Example Basic Information, Curriculum Analysis and Transcript Analysis of the ABET EAC E74 Program Evaluator Report Form for Civil Engineering Programs

Prepared by the ASCE Committee on Accreditation Operations

During reviews of Program Evaluator (PEV) forms submitted as a part of the annual evaluation of PEVs, the Committee on Accreditation Operations (COAO) has noticed a wide variety of form completing practices. In some cases, important information has been omitted from the report forms. In other cases, the PEV has spent considerable time and effort tabulating information that is beyond what is needed.

COAO concluded that a series of examples would be helpful to PEVs, and completed E74 forms including the portions for the Basic Information Sheet, Curriculum Analysis and Transcript Analysis are attached along with notes to guide the PEV.

Various items and issues need to be discussed as needed in other forms. For example:

- Any item constituting a shortcoming should be discussed in the E62 Program Evaluator Worksheet, in the E74 Exit Statement, and repeated in the E61B Program Audit Form.
- The specific civil engineering additional basic science course options should be mentioned in the Program Evaluator Worksheet under Program Criteria rather than in the curriculum analysis or transcript analysis. Similar Worksheet comments would be included for other program criteria.

The attached Example is not intended to prohibit a PEV from providing extra information, but it is hoped that it will help assure that essential information is provided in a reasonably common format. It is also hoped that the guidance will reduce the time necessary for this portion of PEV’s review task.
PROGRAM EVALUATOR REPORT FOR 2011-2012 VISITS
BASIC INFORMATION SHEET

Evaluation of Program in Civil Engineering
Title of Program

At Example State University
Official Name of Institution

Dates of Visit: October 1 – 3, 20XX

Evaluated by: Phillip E. Vision
Name

1245 Maple Street, Sometown, ST xxxxx-xxxx
Address

xxx-xxx-xxxx yyyy-yyyy-zzzz
Office Phone Home Phone Fax

PEVision@email.org
e-mail

Society Represented by Program Evaluator: American Society of Civil Engineers
Society

Evaluation conducted in accordance with EAC General Criteria and the following applicable Program Criteria:

Civil Engineering
Program Criteria

LIST OF PERSONS INTERVIEWED

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. William Goodhead</td>
<td>Professor &amp; Head, Civil, Construction and Environmental Engr. Dept.</td>
</tr>
<tr>
<td>Drs. Martin Dillon and Tom Black</td>
<td>Professor of CCEE</td>
</tr>
<tr>
<td>Drs. Li Chou and Warren Tucker</td>
<td>Associate Professor of CCEE</td>
</tr>
<tr>
<td>Dr. George Johnson</td>
<td>Associate Professor of CCEE and ABET Coordinator</td>
</tr>
<tr>
<td>Drs. Juan Diaz and Paul Kim</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Drs. Mary Brown and Howard Owen</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Mr. James Smith and Ms. Zhn Tran</td>
<td>Chair and Member, Advisory Board</td>
</tr>
<tr>
<td>Ms Carla Sims and Mr. Said Elbarady</td>
<td>ASCE Student Chapter President, EWB Secretary</td>
</tr>
<tr>
<td>Drs. Brenda Plus and David Minus</td>
<td>Assoc. Head &amp; Assoc.Prof.; Prof.- Math &amp; Statistics</td>
</tr>
<tr>
<td>29 Students in CCE 470</td>
<td>Seniors in Civil Engineering</td>
</tr>
</tbody>
</table>
ABET, Inc.
Engineering Accreditation Commission

CURRICULUM ANALYSIS

Institution Example State University Program Civil Engineering

PLEASE COMPLETE TWO DRAFT COPIES OF THIS WORKSHEET PRIOR TO YOUR ARRIVAL AT THE INSTITUTION AND PROVIDE ONE COPY OF THE CURRICULUM ANALYSIS TO YOUR TEAM CHAIR AT THE START OF THE VISIT. INCLUDE A COPY IN YOUR REPORT, REVISED AS NECESSARY TO REFLECT YOUR ANALYSIS OF ACTUAL COURSE CONTENT DURING THE VISIT.

<table>
<thead>
<tr>
<th>Curricular Category</th>
<th>Number of Credits*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Criteria Requirement</td>
</tr>
<tr>
<td>College-level Mathematics and Basic Sciences</td>
<td>32</td>
</tr>
<tr>
<td>Engineering Topics</td>
<td>48</td>
</tr>
<tr>
<td>General Education</td>
<td>24</td>
</tr>
</tbody>
</table>

Please List Below Any Applicable Program Criteria Requirements:
- Math through differential equations
  - Yes
- Chemistry, calculus based physics
  - Yes
- Additional basic science
  - Yes (GEO 102)
- Apply 4 technical areas of CE
  - Yes
- Conduct CE experiments; analyze data
  - Yes
- Design system, component, process
  - Yes
- Explain: management, bus., policy, etc
  - Yes
- Explain import. of professional licensure
  - Yes

* One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

<table>
<thead>
<tr>
<th>Are curricular requirements met in each of the following areas?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major design experience based on knowledge and skills acquired in earlier course work.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Major design experience incorporates appropriate engineering standards and multiple realistic constraints.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Other requirements contained in applicable program criteria</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

If “no” is checked in any of the above categories, please describe the specific weakness or deficiency on the Explanation of Shortcomings Form.
TRANSCRIPT ANALYSIS

Institution  Example State University  Program  Civil Engineering

PLEASE COMPLETE TWO DRAFT COPIES OF THIS WORKSHEET PRIOR TO YOUR ARRIVAL AT THE INSTITUTION AND PROVIDE ONE COPY TO YOUR TEAM CHAIR AT THE START OF THE VISIT. PLEASE INCLUDE A COPY IN YOUR REPORT, REVISED IF NECESSARY TO REFLECT YOUR ANALYSIS OF ACTUAL COURSE CONTENT.

<table>
<thead>
<tr>
<th>ABET Curricular Category</th>
<th>Number of Credits*</th>
<th>Credits Actually Earned by Student Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABET Criteria Requirement</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
</tr>
<tr>
<td>College-level Mathematics and Basic Sciences</td>
<td>32</td>
<td>32&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Engineering Topics</td>
<td>48</td>
<td>67</td>
</tr>
<tr>
<td>General Education</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Please List Below Any Applicable Program Criteria Requirements:

- Math through differential equations: Yes Yes Yes Yes Yes Yes
- Chemistry, calculus based physics: Yes Yes Yes Yes Yes Yes
- Additional basic science: NA Yes Yes NA Yes Yes
- Apply 4 technical areas of CE: Yes Yes Yes Yes Yes Yes
- Conduct CE experiments; analyze data: Yes Yes Yes Yes Yes Yes
- Design system, component, process: Yes Yes Yes Yes Yes Yes
- Explain: management, bus., policy, etc: Yes Yes Yes Yes Yes Yes
- Explain import. of professional licensure: Yes Yes Yes Yes Yes Yes

* Computed as in curriculum analysis table.

<sup>a</sup> Less basic science since enrolled in previous curriculum version.

Notes for PEV from COAO:

- List program criteria requirements. Add lines to tables as necessary. Indicate with a “yes” or “no” whether the requirement is met (do not use an “X” which could mean either.). For program criteria requirement, it is not necessary to list hours involved.

- Transcript Analysis hour distribution is based on comparison to the Self-Study Table 5-1, not the PEV’s evaluation of the curriculum. The objective is to evaluate whether the program is guiding and requiring students to meet the program’s stated requirements. PEVs sometimes add helpful notes. In this case, two students were on an earlier curriculum version before the “additional basic science” was required by the program criteria.