

EAC Commission Summit 2008

Wednesday, October 29, 2008
Louisville, KY

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*Leadership and Quality Assurance in Applied Science,
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Today's Theme

**“Preparing an Effective
Self-Study”**

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Effective Self-Study

- Describes how your program satisfies the criteria
- Organized clearly
- Well-written
- Complete



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Your Audience

- The program evaluator (PEV) will substantially evaluate your program based on your self-study.
- The PEV will form an opinion **before** arriving on campus based on your self-study.



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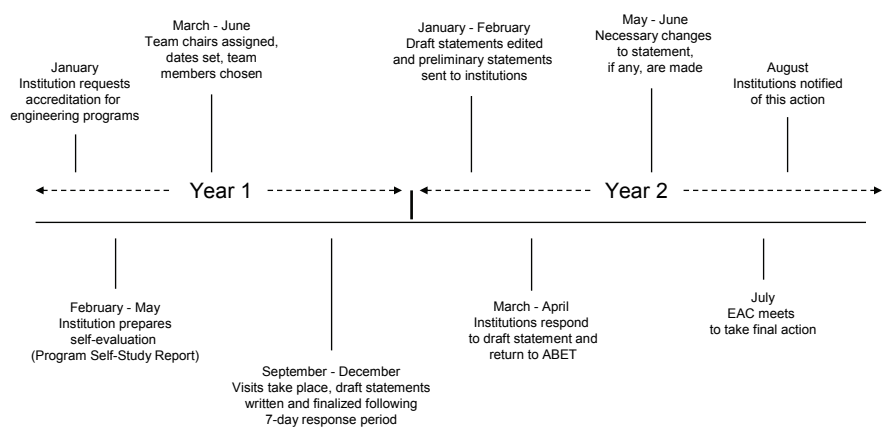
Today's Objectives

- Describe an effective self-study
- Know how to prepare an effective self-study
- Understand the role of the self-study in the accreditation process
- Know the processes used by the PEV and the team to make a recommendation and prepare a statement during the visit
- Know the process that leads to a final statement and accreditation decision for each program

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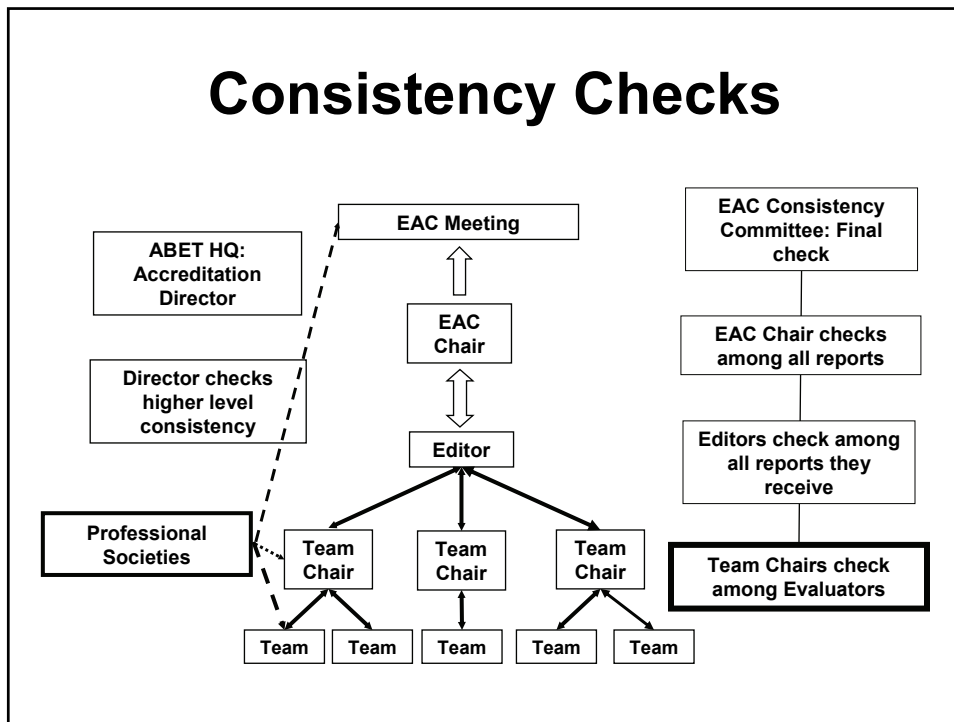
The Accreditation Timeline



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Consistency Checks



Resources for Program Evaluator (PEV)

- Self-study report
- Transcripts
- Catalog and degree requirements
- Other publications

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The PEV Must Determine If...

- Corrective actions were taken after previous visit.
- All students met graduation requirements.
- Students meet minimum accreditation requirements (math, basic sciences, engineering topics, engineering design, general education).
- Plus...



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From the Above Material, the PEV Must Determine If...

- Students took all courses in the proper order (prerequisites/co-requisites).
- All accreditation criteria are met.
- There are concerns, weaknesses and/or deficiencies for each criterion.



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And the PEV must make these decisions based upon material received before the visit and during a short two-day campus visit!



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Workshop Sessions

Preparing an Effective Self-Study



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Today's Workshop Leaders

- Jack Rutherford – EAC Chair
- Doug Bowman – EAC Chair-Elect



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Workshop Sessions

- **For each criterion and from a PEV's point of view, your group will use the self-study guide to determine what you would expect to see in the self-study:**

Part I – Brainstorm at your table

Part II – Selected groups report out



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EAC Accreditation Criteria 2008-2009 Accreditation Cycle

- 1) Students
- 2) Program Educational Objectives
- 3) Program Outcomes
- 4) Continuous Improvement
- 5) Curriculum
- 6) Faculty
- 7) Facilities
- 8) Support
- 9) Program Criteria



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Workshop Sessions



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Criterion 1 – Students

(Criteria for 2008-2009 Accreditation Cycle)

- The program must evaluate student performance, advise students regarding curricular and career matters, and monitor student's progress to foster their success in achieving program outcomes, thereby enabling them as graduates to attain program objectives.
- The program must have and enforce policies for the acceptance of transfer students and for the validation of courses taken for credit elsewhere.
- The program must also have and enforce procedures to assure that all students meet all program requirements.

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Criterion 1 – Students

(Self-Study Directions)

Summarize:

- Requirements and process for admission of students; complete Table 1-1.
- Process by which student performance is evaluated and student progress is monitored.
- Process by which students are advised regarding curricular and career matters.
- Requirements and process for accepting transfer students and transfer credit; complete Table 1-2.

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Criterion 1 – Students

(Self-Study Directions)

Summarize:

- Process for ensuring that each graduate completes all the graduation requirements for the program.
- Enrollment and graduation trends for the past five years; complete Table 1-3.
- Complete Table 1-4 program graduates.



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Criterion 1 Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 2 – Program Educational Objectives

(Criteria for 2008-2009 Accreditation Cycle)

Each program... must have in place:

- a) Published educational objectives that are consistent with the mission of the institution and these criteria
- b) A process that periodically documents and demonstrates that the objectives are based on the needs of the program's various constituencies
- c) An assessment and evaluation process that periodically documents and demonstrates the degree to which these objectives are attained.



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Criterion 2 – Program Educational Objectives

(Self-Study Directions)

- Provide a copy or summary of any applicable institutional, college, departmental, and program mission statements and document where they are published.
- List the program educational objectives and state where these are published.
- Describe how the program educational objectives are consistent with the mission of the institution.



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Criterion 2 – Program Educational Objectives

(Self-Study Directions)

- List and describe the program constituencies.
- Describe the process that periodically documents and demonstrates that the program educational objectives are based on the needs of the program's various constituencies.
- Describe the assessment and evaluation process that periodically documents and demonstrates the degree to which the program educational objectives are attained.



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Criterion 2 Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 3 – Program Outcomes

(Criteria for 2008-2009 Accreditation Cycle)

- Engineering programs must demonstrate that their students attain the following outcomes: (a) through (k).
- Program outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the program.
- Program outcomes must foster attainment of program educational objectives.
- There must be an assessment and evaluation process that periodically documents and demonstrates the degree to which the program outcomes are attained.



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Criterion 3 – Program Outcomes

(Self-Study Instructions)

- Describe the process used for establishing and revising program outcomes.
- List the program outcomes and describe how they encompass Criterion 3 and any applicable program criteria. Indicate where the program outcomes are documented.
- Describe how the program outcomes lead to the achievement of the program educational objectives.
- Describe the relationship of courses in the curriculum to the program outcomes.



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Criterion 3 – Program Outcomes (Self-Study Instructions)

- Describe by example how the evaluation team will be able to relate the display materials – i.e., course syllabi, sample student work, etc. – to each program outcome.
- Explain the assessment and evaluation processes that periodically document and demonstrate the degree to which the program outcomes are attained.
- Describe the level of achievement of each program outcome.
- Discuss what evidence will be provided to the evaluation team that supports the levels of achievement of each program outcome.

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Criterion 3 Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?

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Criterion 4 – Continuous Improvement

(Criteria for 2008-2009 Accreditation Cycle)

- Each program must show evidence of actions to improve the program. These actions should be based on available information, such as results from Criteria 2 and 3 processes.



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Criterion 4 – Continuous Improvement

(Self-Study Directions)

- Describe the available information, such as results from the Criteria 2 and 3 processes, commonly used in making decisions regarding program improvements.
- Describe actions taken to improve the program since the last general review. Indicate why (the basis for taking action) and when each action was implemented and the results of the implementation.



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Criterion 4

Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 5 – Curriculum

(Criteria for 2008-2009 Accreditation Cycle)

- The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses.
- The faculty must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program and institution.



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Criterion 5 – Curriculum

(Criteria for 2008-2009 Accreditation Cycle)

- The professional component must include:
 - a) One year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline
 - b) One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study...
 - c) A general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.



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Criterion 5 – Curriculum

(Criteria for 2008-2009 Accreditation Cycle)

- Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints.



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Criterion 5 – Curriculum

(Self-Study Directions)

- Describe how students are prepared for a professional career and further study in the discipline through the curriculum and indicate how the curriculum is consistent with the program educational objectives and program outcomes.
- Provide evidence that the minimum credit hours and distribution, as specified in Criterion 5, are met.
- Describe the culminating major design experience, including how it is based on the knowledge and skills acquired in earlier course work and how appropriate engineering standards and multiple realistic constraints are incorporated in the experience.



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Criterion 5 – Curriculum

(Self-Study Directions)

- Demonstrate that adequate time and attention are given to each curricular component, consistent with the outcomes and objectives of the program and the institution.
- Describe the provisions for any cooperative education that is used to satisfy curricular requirements. Include a description of the academic component evaluated by program faculty.
- Describe the additional materials that will be available for review during the visit to demonstrate achievement related to this criterion.
- Attach a flow chart showing the prerequisite structure of program's courses required or allowed towards the major.



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Criterion 5

Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 6 – Faculty

(Criteria for 2008-2009 Accreditation Cycle)

- The faculty must be of sufficient number and must have the competencies to cover all of the curricular areas of the program.
- There must be sufficient faculty to accommodate adequate levels of student-faculty interaction, student advising and counseling, university service activities, professional development, and interactions with industrial and professional practitioners, as well as employers of students.



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Criterion 6 – Faculty

(Criteria for 2008-2009 Accreditation Cycle)

- The program faculty must have appropriate qualifications and must have and demonstrate sufficient authority to ensure the proper guidance of the program and to develop and implement processes for the evaluation, assessment, and continuing improvement of the program, its educational objectives, and outcomes.
- The overall competence of the faculty may be judged by such factors as education, diversity of backgrounds, engineering experience, teaching effectiveness and experience, ability to communicate, enthusiasm for developing more effective programs, level of scholarship, participation in professional societies, and licensure as Professional Engineers.



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Criterion 6 – Faculty

(Self-Study Directions)

- Identify the person who has leadership responsibilities for the program. Describe the leadership and management responsibilities of that person.
- Describe the role played by the program faculty with respect to course creation, modification, and evaluation.
- Describe the roles played by others on the campus, e.g., Dean's Office, Provost's Office, with respect to these areas.
- Describe the process used to ensure consistency and quality of the courses taught.



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Criterion 6 – Faculty

(Self-Study Directions)

- Describe the composition, size, credentials, experience, and workload of the faculty that supports this program – complete Tables 6-1 and 6-2.
- Describe the competencies of the faculty and how they are adequate to cover all of the curricular areas of the program.
- Discuss the adequacy of the size of the faculty and describe the extent and quality of faculty involvement in interactions with students, student advising, service activities, and professional development.



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Criterion 6 – Faculty

(Self-Study Directions)

- Attach as Appendix B an abbreviated resume for each program faculty member with the rank of instructor or above. The format should be consistent for each resume, must not exceed two pages per person, and, at a minimum, must contain the following information:
 - Name and academic rank
 - Degrees with fields, institution, and date
 - Number of years of service on this faculty, including date of original appointment and dates of advancement in rank
 - Other related experience, i.e., teaching, industrial, etc.
 - Consulting, patents, etc.



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Criterion 6 – Faculty

(Self-Study Directions)

- States in which professionally licensed or certified, if applicable
- Principal publications of the last five years
- Scientific and professional societies of which a member
- Honors and awards
- Institutional and professional service in the last five years
- Percentage of time available for research or scholarly activities
- Percentage of time committed to the program



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Criterion 6 – Faculty

(Self-Study Directions)

- Describe the plan that is in place for faculty development and the funding available to execute this plan.
- Provide detailed descriptions of professional development activities for each faculty member.



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Criterion 6

Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 7 – Facilities

(Criteria for 2008-2009 Accreditation Cycle)

- Classrooms, laboratories, and associated equipment must be adequate to safely accomplish the program objectives and provide an atmosphere conducive to learning. Appropriate facilities must be available to foster faculty-student interaction and to create a climate that encourages professional development and professional activities. Programs must provide opportunities for students to learn the use of modern engineering tools. Computing and information infrastructures must be in place to support the scholarly activities of the students and faculty and the educational objectives of the program and institution.



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Criterion 7 – Facilities

(Self-Study Directions)

- Summarize the availability of program facilities and indicate how adequate they are for supporting the educational objectives and outcomes of the program.
- Discuss the following: Offices (administrative, faculty, clerical, teaching assistants), classrooms, laboratories, library.
- Describe the computing resources, hardware and software used for instruction. Specify any limitations that impact the student's ability to achieve the program's outcomes and the faculty's teaching and scholarly activities.
- Describe the laboratory equipment planning, acquisition, and maintenance processes and their adequacy.



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Criterion 7 – Facilities

(Self-Study Directions)

- Describe the type and number of support personnel available to install, maintain, and manage departmental hardware, software, and networks.
- Describe the type and number of support personnel available to install, maintain, and manage laboratory equipment.
- List major instructional and laboratory equipment and attach as Appendix C.



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Criterion 7

Group Assignment

You are a team of PEVs reviewing the self-study. What do you expect to see in it to convince you that the program is compliant with the criterion?



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Criterion 8 – Support

(Criteria for 2008-2009 Accreditation Cycle)

- Institutional support, financial resources, and constructive leadership must be adequate to assure the quality and continuity of the program. Resources must be sufficient to attract, retain, and provide for the continued professional development of a well-qualified faculty. Resources also must be sufficient to acquire, maintain, and operate facilities and equipment appropriate for the program. In addition, support personnel and institutional services must be adequate to meet program needs.



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Criterion 8 – Support

(Self-Study Directions)

- Describe the process used to establish the program budget and provide evidence of continuity of institutional support for the program.
- Describe the sources of financial support, including both “hard” and “soft” monies.
- Describe the adequacy of the budget.
- Describe the adequacy of support for faculty professional development, how such activities are planned, and how they are supported.



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Criterion 8 – Support

(Self-Study Directions)

- Describe the sufficiency of resources to acquire, maintain, and operate facilities and equipment appropriate for the program.
- Describe the adequacy of support personnel and institutional services necessary to meet program needs.



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Criterion 8

Group Assignment

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Criterion 9 –

Program Criteria

(Criteria for 2008-2009 Accreditation Cycle)

- Each program must satisfy applicable program criteria (if any). Program criteria provide the specificity needed for interpretation of the baccalaureate level criteria as applicable to a given discipline. Requirements stipulated in the program criteria are limited to the areas of curricular topics and faculty qualifications. If a program, by virtue of its title, becomes subject to two or more sets of program criteria, then that program must satisfy each set of program criteria; however, overlapping requirements need to be satisfied only once.



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Criterion 9 – Program Criteria

(Self-Study Directions)

- Describe how the program satisfies any applicable program criteria. If already covered elsewhere in the self-study report, provide appropriate references.



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Criterion 9 Group Assignment

Part I

**You are a group of program faculty preparing
the self-study.**

Part II

**Now, you are a team of PEVs
reviewing the self-study.**



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Criterion 10

Master's Level Or Policies and Procedures



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Today's Objectives

- Describe an effective self-study
- Know how to prepare an effective self-study
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- Know the processes used by the PEV and the team to make a recommendation and prepare a statement during the visit
- Know the process that leads to a final statement and accreditation decision for each program



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