

UNIVERSITY OF BRITISH COLUMBIA CIVIL ENGINEERING PROGRAM ACCREDITATION

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GRADUATE ATTRIBUTES AND CONTINUAL IMPROVEMENT

DOSSIER FOR THE CEAB VISITING TEAM

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Executive Summary

The Department of Civil Engineering at the University of British Columbia formally initiated program assessment and improvement activities in 2008. The Dossier presented here summarizes and builds on results from this early work. It includes:

- A curriculum assessment and improvement framework and step-by-step assessment process
- An overarching program improvement process
- A data collection methodology
- The characteristics of high quality data
- Summaries of course-based, and student survey data
- A discussion of data
- Conclusions and next steps in curriculum improvements.

The 2013-2014 assessment found gaps between CIVL program indicators and student performance measures respecting four Attributes, namely:

- Attribute 5: Use of Engineering Tools
- Attribute 7: Communication
- Attribute 9: Impact of Engineering on Society and the Environment
- Attribute 10: Ethics and Equity

These gaps are summarized in Figure i below (which is Figure 7 on page 20 in the body of the dossier).

2013-2014 Course-Based and Survey Data

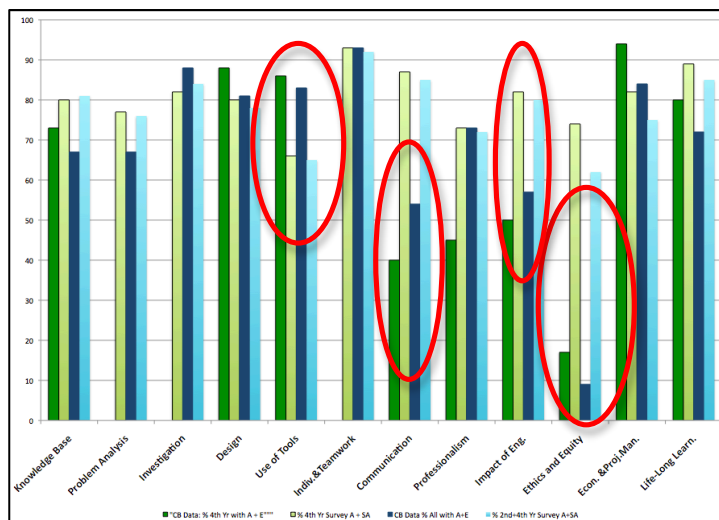


Figure i. The conflated data collected in 2013-2014 provides a broad picture of the quality of the civil engineering program and the achievement of the 2014 graduating class. The green hue bars are 4th year data. Dark green is the Course-based data and light green is the student survey data. The dark blue line is course-based data taken from different levels within the program. The light blue is the combined 2nd and 4th year student survey data.

Recently created ad hoc committees are now charged with making recommendations for improvement to the Civil Engineering Department before February, 2015. Other actions aimed at improving the four attributes are described in the dossier (section 8.1, p. 56).

In addition to action related to the four Attributes mentioned above, a fifth ad hoc committee is charged with reviewing and improving the data collection process with the aim of gathering the highest quality information on which subsequent program improvement decisions can be based.

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- 1 2008-2013 Program Improvement Cycle Reports
- 2 Curriculum Map Based on CEAB Content Level Codes
- 3 Protocol for Attributes 9 and 10 Assessment of Student Performance by Young Alumni
- 4 All Data (Course-Based, Survey, Other)
- 5 Report on Communication Skills in the Civil Engineering Program (Feb. 2014)

APPENDIX 1. 2008-2013 Program Improvement Cycle Reports

**APPENDIX 2. Curriculum Map Based on
CEAB Content Level Codes**

**APPENDIX 3. Protocol for Attributes 9 and 10 Assessment of
Student Performance by Young Alumni**

APPENDIX 4. All Data

**APPENDIX 5. Report on Communication Skills in the Civil
Engineering Program (Feb. 2014)**