ENGINEERING TECHNOLOGY

PROGRAM EVALUATION REPORT

*Effective for evaluations during the 2017-2018 Accreditation Cycle*

This form is to be used by each team member to record program data and information during the fact finding and evaluation process. Use the following quality ratings throughout the form:

|  |  |
| --- | --- |
| **E** | Exceptional; strong, effective practice or condition |
| **S** | Satisfactory; fully meets the criterion |
| **O** | Observation; a suggestion offered to improve a program |
| **C** | Concern; criterion satisfied; however, the potential exists for the situation to change |
| **W** | Weakness; lacks strength and remedial action is required. |
| **D** | Deficient; fails to meet the criterion, and corrective action is required. |
| **X** | Not Applicable |

Enter your quality rating next to each topic. A “Finding” is any topic rated other than S or X. For all findings rated C, W, or D enter explanatory comments and ratings for each of the four performance elements. Appropriate comments should be entered for ratings of E or O. Record all findings on Form T301.

*Note: This document can be completed electronically using Microsoft Word. Place the cursor where you wish to type on forms. Place the cursor in the check boxes on page 3 and enter an “X” where needed. Tables work as usual.*

At the conclusion of the visit, leave the original of this form with the team chair, who will use it to prepare the draft statement to the institution.

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# General

(Items in parenthesis refer to applicable ETAC Criteria or to sections in the Accreditation Policy and Procedure Manual, e.g., APPM-1.D.1.f.

|  |
| --- |
| Program Identification |
| Institution  | Program Name (APPM-I.C.3 and I.C.4) |
| Evaluated By: | Society Represented: |
| Applicable Program Criteria: |
| Academic Term Semester Quarter Other  |
| Degree(s) Awarded Associate Baccalaureate Other  |
|  *Specify*2 Yr 4 or 5 Yr 2 + 2 Yr Upper Division Closely-Related Other  |
| **Offerings** | **Locations, Descriptions (as applicable)** |
| Options (APPM-1.D.1.f) |  |
| Evening  |  |
| Remote Locations (APPM-1.D.1.f) |  |
| Alternate Delivery (APPM-1.D.1.f) |  |
| Cooperative Education (Criterion 5) |  |
| Describe any unique aspects of the program: |

# Criterion 1 - Students

**1.A. Performance: *Evaluate the extent to which the program attains the following elements of Criterion 1.***

|  |  |  |
| --- | --- | --- |
| Objective | Quality Rating | Comment |
| 1. Policies for admission to the program exist and are enforced.
 |  |  |
| 1. Student performance is evaluated and student progress through curriculum is monitored.
 |  |  |
| 1. Prerequisites are enforced and any waivers documented.
 |  |  |
| Policies exist and are enforced for accepting transfer students and transfer credit. |  |  |
| Adequate procedures exist and are used for student advisement regarding curriculum and career matters. |  |  |
| Policies exist, are documented, and enforced for awarding credit in lieu of courses [note that not granting such credit is an acceptable policy]. |  |  |
| Policies exist and are enforced for ensuring and documenting that each graduate meets all program graduation requirements. |  |  |

**1.B. Summary: *Summarize the extent to which Criterion 1 is met*.**

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 1** | **Quality Rating** | **Comment** |
| Extent to which Criterion 1 is met. |  |  |

# Criterion 2 - Program Educational Objectives

**2.A. Performance: *Evaluate the extent to which the program attains the following elements of Criterion 2.***

|  |  |  |
| --- | --- | --- |
| Objective | Quality Rating | Comment |
| a. There are published program educational objectives consistent with the mission of the institution, constituency needs, and ETAC Criteria. |  |  |
| b. The key constituencies served by the program are stated. |  |  |
| c. There is a documented process for periodic review of the PEOs by the key constituencies as stated by the program.  |  |  |
| d. The documented process is utilized and effective; involves stated program constituencies so that the PEOs remain consistent with the mission of the institution, the needs of the program’s constituencies, and the ETAC Criteria. |  |  |

**2.B. Summary: *Summarize the extent to which Criterion 2 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 2** | **Quality Rating** | **Comment** |
| Extent to which Criterion 2 is met. |  |  |

# Criterion 3 - Student Outcomes

**3.A. Performance: *Evaluate the extent to which the baccalaureate or associate program student outcomes encompass the following elements of Criterion 3:***

| Baccalaureate Degree Student Outcomes | Quality Rating | Comment |
| --- | --- | --- |
| a. The program has student outcomes that are documented, clearly defined, and adequate in breadth and depth to encompass all the learned capabilities in 3a - 3k. Comment on each. |  |  |
| 3a. An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities. |  |  |
| 3b. An 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. |  |  |
| 3c. An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes. |  |  |
| 3d. An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives. |  |  |
| 3e. An ability to function effectively as a member or leader on a technical team. |  |  |
| 3f. An ability to identify, analyze, and solve broadly-defined engineering technology problems. |  |  |
| 3g. An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to use appropriate technical literature. |  |  |
| 3h. An understanding of the need for and an ability to engage in self-directed continuing professional development.  |  |  |
| 3i. An understanding of, and a commitment to address, professional and ethical responsibilities, including a respect for diversity. |  |  |
| 3j. A knowledge of the impact of engineering technology solutions in a societal and global contex. |  |  |
| 3k. A commitment to quality, timeliness, and continuous improvement. |  |  |
| b. There is a documented and effective process for the periodic review and revision of Baccalaureate Degree student outcomes. |  |  |
| c. The Baccalaureate Degree student outcomes prepare graduates to attain the PEOs adopted by the program. |  |  |

| Associate Degree Student Outcomes | Quality Rating | Comment |
| --- | --- | --- |
| a. The program has student outcomes that are documented, clearly defined, and adequate in breadth and depth to encompass all the learned capabilities in 3a - 3i. Comment on each. |  |  |
| 3a. An ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly-defined engineering technology activities. |  |   |
| 3b. An ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge. |  |  |
| 3c. An ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments. |  |  |
| 3d. An ability to function effectively as a member of a technical team. |  |  |
| 3e. An ability to identify, analyze, and solve narrowly-defined engineering technology problems. |  |  |
| 3f. An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and the ability to use appropriate technical literature. |  |  |
| 3g. An understanding of the need for and an ability to engage in self-directed continuing professional development. |  |  |
| 3h. An understanding of, and a commitment to address, professional and ethical responsibilities, including a respect for diversity. |  |  |
| 3i. A commitment to quality, timeliness, and continuous improvement. |  |  |
| b. There is a documented and effective process for the periodic review and revision of Associate Degree student outcomes. |  |  |
| c. The Associate Degree student outcomes prepare graduates to attain the PEOs adopted by the program. |  |  |

**3.B. Summary: *Summarize the extent to which Criterion 3 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 3** | **Quality Rating** | **Comment** |
| Extent to which Criterion 3 is met. |  |  |

# Criterion 4 - Continuous Improvement

**4.A. Performance: *Evaluate the assessment, evaluation, and improvement processes for the program with regard to the following Criterion 4 requirements.***

| Element | **Quality****Rating** | **Comment** |
| --- | --- | --- |
| a. There is a documented process for continuous improvement of the program that includes assessment of student outcome attainment, evaluation of the assessment results, and use of these evaluations as input for continuous improvement decisions. |  |  |
| b. All student outcomes are included in the assessment, evaluation and continuous improvement process. |  |  |
| c. Appropriate assessment tools and metrics are used, yielding valid data for evaluating the extent to which student outcomes are attained. |  |  |
| d. Assessment data collection is performed on a regular basis, as scheduled in documentation. |  |  |
| e. Evaluation of assessment data to determine the extent to which the student outcomes are being attained is performed on a regular basis, as scheduled in the documentation. |  |  |
| f. Evaluation results are used as input for continuous program improvement decisions and actions. |  |  |

**4.B. Summary: *Summarize the extent to which Criterion 4 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 4** | **Quality Rating** | **Comment** |
| Extent to which Criterion 4 is met. |  |  |

# Criterion 5 - Curriculum

**5.A. Performance: *Evaluate the extent to which the program demonstrates the following characteristics required by the Criterion.***

|  |  |  |
| --- | --- | --- |
| GENERAL | Quality Rating | Comment |
| Curriculum effectively develops subject areas in support of student outcomes and program educational objectives. |  |  |

| CURRICULUM  | Quality Rating | Comment |
| --- | --- | --- |
| **Mathematics -** The curriculum provides: |  |  |
| 1. Algebra and trigonometry appropriate to the student outcomes and program educational objectives for an associate degree program.
 |  |  |
| 1. Baccalaureate program includes integral and differential calculus or other mathematics appropriate to the student outcomes and program educational objectives.
 |  |  |
| **Technical Content -** The program must focus on the applied aspects of science and engineering and must: |  |  |
| 1. Represent at least 1/3, but no more than 2/3 of the total credit hours.
 |  |  |
| 1. Include a technical core that prepares students for increasingly complex technical specialties of the program.
 |  |  |
| 1. Develop student competency in the use of equipment and tools common to the discipline.
 |  |  |
| **Physical & Natural Sciences -** The program provides physical or natural science laboratory experiences appropriate to the discipline. |  |  |
| **Capstone or other integrating experiences -** Baccalaureate degree programs provide a capstone or other integrating experiences that develop student competencies in applying both technical and nontechnical problem-solving skills. |  |  |
| **Cooperative Education -** When used to satisfy prescribed elements of these criteria**,** cooperative internships or similar experiences must include an appropriate academic component evaluated by the program faculty. |  |  |
| **Advisory Committee -** The committee, with representation from organizations served by the program graduates must: |  |  |
| 1. Periodically review the curriculum.
 |  |  |
| 1. Advise the program on establishment, review, and revision of program educational objectives.
 |  |  |
| 1. Provide advisement on current and future aspects of the technical fields for which the graduates are being prepared.
 |  |  |

**5.B. Summary: *Summarize the extent to which Criterion 5 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 5** | **Quality Rating** | **Comment** |
| Extent to which Criterion 5 is met. |  |  |

# Criterion 6 - Faculty

**6.A. Performance: *Evaluate the extent to which the faculty demonstrate the following characteristics required by the Criterion.***

|  |  |  |
| --- | --- | --- |
| Characteristic | Quality Rating | Comment |
| a. Individual faculty member demonstrate appropriate competence factors such as:* Expertise and educational background
* Professional credentials and certifications
* Relevant industrial/professional experience
* Teaching effectiveness
* Ongoing professional development
* Ability to communicate
* Contributions to the discipline
 |  |  |
| b. Collectively, the faculty has breadth and depth adequate to cover all program curricular areas. |  |  |
| c. The size of the faculty is sufficient to maintain continuity, stability, oversight, and to provide student interaction and advising. |  |  |
| d. The faculty has adequate responsibility and authority to define, and revise program educational objectives and student outcomes as well as implementation of a program of study that fosters attainment of student outcomes. |  |  |

**6.B. Summary: *Summarize the extent to which Criterion 6 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 6** | **Quality Rating** | **Comment** |
| Extent to which Criterion 6 is met. |  |  |

# Criterion 7 - Facilities

**7.A. Performance: *Evaluate the following characteristics related to the engineering technology facilities that are required by this Criterion.***

|  |  |  |
| --- | --- | --- |
| Characteristic | Quality Rating | Comment |
| a. Classrooms, offices, and laboratories:* Suitable to support attainment of student outcomes
* Provide an atmosphere conducive to learning.
 |  |  |
| b. Modern tools, equipment, computing resources, and laboratories:* Appropriate to the program and to support program needs
* Available, and systematically maintained and upgraded
* Appropriate guidance for student usage is available
 |  |  |
| c. There are appropriate information resources to support the scholarly activities of students and faculty, e.g.:* Library
* Internet access
* Equipment catalogs
* Professional technical publications
* Manuals of industrial processes
 |  |  |

**7.B. Summary: *Summarize the extent to which Criterion 7 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 7** | **Quality Rating** | **Comment** |
| Extent to which Criterion 7 is met. |  |  |

# Criterion 8 - Institutional Support

**8.A. Performance: *Evaluate the support and financial resources for the program by the institution and employers as required by this Criterion.***

|  |  |  |
| --- | --- | --- |
| Characteristic | Quality Rating | Comment |
| a. Adequate institutional support and leadership to assure the quality and continuity of the program. |  |  |
| b. Sufficient resources (institutional services, financial support, and staff) to provide an environment to which student outcomes can be attained. |  |  |
| c. Sufficient resources (institutional services, financial support, and staff) to attract, retain, and provide for the continued professional development of a qualified faculty. |  |  |
| d. Sufficient resources (institutional services, financial support, and human resources staff) to acquire, maintain, update, and operate infrastructure, facilities and equipment appropriate to the program. |  |  |
| e. Sufficient resources (institutional services, financial support, and staff) to meet program needs. |  |  |

**8.B. Summary: *Summarize the extent to which Criterion 8 is met.***

|  |  |  |
| --- | --- | --- |
| **Summary for Criterion 8** | **Quality Rating** | **Comment** |
| Extent to which Criterion 8 is met. |  |  |

# Program Criteria

**Performance: *If specific program criteria apply to this program, enter the title(s)****.* ***If needed, reproduce this entire section for each set of program-specific criteria that apply.***

 ***Criteria title Date of criteria document***

***For each element of these criteria, enter a brief description and record appropriate quality ratings for each. Add rows as needed.***

|  |  |  |
| --- | --- | --- |
| Element | **Quality****Rating** | **Comment** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary: *Summarize the extent to which program specific criteria are met. [Comments and suggestions regarding possible improvements to the Program Criteria should be directed to the appropriate society and the ETAC Criteria Committee.]***

|  |  |  |
| --- | --- | --- |
| **Summary for Program-Specific Criteria** | **Quality Rating** | **Comment** |
| Extent to which program-specific criteria are met. |  |  |

# Accreditation Policy and Procedure Manual (APPM)

|  |  |  |
| --- | --- | --- |
| **APPM Requirements** | **Quality Rating** | **Comment** |
| I.A.4 Use of same name for accredited program and non-accredited program. |  |  |
| I.A.6 Accredited programs identified as “accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org” |  |  |
| I.A.6.a Accredited programs must publicly state their educational objectives and student outcomes. |  |  |
| I.A.6.b Accredited programs must publicly post annual enrollment and graduation data per program. |  |  |
| I.C.4.b Program name must be shown consistently on transcripts, all publications, and the Request for Evaluation (RFE). |  |  |
| I.C.4.c.(2) All program criteria for any implied program specialization must be satisfied. |  |  |
| I.C.5.a To be eligible for an initial accreditation review, a program must have at least one graduate within the academic year prior to the academic year of the on-site review. |  |  |
| I.E.1 All paths to completion of the program must satisfy the appropriate criteria. |  |  |
| I.E.5.b.(1) Facilities used by program are adequate and safe for intended purposes. |  |  |
| I.E.5.b.(2) Displayed course materials include syllabi, textbooks, example assignments and exams, and examples of student work. |  |  |
| Other APPM requirements. |  |  |

# Corrective Action on Previous ETAC of ABET Findings

**List the unresolved findings from the most recent ETAC Final Statement for this program and briefly describe the corrective action given in the self study or found during the site visit. Describe findings not yet resolved.**

|  |  |  |
| --- | --- | --- |
| **Unresolved findings from previous accreditation actions and brief statement of corrective actions reported in the self study or found during the site visit.** | **New quality rating** | **Details of findings not yet resolved** |
|  |  |  |

|  |
| --- |
| **General Comments**:  |

# Baccalaureate Degree Program Review Worksheet

|  |  |
| --- | --- |
| Institution:  | Program:  |
| Evaluated By:  |

*Enter the appropriate quality rating for each topic for each of the days indicated*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Previsit** | **Day 1** | **Day 2** | **Comment** |
| **1. Students** |  |  |  |  |
| **2. Program Educational Objectives** |  |  |  |  |
| **3. Student Outcomes** |  |  |  |  |
| 1. Knowledge and skills
 |  |  |  |  |
| 1. Apply knowledge, and adapt to emerging applications
 |  |  |  |  |
| 1. Conduct, analyze, and interpret experiments, and apply results
 |  |  |  |  |
| 1. Design creativeness
 |  |  |  |  |
| 1. Teamwork
 |  |  |  |  |
| 1. Technical problem solving
 |  |  |  |  |
| 1. Communications
 |  |  |  |  |
| 1. Continuing professional development
 |  |  |  |  |
| 1. Professional and ethical responsibilities and diversity
 |  |  |  |  |
| 1. Engineering technology solutions in societal and global context
 |  |  |  |  |
| 1. Commitment to quality, timeliness, and continuous improvement
 |  |  |  |  |
| **4. Continuous Improvement** |  |  |  |  |
| **5. Curriculum** |  |  |  |  |
| **6. Faculty** |  |  |  |  |
| **7. Facilities** |  |  |  |  |
| **8. Institutional Support** |  |  |  |  |
| **Program Criteria** |  |  |  |  |
| **Accreditation Policy and Procedure** |  |  |  |  |
| **Corrective Actions on Previous Unresolved ETAC of ABET Findings** |  |  |  |  |

# Associate Degree Program Review Worksheet

|  |  |
| --- | --- |
| Institution:  | Program:  |
| Evaluated By:  |

*Enter the appropriate quality rating for each topic for each of the days indicated*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Previsit** | **Day 1** | **Day 2** | **Comment** |
| **1. Students** |  |  |  |  |
| **2. Program Educational Objectives** |  |  |  |  |
| **3. Student Outcomes** |  |  |  |  |
| 1. Knowledge and skills
 |  |  |  |  |
| 1. Apply knowledge, and adapt to applications needing extensive practical knowledge
 |  |  |  |  |
| 1. Conduct, analyze, and interpret experiments
 |  |  |  |  |
| 1. Teamwork
 |  |  |  |  |
| 1. Technical problem solving
 |  |  |  |  |
| 1. Communications
 |  |  |  |  |
| 1. Continuing professional development
 |  |  |  |  |
| 1. Professional and ethical responsibilities and diversity
 |  |  |  |  |
| 1. Commitment to quality, timeliness, and continuous improvement
 |  |  |  |  |
| **4. Continuous Improvement** |  |  |  |  |
| **5. Curriculum** |  |  |  |  |
| **6. Faculty** |  |  |  |  |
| **7. Facilities** |  |  |  |  |
| **8. Institutional Support** |  |  |  |  |
| **Program Criteria** |  |  |  |  |
| **Accreditation Policy and Procedure** |  |  |  |  |
| **Corrective Actions on Previous Unresolved ETAC of ABET Findings** |  |  |  |  |

# PROGRAM SUMMARY

*Summarize findings using the ratings E, S, O, C, W, D, or X. Multiple ratings can be entered for an item*

|  |
| --- |
| **Institution:** **Visit Dates:**  |
| **Program Title:**  |
| **Program Criteria Title and Date:**  |
| **Accreditation**: **Initial**  |  | **Or Reaccreditation** |  |  **Degree:**  | **Recommended Action\*** |
| **Program Evaluator Print & Sign:** **Society:**  |  **NGR IR IV SC VE SE NA** |
| **Team Chair Print & Sign:** |  **NGR IR IV SC VE SE NA** |
| **Program Arrangement: 2yr.** |  | **4 or 5 yr.** |  | **2 + 2** |  | **Upper Division** |  | **Closely-Related** |  |  |
| **Multiple Campuses** |  | **Distance Education** |  | **Other Alternative Learning** |  |  |
| **If applicable, enter the date of initial accreditation from the previous page:**  |
| **Evaluation Summary** |
| **CRITERION** | **QUALITY RATING** | **COMMENTS** |
| 1. Students |  |  |
| 2. Program Educational Objectives |  |  |
| 3. Student Outcomes |  |  |
| 4. Continuous Improvement |  |  |
| 5. Curriculum |  |  |
| 6. Faculty |  |  |
| 7. Facilities |  |  |
| 8. Institutional Support |  |  |
| Program Criteria |  |  |
| Accreditation Policy and Procedure |  |  |
| Corrective Action on Previous ETAC of ABET Findings |  |  |

\* Definitions of Recommended Actions are found in the APPM (Paragraph I.E.12)