour technical electives. The students also complete two industry-based senior design projects over the last two semesters of their study. The senior design projects are evaluated by industry and faculty.

The BS in Engineering Technology program's Educational Objectives (PEOs) are aimed to ensure that the graduates will have:

1. Identified, analyzed, and solved broadly defined engineering technology problems in mechatronics, technology management, or environmental sustainability.
2. Engaged in professional development activities through training, certification, or advance degree in engineering technology or related fields.
3. Demonstrated the commitment to address professional and ethical responsibilities including a respect for diversity.

Each semester students are required to meet with their advisors before they register for classes. During this consultation, the student's records file is available. Also at this time, lists of approved elective courses in humanities and fine arts, social and behavioral sciences, natural sciences, and in-department and out-of-department technical electives are available. Through

Additionally, the director of the Engineering Technology program performs a graduation check of all seniors in the semester prior when the student is expected to graduate. The director uses a standardized check-sheet to ensure that a student will meet all graduation requirements before he/she graduates.

The Engineering Technology program undergoes continuous refinement with input from faculty, students, alumni, and the Industrial Advisory Board. The curriculum, lab development, and other educational opportunities are analyzed and structured to meet the PEOs of the programs.

Program goals

The enrollment and number of graduates for Engineering Technology program are expected to grow steadily. The goals for next three years are as follows.

FY	UG student enrollment (Fall census)	UG graduates
2015	75	10
2016	100	15
2017	115	20

2. Describe the quality of the program as assessed by the strengths, productivity, and qualifications of the faculty in terms of SCH, majors, graduates and scholarly productivity (refer to instructions in the WSU Program Review document for more information on completing this section). Complete a separate table for each program if appropriate.

Last 3 Years	Tenure/Tenure Track Faculty (Number)	Tenure/Tenure Track Faculty with Terminal Degree (Number)	Instructional FTE (#): TTF= Tenure/Tenure Track GTA=Grad teaching assist O=Other instructional FTE			Total SCH - Total SCH by FY from Su, Fl, Sp	Total Majors - From fall semester	Total Grads by FY
			TTF	GTA	O			
Year 1								

* Winning by competitive audition. **Professional attainment (e.g., commercial recording). ***Principal role in a performance. ****Commissioned or included in a collection. KBOR data minima for UG programs: Majors=25; Graduates=10; Faculty=3; KBOR data minima for master programs: Majors=20; Graduates=5; Faculty=3 additional; KBOR data minima for doctoral programs: Majors=5; Graduates=2; Faculty=2 additional.

*From the table on page 3, indicate number of faculty (and instructional FTE) teaching in the undergraduate program.

a. Provide a brief assessment of the quality of the faculty/staff using the data from the table above as well as any additional relevant data. Programs should comment on details in regard to productivity of the faculty (i.e., some departments may have a few faculty producing the majority of the scholarship), efforts to recruit/retain faculty, departmental succession plans, course evaluation data, etc.

BSET program consists of five permanent faculty members, two dedicated full time to

3. Academic Program: Analyze the quality of the program as assessed by its curriculum and impact on students. Complete this section for each program (if more than one). Attach updated program assessment plan (s) as an appendix (refer to instructions in the WSU Program Review document for more information).

g. an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
h. an understanding of the need for and an ability to engage in self-directed continuing professional development;
i. an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
j. a knowledge of the impact of engineering technology solutions in a societal and global context; and

Table 2. Example of learning outcome assessment assigned to a specific course (ENGT 303)

Course:			Instructor:			
Semester:			Assignment:			
	1 Highly Unsuccessful	2 Moderately Unsuccessful	3 Neither Successful nor Unsuccessful	4 Moderately Successful	5 Highly Successful	Overall Score *70%* Average
Suboutcome:						
Suboutcome Count:			4		5	
Performance Indicators for Suboutcome: (Specific qualifications associated with each rating)	The student demonstrates no research of topic. Reader gains no insights.	The student demonstrates minimal research of topic. Reader is confused or may be misinformed.	The student demonstrates a reasonable amount of research combined with knowledge gained from class to produce a general analysis of a significant topic. Reader gains few insights.	The student demonstrates a reasonable amount of research combined with knowledge gained from class to produce a basic analysis of a significant topic.		

Feedback Loop:

Results of evaluation processes for the student outcomes and other available information are systematically used as input in the continuous improvement of the program. The results of course assessments are summarized by respective assessment leads for the three concentrations and submitted to the program director at the end of each semester. The survey of graduating seniors and employers are submitted directly to the program director. After analysis of the results, the documents are submitted to the assessment coordinator for the college. Trend analysis are performed at the end

Table 3b. Summary results for Outcome b

Ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

First 2-Year Evaluation Cycle				Assessment Results			
Course	Assessment Method	Frequency	Performance Target	Percent achieving ≥4 (sample size)			
				Fa13	Sp14	Fa14	Sp15

Table 3d. Summary results for Outcome d

Ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives

First 2-Year Evaluation Cycle				Assessment Results			
Course	Assessment Method	Frequency	Performance Target	Percent achieving ≥4 (sample size)			
				Fa13	Sp14	Fa14	Sp15
ENGT 401	Rubric measure of one assessment on the final project report: design systems, components, or processes	Every semester	At least 70% of students will achieve a score of 4 or higher on a scale of 1-5	Period used to develop and refine assessments		80% (5)	100% (2)
ENGT 402	Rubric measure of one assessment on the final project report: design systems, components, or processes	Every semester				75% (4)	100% (4)
Evaluation and Actions							
First 2-Year Cycle: In summer 2015, the ET faculty computed the composite measurement of the extent of attainment of *Outcome a* as 87%, the weighted average of all assessment results during the 2-year evaluation period. Extents of attainment of at least 70% indicate achievement of the outcome. Therefore, no required action was deemed necessary.							

Table 3e. Summary results for Outcome

Table 3f. Summary results for Outcome f

Ability to identify, analyze, and solve broadly-defined engineering technology problems

First 2-Year Evaluation Cycle				Assessment Results
Course	Assessment Method	Frequency	Performance Target	Percent achieving ≥4 (sample size)

Table 3g. Summary results for Outcome g

Ability to apply written, oral, and graphical

Table 3h. Summary results for Outcome h

Understanding of the need for and an ability to engage in self-directed continuing professional development

First 2-Year Evaluation Cycle				Assessment Results			
Course	Assessment Method	Frequency	Performance Target	Percent achieving ≥4 (sample size)			
				Fa13	Sp14	Fa14	Sp15
ENGT 401	Rubric measure of assignment on continuing professional development plan	Every semester	At least 70% of students will achieve a score of 4 or higher on a scale of 1-5	Period used to develop and refine assessments		80% (5)	60% (2)
ENGT 402	Rubric measure of assignment on continuing professional development plan	Every semester				75% (4)	75% (4)

Table 3k. Summary results for Outcome k

Commitment to quality, timeliness, and continuous improvement

First 2-Year Evaluation Cycle				Assessment Results			
Course	Assessment Method	Frequency	Performance Target	Percent achieving ≥4 (sample size)			
				Fa13	Sp14	Fa14	Sp15
ENGT 401	Rubric measure of two assessments: project deadlines and quality of the final project report	Every semester	At least 70% of students will achieve a score of 4 or higher on a scale of 1-5	Period used to develop and refine assessments		90% (5)	60% (2)
ENGT 402	Rubric measure of two assessments: project deadlines and quality of the final project report	Every semester				75% (4)	75% (4)
Evaluation and Actions							
First 2-Year Cycle: In summer 2015, the ET faculty computed the composite measurement of the extent of attainment of *Outcome a* as 78%, the weighted average of all assessment results during the 2-year evaluation period. Extents of attainment of at least 70% indicate achievement of the outcome. Therefore, no required action was deemed necessary.							

d. Indicate whether the program is accredited by a specialty accrediting body including the next review date and concerns from the last review.

The Bachelor of Science in Engineering Technology program submitted the first ABET self-study report in Summer 2015. The ABET accreditation team is scheduled to visit in September 2015.

e. Provide a brief assessment of the overall quality of the academic program using the data from 3a – 3f and other information you may collect, including outstanding student work (e.g., outstanding scholarship, inductions into honor organizations, publications, special awards, academic scholarships, student recruitment and retention).

The undergraduate programs in Engineering Technology are regularly collecting data on learner outcomes. Core competency exams and satisfaction with core courses are assessed each year. Beginning in Spring 2015 all undergraduate students participate in at least one open house project presentation before they graduate.

Overall, the Engineering Technology program has a sound curriculum as evidenced by the data collected under assessment for the BSET program. There is a good assessment system for the undergraduate program. Most of the students also have coop/internships in their junior/senior year.

4. Analyze the student need and employer demand for the program. Complete for each program if

	Year 1 (Fall 2012)	1	1	0	0	1	0	10	1	0	0	0	0	0	0	0	0	0	0	
	Year 2 (Fall 2013)	7	7	1	2	2	0	19	0	2										
	Year 3 (Fall 2014)																			

5. Analyze the cost of the program and service the Program provides to the discipline, other programs at the University, and beyond. Complete for each program if appropriate (refer to instructions in the WSU Program Review document for more information on completing this section).

Percentage of SCH Taken By (last 3 years)			
Fall Semester	Year 1	Year 2	Year 3
UG Majors	100	100	N/A
Gr Majors			
Non-Majors			

4. Initiate an engineering technology student organization.
5. Increase undergraduate enrollment and graduation through the program.
6. Increase applied research output for the program.
7. Develop collaborative programs with other departments/programs at WSU.