An Introduction to ABET

The Essential Facts
Computer Science
University of Wyoming
Accreditation: The Basics

• In the U.S., accreditation is a non-governmental, peer-review process
• To assure quality of postsecondary education
• Two Types
  – Institutional
    • e.g. regional accreditation of colleges and universities
  – Specialized
    • specific programs of study

Ref: http://www.abet.org/the_basics.shtml
What is ABET Accreditation?

• Specialized accreditation
  – Applied science, computing, engineering, technology

• “ABET accredits programs only, not degrees, departments, colleges or institutions.”
Who Sets ABET Quality Standards?

- The ABET professions themselves
- Many different professional and technical societies
  - Develop the standards
  - Provide the professionals who evaluate programs
Why is ABET Accreditation Important?

• Help students/parents select quality programs
• Enables employers to recruit well-prepared graduates
• Used by registration, licensure, and certification boards to screen candidates
• Provides a structured mechanism to assess, evaluate, and improve programs
The ABET Accreditation Process

• Institution requests an evaluation of program(s)
• Each program completes a self-study questionnaire
• Appropriate ABET commission forms an evaluation team
• Evaluation team reviews self-study and conducts on-campus visit
• Evaluation team provides written report
• Commission meets annually to review reports, recommended action, make final decision
• Accreditation is granted for a maximum of six years.
More Specifics of ABET

• ABET’s Four Accreditation Commissions
  – ASAC (Applied Science Accreditation Commission)
  – CAC (Computing Accreditation Commission)
  – EAC (Engineering Accreditation Commission)
  – TAC (Technology Accreditation Commission)

• As of October 2008, accredits ~2800 programs at ~600 colleges and universities.

• Accreditation requires one graduate at least.

ABET: Information for Programs Seeking Initial Accreditation: Answers to Frequently-Asked-Questions
ABET Board of Directors

- Applied Science Accreditation Commission
  - 71 accredited programs at 57 institutions

- Computing Accreditation Commission
  - 316 accredited programs (37 IS, 9 IT) at 256 institutions

- Engineering Accreditation Commission
  - 1,853 accredited programs at 383 institutions

- Technology Accreditation Commission
  - 649 accredited programs at 233 institutions

ABET: Leadership and Quality Assurance in Applied Science, Computing, Engineering, and Technology Education
Timeline of Typical General Review

- Request for Evaluation: January 31 of review year
- Invoice of visit fees: May 1 (team chair identified mid May)
- Self-study delivered to ABET: July 1
- Program evaluator(s) chosen: late July
- Institutional representatives orientation: usually July
- Visit date negotiable: September thru December
- Evaluation team visit
  - Team arrives Saturday or Sunday, preview Sunday
  - Visit Monday and Tuesday, exit interview with officials, Program Audit Form
  - Seven-day period for institution to respond to “errors of fact”
- Draft Statement prepared by team chair: few months later
  - Institution has 30-day “due process response period”
- Final Statement prepared
  - Reviewed at commission annual meeting: July (next year)
- Final accreditation action: August (next year)
CSAB, Inc.
(Formerly the Computing Sciences Accreditation Board, Inc.)

- The ABET “society” for computing accreditation
- A federation of ACM, IEEE-CS, and possibly others
- Cooperating society for Computer Engineering
- Develops program-specific accreditation criteria for lead society programs
CAC General Criteria

• Criterion 1. Students
• Criterion 2. Program Educational Objectives
• Criterion 3. Program Outcomes
• Criterion 4. Continuous Improvement
• Criterion 5. Curriculum
• Criterion 6. Faculty
• Criterion 7. Facilities
• Criterion 8. Support
• Criterion 9. Program Criteria
Criteria Compliance / Review Results / “Satisfied” vs. “Shortcomings”

• An accredited program must meet the intent of each criterion

  – If a program doesn’t meet the intent, it has a **deficiency** (either Not to Accredit or SC)
  – If a program meets the intent but lacks strength of compliance, it has a **weakness** (impacts term)
  – If a program meets the intent but observations indicate a potential for non-satisfaction in the future, there can be a **concern** (doesn’t impact term)
## Accreditation Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Typical Duration (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGR (Next General Review)</td>
<td>6</td>
</tr>
<tr>
<td>IR (Interim Report)</td>
<td>2</td>
</tr>
<tr>
<td>IV (Interim Visit)</td>
<td>2</td>
</tr>
<tr>
<td>SC (Show Cause)</td>
<td>2</td>
</tr>
<tr>
<td>RE (Report Extended)</td>
<td>2 or 4</td>
</tr>
<tr>
<td>VE (Visit Extended)</td>
<td>2 or 4</td>
</tr>
<tr>
<td>SE (Show Cause Extended)</td>
<td>1-5</td>
</tr>
<tr>
<td>NA (Not to Accredit)</td>
<td>—</td>
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