Institutional Representatives Webinar

CAC Self-Study Report (SSR)

2024-25 Accreditation Cycle

April 16 and 24, 2024

David "Hoot" Gibson
CAC Chair, 2023-24

Harold Grossman
Adjunct Accreditation Director, Computing

Welcome!

We will be recording today's webinar

- Recording and slides will be available on ABET's website.

- All Institutional Representatives will receive a follow-up email with a link to, and instructions how to access, the recording and slides at their location on the ABET public website.

Q & A

- You have the opportunity to ask questions throughout the webinar using the Q&A button at the bottom of your Zoom screen.

- We are not actively monitoring chat, so any questions asked via the chat function may be missed.

If we cannot address all of your questions due to time constraints, please follow up with:

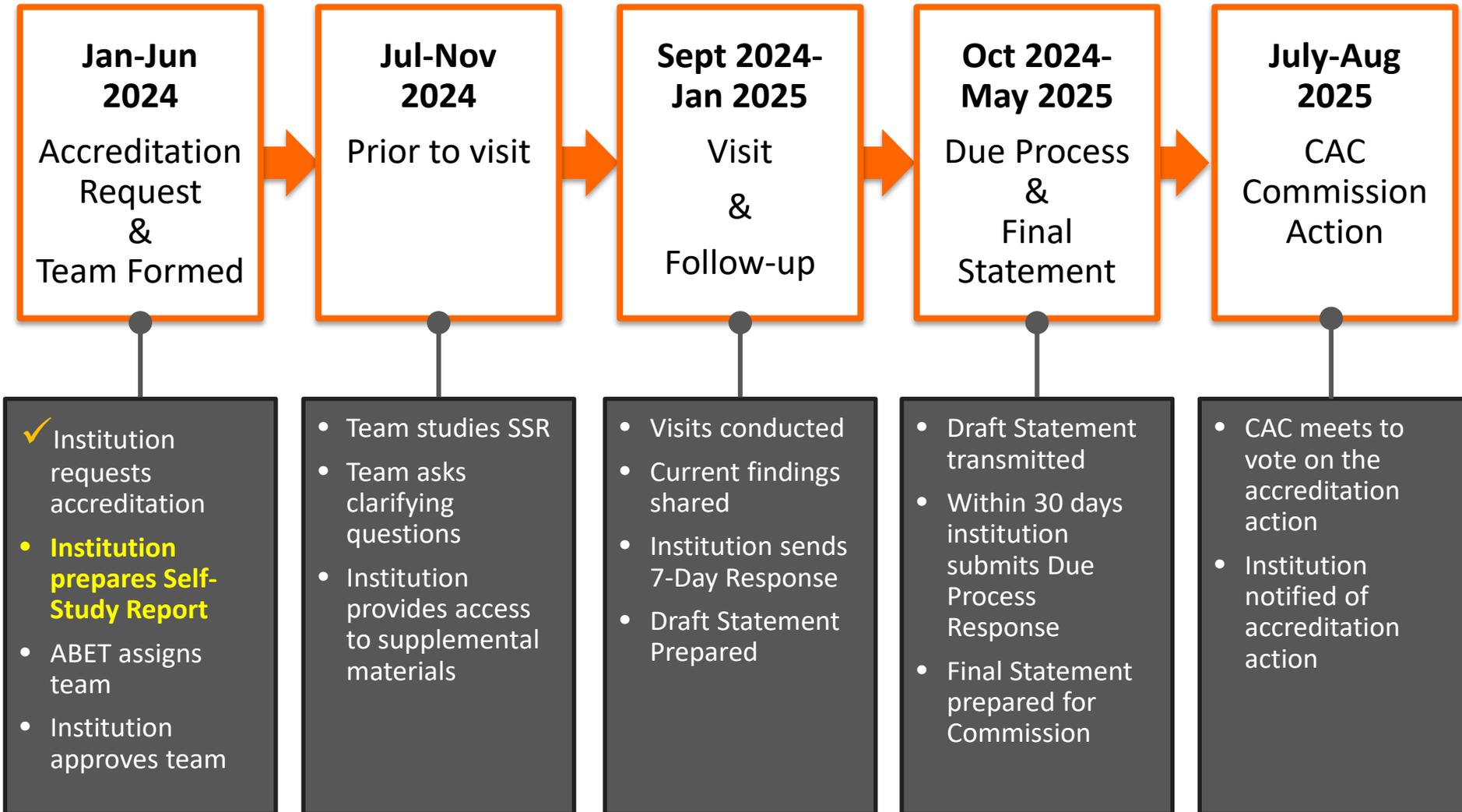Harold Grossman, hgrossman@abet.org

Today's Agenda

- Accreditation Timeline
- Self Study Report Preparations
- Criterion-by-Criterion Common Findings
- Pre-visit Activities
- Future Webinar on Preparing for the Visit
  - Mid-August 2024 (2 sessions)

Mutual Goal:
Work toward a successful and productive accreditation visit!

Accreditation Timeline, 2024-25 Cycle

Jan-Jun 2024	**Jul-Nov 2024**	**Sept 2024-Jan 2025**	**Oct 2024-May 2025**	**July-Aug 2025**
Accreditation Request & Team Formed	Prior to visit	Visit & Follow-up	Due Process & Final Statement	CAC Commission Action

✓ Institution requests accreditation • **Institution prepares Self-Study Report** • ABET assigns team • Institution approves team	• Team studies SSR • Team asks clarifying questions • Institution provides access to supplemental materials	• Visits conducted • Current findings shared • Institution sends 7-Day Response • Draft Statement Prepared	• Draft Statement transmitted • Within 30 days institution submits Due Process Response • Final Statement prepared for Commission	• CAC meets to vote on the accreditation action • Institution notified of accreditation action

Self-Study Report (SSR) Preparations

Gather ABET Materials – Self Study

Begin by collecting **2024-2025** accreditation materials:

From https://www.abet.org/accreditation/accreditation-criteria/self-study-templates/

- Self-Study Questionnaire/Template

Gather ABET Materials - Criteria

From https://www.abet.org/accreditation/accreditation-criteria/

- **2024-2025** CAC Accreditation Criteria

- **2024-2025** Accreditation Policy and Procedure Manual (APPM) at top of page shown

- Program Evaluator Workbook (contains the Program Evaluator Worksheet and Program Evaluator Report)

Computing Accreditation Commission (CAC)

2024-2025 Criteria

2023-2024 Criteria

2022-2023 Criteria

2021-2022 Criteria

2020-2021 Criteria

2019-2020 Criteria

2018-2019 Criteria

2017-2018 Criteria

CAC Program Evaluator Workbook

CAC Observer Visit Packet

Guidance on Materials

2023-2024 Questionnaire Template for Interim Reports

2024-2025 Preparing Interim Reports Webinar (Recording) (Slides)

2024-2025 CAC Self-Study Report (SSR) Webinar will be on **Tuesday April 16** from **10am – 12 noon Eastern Time**, and **Wednesday April 24** from **9am – 11am Eastern Time**. These sessions are identical in content.

Know Where to Find Your Materials

You might benefit from having readily available as you write:

- Your document describing your review and revision of Program Educational Objectives process (Criterion 2)
  - List of your primary constituencies
  - Minutes of review and/or revision meetings

- Your document describing your Continual Improvement Process (Criterion 4)
  - Your continual improvement products
  - Minutes of continual improvement meetings

- Your curriculum requirements for the major

Understand the Purpose

- Write a distinct SSR
  for each program under review.

- The primary audience is

  The Program Evaluator (PEV)

  The Team Chair (TC)

- **Your goal**: demonstrate that the program
  satisfies all aspects of the Criteria and
  relevant portions of the APPM. Be

  Clear,

  Concise,

  Candid, and

  Focused.
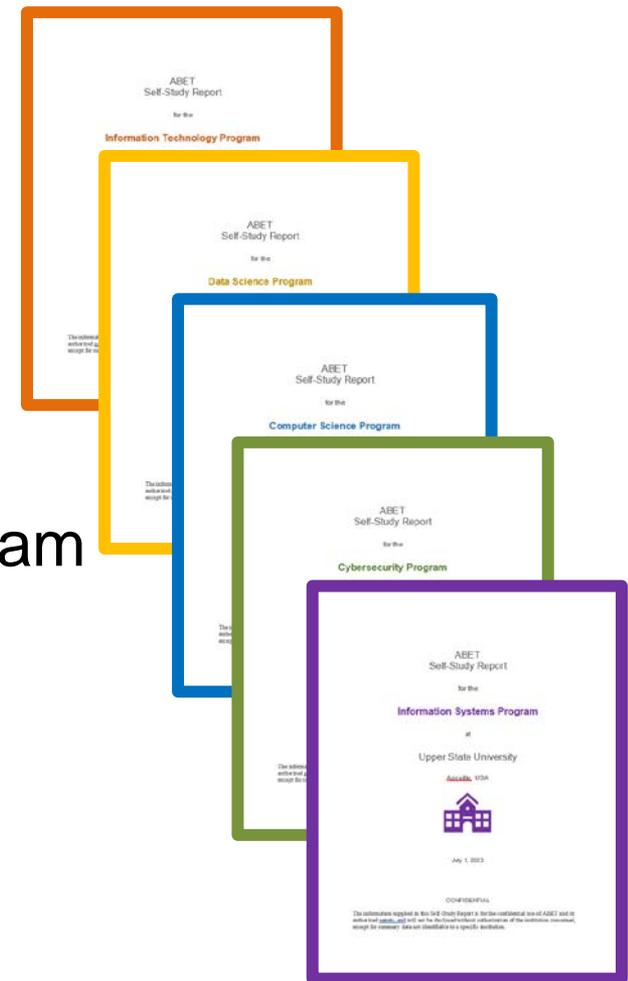
Put Yourself in the PEV Mindset

Your goal: demonstrate that the program satisfies all aspects of the Criteria and relevant portions of the APPM.

The Program Evaluation Worksheet (PEW):

- Identifies, criterion by criterion, what the PEV will be looking for
- Provides key elements of each criterion that must be addressed in the SSR

The Program Evaluator Report (PER):

- Identifies curricular requirements
- Identifies key aspects of continual improvement processes
- Also: records transcript analysis and meetings during the visit

The Self Study Report – Overall

- Focuses on accreditation criteria.

- Is both a quantitative and qualitative self-assessment

  Of strengths and limitations of the program.

- Should include information about:

  - All methods of instructional delivery

  - All possible paths to degree

  - All remote or online offerings

- Should not include not-relevant-to-the-criteria information.

  - Answer only the questions in the self-study questionnaire.
    They are meant to focus your efforts on the task at hand.

  - There will be other opportunities to share your pride and joy.
    Make the PEV's job as easy as possible.

- Must be self-contained, not rely on external hyperlinks.

Submitting the Self Study Report(s)

- **When**: by 1 July 2024
- **What**:
  - SSR(s), each as a PDF file
  - Any required additional explanatory materials
- **Where**: upload on your institution's ABET general review page in the Accreditation Management System (AMS)

  Dashboard/Reviews/Current Reviews
- Do not send by any other means
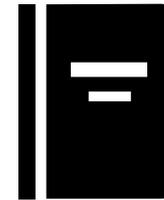
ABET Team Access to Your Materials

- Your *approved* Team Chair and *approved* PEVs will be able to access
  - the self-study,
  - its appendices, and
  - any supplemental materials

  through the ABET secure site (AMS).

- For Transcripts:
  - Institution's primary contact coordinates with Team Chair
  - Team Chair designates how many and how to pick for each program
  - You must agree on distribution approach; uploading the (redacted) transcripts to AMS is convenient for PEV access and secure for all

General Advice

- Start now, if you have not already

- Answer all questions in the questionnaire

- Get the faculty involved in writing the self-study report

- Be sure to include a summary of any significant changes since the last review (if this is a re-accreditation visit).

- Program name must be identical to that used in institutional publications, the ABET RFE and on the transcripts of graduates.

Questions/Comments?

Criterion by Criterion Common Findings

CAC Criteria

General Criteria

1. Students
2. Program Educational Objectives
3. Student Outcomes
4. Continuous Improvement
5. Curriculum
6. Faculty
7. Facilities
8. Institutional Support

Program Criteria

3. Student Outcomes
5. Curriculum
6. Faculty

Note: all General and Program Criteria (when applicable) must be satisfied!

Other Requirements

Accreditation Policy and Procedure Manual (APPM)

Criterion 1. Students

Common Findings

- Lack of documentation on why prerequisite requirements are/are not being met

- Lack of evidence that students are being properly advised

- Transcript review indicates that students have not completed all graduation requirements and there is no documentation validating waiver

Record of Student/Transcript

- Program evaluators will review transcripts carefully

- A completed degree audit form or requirements checklist for each transcript is a great help to reviewers

- Program name and degree awarded must be exactly as shown on the RFE

Criterion 2. Program Educational Objectives (PEOs)

- Must show evidence of how review processes and their results are documented.

- The PEO statements themselves will be reviewed for compliance with the criteria definition of a PEO.

  - PEOs are broad statements that describe what graduates are prepared to attain within a few years after graduation.

  - PEOs are based on the needs of the program's constituencies.

  - If a PEO statement does not appear to meet the criteria definition and you work to fix that, it is imperative that the constituency review process endorsing the new PEO statement is well documented.

Criterion 2. Program Educational Objectives (PEOs)

Common Findings

- PEOs are not framed as broad attainments

- PEOs are framed as Student Outcomes

- PEO review and revision process:

  - Not all identified constituents were involved in the review process

  - PEOs are not reviewed periodically and systematically

  - The PEO review process lacks documentation

- Although not required, an illustrative table or flowchart can be helpful:

  - Key constituents involved in the review of PEOs

  - Timetable for those constituents' review of the PEOs

  - Manner of the review (survey tool, meeting or process)

  - How reviewed results are utilized (who does what)

Criterion 3. Student Outcomes (SOs)

Common Findings

- Published SOs are not verbatim with those in the general and applicable program criteria

    Minor exception: CAC programs may replace "the program's discipline" with the name of the discipline, e.g., "Computer Science"

- SOs are not documented or not publicly stated

- Publicly stated SOs are not consistent with the outcomes being assessed by the program

- One or more of the SOs is not included in the program's documented outcomes

- Program has defined additional SOs (which is permitted) but is not assessing them

Criterion 4. Continuous Improvement

Common Findings – no documentation of …

- The program's overall continuous improvement process
- Evaluation of SO assessment data each cycle
- Consideration of the results of SO assessment evaluation results as input to program improvement
- If SO evaluation-based improvements are identified:
  - What is to be done
  - When it will be implemented
  - Assignment of responsibility for the change(s)
  - When follow-up review will occur

Criterion 4. Continuous Improvement

Common Findings – appropriateness

- Assessment and evaluation are only at the course level, not at the program level

- Data does not/cannot get at extent of SO achievement
  - Use of course grades or exam grades as assessment data
  - Use of averaging to determine attainment levels

- Assessment activity lumps multiple SOs (using same rubric)

- Overreliance on indirect evidence

- Data collected across students from multiple programs and not disaggregated by program

- Death by assessment – too much, with too little benefit to program

Criterion 4. Continuous Improvement

Common Findings – complete and systematic

- Process does not address all SOs
    - In total, assessment events address only a portion of an SO
    - Process does not discern the extent of attainment of each SO
- Assessment methods are ad hoc or not used consistently
- Data are collected and evaluated, but the information does not lead to improvement actions when warranted
- Seemingly inappropriate avoidance of making the process effective for the program

   For example, setting a low bar to avoid improvement action

Criterion 4. Continuous Improvement

- **Criterion 4 is about bringing value to your program**

- **… by using assessment and evaluation of attainment levels of student outcomes to guide continuous improvement actions**

- **… not by spending faculty time on collecting and organizing uninformative assessment data**

Assessment Resources

On-Demand Webinars
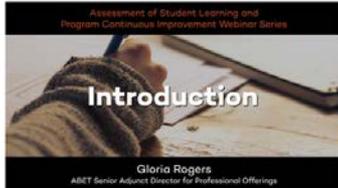
Assessment of Student Learning Introduction

Gloria Rogers, ABET Senior Adjunct Director for
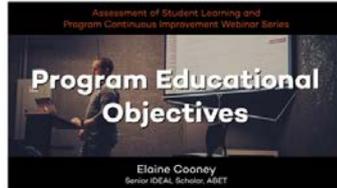
Program Educational Objectives

This webinar covers expectations for the development and maintenance of your Program
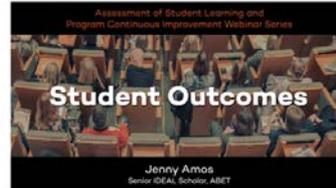
Student Outcomes

Jennifer "Jenny" Amos, ABET Senior IDEAL Scholar, deconstructs student outcomes for

Assessment Planning Tools

Self Assessment

An instrument that can be used to determine the status of a program assessment process.

Assessment Planning Matrix

Sample matrix to demonstrate the program assessment process and results.

Sample Protocol for Pilot Testing Survey Items

Example of how you can test your survey items for validity before administering the survey.

Timelines and Responsibilities

Documenting the processes involved in program assessment.

Assessment Planning Articles

Using Commercial Exams for Program Assessment

Things to consider if you are thinking of using a commercial exam for

Using Course or Test Grades for Program Assessment

Use of course or test grades as

Understanding the Accreditation Question

Design of the assessment process rests on the understanding of the

https://assessment.abet.org/resources/

Questions/Comments?

Criterion 5. Curriculum

General Criteria Common Findings

- Not enough computing credits
- Principles and practices for secure computing is lacking
- Local and global impacts of computing solutions is lacking
- New in 2024-25: "mathematics, statistics, and science ..."

Computer Science Criteria Common Findings

- Not enough or inappropriate math
- No exposure to ….. [any of the listed topics]
- Exposure, but not substantial coverage of ….. [any of the listed topics]
- No major project that requires integration and application of knowledge and skills acquired in earlier coursework
- New in 2024-25: Requires coursework that develops and applies the scientific method in a non-computing area

Criterion 5. Curriculum

Cybersecurity Criteria Common Findings

- Missing coverage of "application" of CY Student Outcome
- Lacking coverage of fundamental topic(s) ….. *[there are 8]*
- Lacking coverage of advanced topics that build on ….
- Crosscutting concepts not cutting across ….. *[there are 6]*

Data Science Criteria Common Findings

- Lacking coverage of the full data science lifecycle ….. *[6 parts]*
- Not requiring an application area

Information Systems Criteria Common Findings

- IS environment Lacking (see definition of IS environment)

Information Technology Criteria Common Findings

- lack of fundamentals and applied practice in 8 IT knowledge areas

Criterion 6. Faculty

General Criteria Common Findings

- Faculty numbers are not adequate for advising, interaction, or professional development, or offering courses for students to graduate on time
- Faculty size currently adequate but factors such as program growth and faculty attrition could jeopardize the adequacy of faculty size
- Some faculty members lack professional development activity
- Faculty do not have the appropriate authority for program guidance

Computer Science and Information Systems Common Findings

- No faculty member(s) has/have the qualification in the program criteria
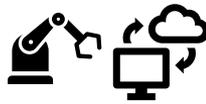
Criterion 7. Facilities

Common Findings

- Equipment needs upgrade, repair, or maintenance

- Program lacks planning for staff or other resources related to maintenance or upgrades

- Students do not have access to appropriate modern equipment or tools

- Faculty do not have access to appropriate modern equipment and tools

- Space and equipment currently may be adequate, but there is reason to believe that increased enrollments or current budgeting trends may jeopardize it in the future
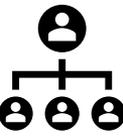
Criterion 8. Institutional Support

Common Findings

- Inadequate support for laboratories (e.g., equipment or physical space)

- Insufficient support staff

- Evidence of excessive faculty turnover

- Lack of continuity of program leadership

- Lack of support for the program

- Environment and resources are inadequate to support attainment of student outcomes

Reporting Program Criteria

- Documenting program criteria compliance is as important as documenting general criteria compliance

- If already covered elsewhere in the SSR, provide clear references to where it can be found

Note: all General and Program Criteria (when applicable) must be satisfied!

Self-Study Report Tips

- ABET offers a self-study workshop (which will have a fee). Watch for ABET communications.

- Get SSR proofread by someone not heavily involved in writing the program's SSR.

- Once it is written, do a self-evaluation using the same documents that will be used by the PEV.

  - Program Evaluator Report (C341).

  - Program Evaluator Worksheet (C351).

  - These are available in the PEV Workbook on the ABET website.

- If you have a CAC PEV or TC available on your faculty, ask for an evaluation of the Self-Study Report.

Questions/Comments?

Pre-Visit Activities

Visiting Team

Team Chair (TC)

Primary Contact before & after the visit

ABET Experts

Volunteers selected by CAC ExCom

Will decide communication protocol

Program Evaluators (PEVs)

ABET Experts

Disciplinary Experts

Volunteers selected by professional society

Observers

No vote in accreditation process

PEV in training, ABET staff or governmental representative

Technically competent

Refresher training

Trained & Evaluated by ABET

Interpersonally Skilled

Professional

Organized
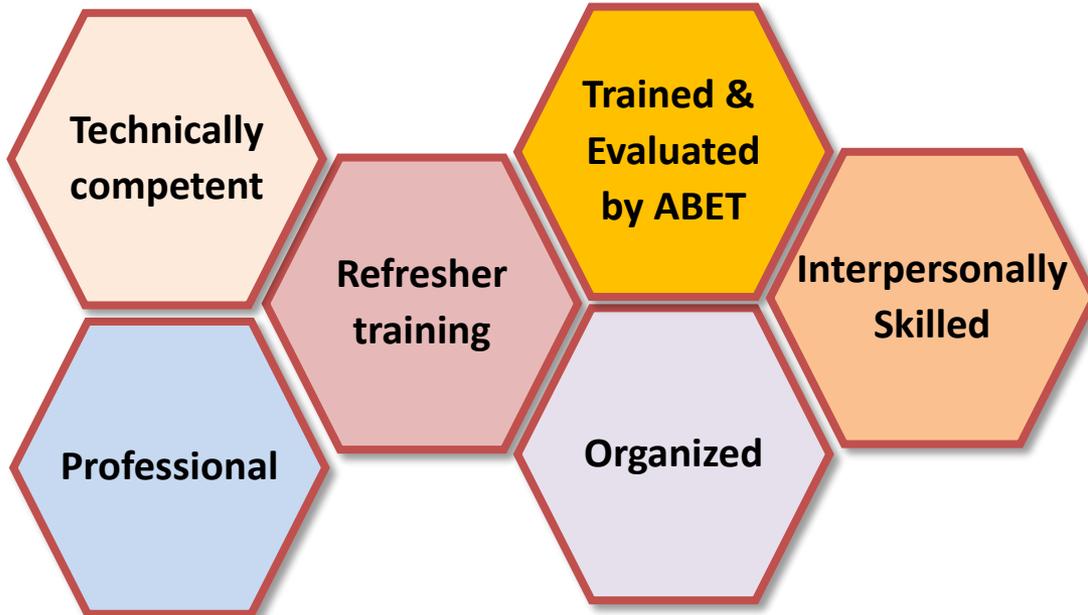
Institution must approve the team members

- Team Chair
- Program Evaluators

Can only reject a TC or PEV if a conflict of interest is identified.

Then, a new TC and/or PEV will be assigned.

Before the Visit — after Team Approved

Transcripts

→ Samples from each program

→ Document all paths to graduation

Additional information & supplemental materials

→ Clarification of self-study report

→ Additional materials

Logistics

→ Decision about review modality (virtual or F2F)

→ Work w/ TC on communication protocol
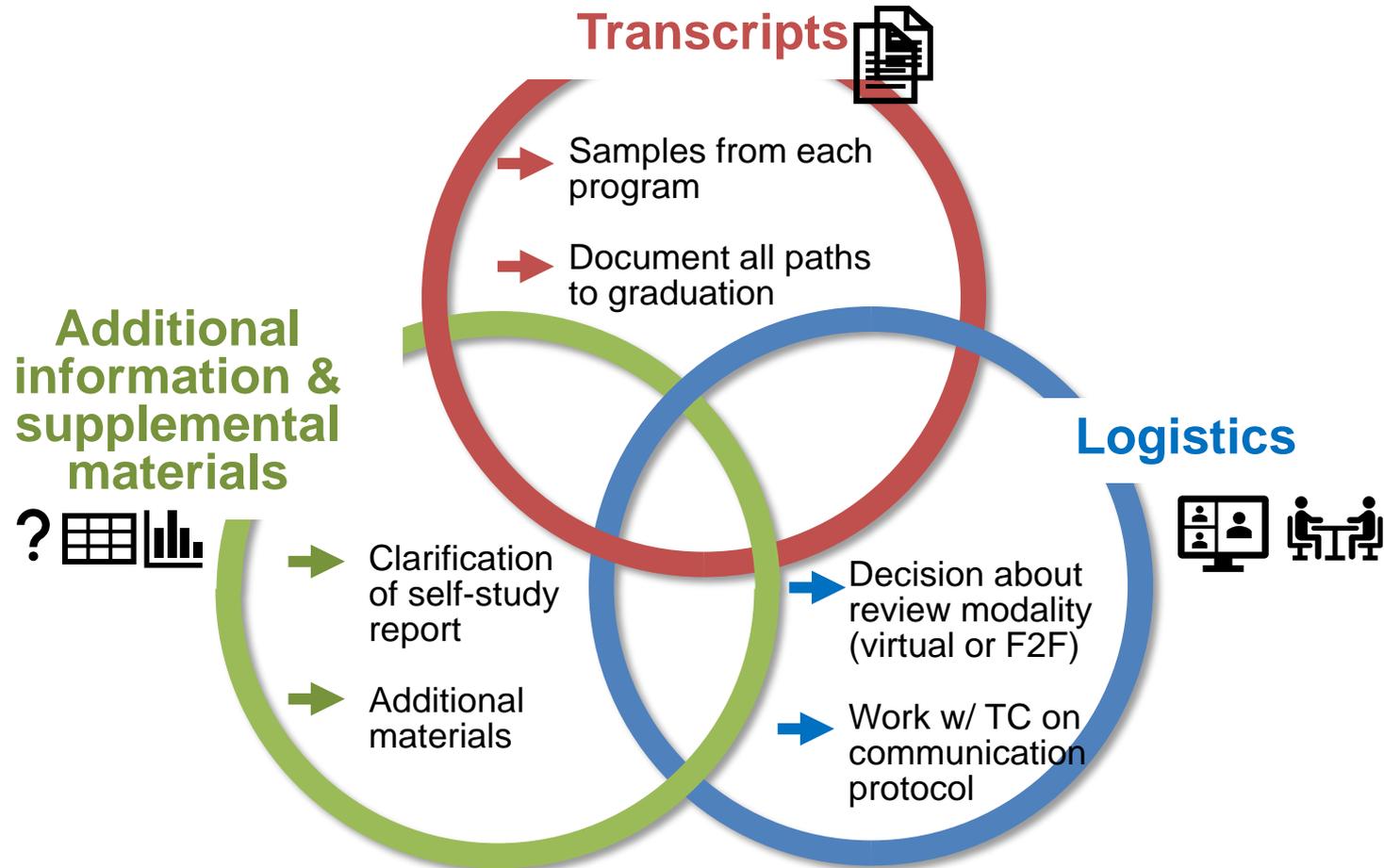
Watch for the webinar on the preparing for your CAC visit in mid-August 2024

Tasks to complete before July

- May - July

Team Chair Approval

- May - July

PEV Approvals

- July 1st

Self-Study Report Due

(optional) Mid-August

Prep for CAC Visit Webinar

- Before Now to Evaluation

Prepare supplemental materials

Before July 1, 2024

- ✓ Team Chair approved.
- ✓ Self-Study report uploaded.
- ✓ Evaluation dates set.
- ✓ PEV(s) approved.
- ✓ Finish collecting all course materials, and assessment documentation.

Be prepared to provide after July 2024

- ❑ Transcripts for each program being reviewed.
  - ❑ Team chair will inform you about the number/type of transcripts.
  - ❑ Student names should be removed and replaced by a tracking code.
- ❑ Explanation and documentation of course substitutions.
- ❑ Documentation of approval of transfer/substitution of courses.
- ❑ Graduation audit form or process documentation.

Follow-up with Team Chair: Transcript and Enrollment documentation

After July 1, 2024

- Suppose after you submit the SSRs then …
  - You find mistakes on your own, or
  - The visit team asks you questions, and you realize some items are missing, or insufficient, or incorrect.
- Do you redo the SSR? NO

  The purpose of the SSR is to get the review started. Once you submit, the SSR is done!

- If you need to make additions or corrections …

  Just provide them to the Team Chair as supplements.

Questions? Comments?

CAC Contacts

➡️ Harold Grossman, Adjunct Director - Computing: hgrossman@abet.org

David Gibson, CAC Chair, 2023-24:   dsgibson@comcast.net

Scott Murray, CAC Chair, 2024-25:   rsmurray1@gmail.com

ABET HQ – Accreditation Contacts

Jane Emmet, Senior Director, Accreditation Operations

Tom Walker, Manager, U.S. Accreditation

Sherri Hersh, Senior Manager, International Accreditation

Anna Karapetyan, Specialist, International Accreditation

Watch for the webinar on the preparing for your CAC visit in mid-August 2024

Q&A

Question	Answer
Does "draft statement" come from ABET or institution?	From ABET after being reviewed by 2 editors and the Adjunct
Is there a specific date to request to defer a review?	You can always ask. The answer is most likely no, but it never hurts to ask.
Where can we find the Program Evaluation Worksheet (PEW)	The Accreditation Policy & Procedure Manual, the CAC Criteria, and the PEV Workbook can all be found at https://www.abet.org/accreditation/accreditation-criteria/
If a program has several emphasis options, can we submit a single self-study, or do we need to submit one for each emphasis?	One self-study report covering the several emphasis options.
What kind of evidence can show the students are advised?	A description of the advising process in the self-study, talking with students about where they get their academic advising and career advising.
Concerning the "Lack of evidence that students are being properly advised," how can we present supporting evidence in the report? What types of evidence should be included?	It depends on how your program does advising. I have seen programs do a night of advising. Putting that announcement as additional materials in the SSR would help document.
Is there are a recommended ration between student to faculty?	ABET has no such requirement.

It sounded like mandatory advising was a requirement of the criteria. Is that accurate? Our faculty work closely with the centralized advising office, but I do not believe that they are required to go to advising.	Students need to be made aware of where they can receive advising both academic and career.
We have local body accreditation and their terminology program learning outcomes (PLOs) instead of student outcomes (SOs). Can we map the PLOs to SOs and present to the ABET evaluator ?	You can but I would suggest using appropriate data from your PLO assessment for the ABET SO evaluation would be best. That way you don't ask faculty to collect two sets of data and you do not lose any fidelity in the SO evaluation.
What is the least amount of evidence required to be available at time of visit for a single SO?	Completion of all SOs from data collection to decision of what to do. What we call closing the loop on all SOs.
What is the recommended duration in years for a cycle to assess all SOs? Two years? Three Years?	One to three years with perhaps 2 years being optimal.
Our program has 4 student learning outcomes, is that okay if they can be mapped to the 6 ABET student outcomes? Or will we need to revise our outcomes?	No mapping. ABET's SOs verbatim....
For 2022-23 and 2023-24 we have trimester. And we are assessing all SO's in every semester. Do we need to present all the assessment/evaluation data ?	Yes but probably not in the self-study. Have that data available at the visit.
Do we need to close the loop for every semester if we are assesing all SO's in every semester ? OR can we close the loop after each year based on 3 semester data ?	So I think that what you are telling me is that you collect data from 3 semesters and then do an evaluation. if so, then yes. Hopefully your continuous improvement plan documents that.

To my understanding, we need to collect data from each course. If a course is offered in both Fall and Spring semesters with multiple sections each. Is it enough to collect data only from one section in one semester, say Fall 2023?	I would collect assessment data from one section. I would not collect data from all required courses. I would concentrate on junior and senior courses as attainment of the SO is defined as what the student knows at graduation.
Do we need to collect all available assessment data (all exams, assignments, etc) for a specific section of a specific course, or could we select some assessment data?	No, you cannot sustain that. Be selective of the material and make sure that the collected material fits the SO.
What document contains the credit-hour requirements per domain kowledge for each program type?	Those requirements are in the general criteria and specific program criteria. Typically in criterion 5, Curriculum.
Where in Criterion 5 of the Self-Study are these explicitly mentioned (e.g., secure computing, application of scientific method in a non-computing area, etc.)?	Secure computing is in the General Criteria. See Criterion 5. Curriculum. Scientific method is in the Computer Science Program Criteria.
For AI curriculum, which is the best appropriate ABET curriculum?	AI programs are currently evaluated under the general criteria only.
Does it affect to apply major changes in the curriculum starting from 2025-2026?	Your program needs to satisfy the criteria requirements when the program is evaluated. Changes to CAC criteria will continue as the topic areas continue to evolve.
For trimester how many weeks of teaching and contact hrs is must to cover the course ? I mean for 2 semester - we have 16 weeks of teaching and for 3 cr course we have 45 contact hrs. My question is for trimester plan ? how many weeks of teaching for 3 cr course and how many contact hrs ?	I don't have a specific number to give you. But a rational argument of what that conversion is should carry the day. I am sure that your admission office has such a number.

Is there a guideline for what is expected in the course material display? It seems the previous requirement of student material has been relaxed, but I have gotten somewhat mixed messages from ABET meetings.	I think that what was relaxed is the student work. CAC still expects to see the actual transcript, test, program assignments, final, etc.
Everything is graded on LMS now a days. How does ABET want to see the samples of high, average and low grades. I am not sure if the grading comments will be appropriately shown if we print them	I would if possible keep the materials in your LMS.
Is it necessary to furnish research evidence for each faculty member? How significant is this requirement for ABET from your perspective?	It is important to show professional development which could be shown via publications. There are no publications requirements.
Other than publications, what else can we show for the professional development?	Workshops, conferences, training, etc.
Going forward there is no need of science labs for Computer Science and Similarly Named Computing Programs	The requirement is for the scientific method. If you can satisfy that criteria with no science labs, then i agree.
Harold, I seem to recall much more specific formatting requirements for the syllabi and faculty vitae. The Self Study template has fairly minimal specific requirements re formatting- has this changed or is there something more than what is in the template?	We have had pushback from some large program about the syllabi and vitae. Hence, the requirements have been relaxed.
If the institute relies on open-source and free tools to deliver course concepts, how would ABET evaluate this approach? Would ABET still consider the purchase of paid tools that might offer better delivery of the concepts, despite the use of free tools?	Not a problem from CAC. Free is always good.