

ATMAE

Self-Study

Workshop

Agenda

1. ATMAE Accreditation Background
2. Getting Ready for Accreditation
3. Typical Steps in the Accreditation Process
4. ATMAE Accreditation Standards
5. Tips for Getting Business & Industry Involved
6. Frequently Asked Questions
7. For More Information

ATMAE Accreditation Background

What is Accreditation?

- A standards-based quality assurance process of internal stakeholder review and external peer review that includes on-site evaluation
- Can be used for quality improvement
- Avoids making recommendations about administrative structures

Foundation of Accreditation

Volunteerism – an optional process conducted by volunteers

Confidentiality – the report represents a judgment

Diversity – has a broad input base

Impartiality – screens out conflicts of interest

Standards – reflects the consensus of experts in the discipline

The Stakeholders

- Educators
- Practitioners
- Students
- Parents
- Employers
- Regulators
- Public

Accreditation in Context

- Provides a measure of educational quality and facilitates a student's academic progression including transfer credit between institutions
- Provides assurance that educational programs are evaluated against nationally accepted standards and that graduates are competent for the workplace or for advanced practice
- Provides validation of the educational program and the opportunity for academic administrators, faculty, and practitioners to build consensus on expected learning outcomes and graduate competencies
- Assures prospective employers that graduates come from a school where the content and quality satisfy established standards

ATMAE's Vision

The Association of Technology, Management, and Applied Engineering **sets standards for academic program accreditation,** personal certification, and professional development for college and university educators, administrators, students, and industry professionals involved in integrating technology, leadership, and design.

ATMAE's Mission

The Association of Technology, Management, and Applied Engineering is faculty, students, and industry professionals dedicated to solving complex technological problems and **developing the complete technologist and applied engineering workforce.**

A Little History

- 1965 – Initial meeting at Kent State University
- 1967 – NAIT was incorporated in Ohio
- 1973 – Accreditation program approved by COPA
- 1974 – The first four programs were accredited
- 1989 – Accreditation program approved by USDOE
- 1990 – NAIT accredits its first Associates program
- 1997 – Membership in ASPA approved
- 2002 – NAIT is recognized by CHEA
- 2009 – NAIT changes its name to ATMAE
- 2013 – ATMAE earned CHEA re-recognition

Relationships and Accountability

Council for Higher Decagon Accreditation (CHEA)

Associate, baccalaureate, and master's degree programs in technology, applied technology, engineering technology, and technology-related disciplines delivered by national or regional accredited institutions in the United States. (2011)

<http://www.chea.org/>

Relationships and Accountability

Association of Specialized & Professional Accreditors

ASPA is an association of organizations that evaluate the quality of programs in higher education for more than 100 different professions and specialized disciplines from nursing to architecture, and physical therapy to engineering.

<http://www.aspa-usa.org/>

ATMAE Board of Accreditation

- Has autonomous decision-making authority
- Comprised of University, Community College, Technical Institutes, Industry, Student, and Public members
- Supported by the Director of Accreditation

Accreditation Committees

- Accreditation Personnel & Policy
- Standards & Accreditation
- Accreditation Appeals Panel

What Does ATMAE Accredite?

- Fields of study designed to prepare technical- and/or management oriented professionals for employment in business, industry, education, and government.

These professionals are primarily involved in the installation, management, operation, and maintenance of complex technological systems.

What Does ATMAE Accredite? continued

- Degree Programs – not institutions or departments
- Programs that may have multiple options, specializations or concentrations
- Programs and options that have titles consistent with ATMAE’s approved definition of Technology, Management, and Applied Engineering (See Accreditation Handbook)

Accreditation Periods

- Initial Accreditation is four years
- Reaccreditation is six years
- If a program receives non-accreditation status, or if accreditation is interrupted, an application for reinstatement will be treated as an initial application and the maximum period is four years



Getting Ready for Accreditation

- Review the ATMAE standards thoroughly and decide whether to pursue accreditation
- Identify the standards that will take time and extensive work before writing the self-study
- Establish a time schedule

Accreditation Assumptions

- Each institution and program is unique
- Each program and option has long- and short-term goals
- The long- and short-term goals determine the mission of the program and option at a given institution

Program Components

- Humanities, and social and behavioral sciences including communication skills
- Mathematics, science, and computer fundamentals
- Related technical and/or related disciplines such as management and marketing
- Field of specialization

Associate Degree Programs

- Lead to the Associate Degree
- Be within the ATMAE scope of Accreditation
- Prepare individuals for positions that contribute to the design, development, production, distribution, or operational support of complex technical systems

Baccalaureate Degree Programs

- Include at least the junior and senior years of instruction
- Be designed to prepare management-oriented technical professionals
- Prepare students for technical management positions in areas such as industrial planning, production, supply, product market research, and technical sales

Master Degree Programs

- Programs that prepare individuals for career advancement that involves the management of complex technological systems

Outcomes Assessment

- ATMAE implemented a new accreditation model in 2013 for all new and renewing programs, which has been revised for 2017
- The inclusion of Outcomes Assessment is mandated by CHEA
- Program outcomes are established before the accreditation process
- The accreditation process verifies that the program outcomes are in place and part of continuous improvement

Outcomes Assessment

- Program Outcomes

A program outcome is a program-level expectation of the result of teaching and learning. Course competencies are evaluated individually and collectively to determine whether a program outcome has been met, and are revised to provide continuous improvement measures for academic programs.

- Accreditation Outcomes

Twenty-One (21) standards are addressed in ATMAE's Outcomes Assessment. In preparing the self-study, responses to each standard should be in the form of the Accreditation outcomes as listed, followed by succinct documentation about the outcome(s), and thereby the standard has been met.

Definition of Terms

Program Outcomes: A list of general expectations for “what” you expect students to achieve in the form of knowledge and skills as a result of the program.

Outcome Measures: A series of activities, using instruments such as surveys, undertaken during or after students have completed a program to determine the overall effectiveness of the outcomes and competencies identified and covered in the program.

Student Learning Competencies: A series of measurable activities that demonstrate “how” students are achieving the desired outcomes generally take place in courses.

Student Competency Measures: The activities used to determine if students have achieved a competency such as written tests, demonstrations & observations, case studies & discussion groups, exemplars, peer reviews, self-assessments, presentations, mock events and monitors.

Typical Steps in the Accreditation Process

1. Application
2. Self-Study
3. Team Visit
4. Visiting Team Report
5. Review and Recommendation
6. Implementation

Step 1: Application

The institution submits a *Request for Initial Accreditation* application form to ATMAE by October 1 (scan, mail, FAX)

- Make sure all programs and options for review are listed with the application
- Make sure to include first and second choices for visit dates between March 1 and May 1 of the following spring
- Make sure the application is signed, dated, and submitted to the Director of Accreditation and that you receive acknowledgement of receipt in writing

OPTIONAL: Work with a Consultant

- ATMAE consultants are thoroughly familiar with Accreditation Standards
- Consultants can assist with a pre-accreditation view of programs and can provide assistance with the development of the Self-Study
- Contact the ATMAE office for more information

Step 2: Self-Study

- The program formally addresses its strengths and challenges based on the 21 standards. Programs with multiple degrees or options may state one response for all, but not for every standard.
- Describes its plans for improvement in a one-time or continuously-updated document commonly called a self-study
- Submit digital self-study to Director of Accreditation and team members no less than 30 days before the scheduled visit—sooner if possible

Step 3: Team Visit

- ATMAE assigns trained peer reviewers to analyze the self-study documents and conduct a 2½ day on-site visit of the program(s) under consideration
- The on-site visiting team members are the same individuals who review the self-study

Step 3: Team Visit

The Resource Room

- Must be organized to allow the visiting team to have access to the necessary information
- Take time to acquaint the team to the available resources
- Provide a computer with printer and internet access, phone service and dialing instructions

Step 3: Team Visit

Resource Room Items

- Course syllabi/outlines, textbooks & reference books
- Faculty vitae and faculty handbook
- Graded student work including tests, reports, projects
- Lists of graduates for the last two years
- List of advisory council members with contact information, and Advisory committee policy and meeting minutes
- Documentation of student follow-up surveys
- Documentation of outcomes assessments
- A copy of the institution policy manual
- Marketing materials, and any other materials that help in the review process

Step 4: Visiting Team Report

- The evaluation team prepares a preliminary qualitative assessment regarding the accuracy of the institutional self-study report and an analysis of program/option compliance with the standards
- The report does not contain recommendations on how the institution should rectify any deficiencies
- A draft copy of the report is provided to the institution by the visiting team chair for review and response to factual errors
- A final report is delivered to the institution within 45 days of the site visit and includes appeal instructions

Step 5: Review and Recommendation

- Visiting teams recommend the terms of Accreditation in the report
- The Board of Accreditation reviews the visiting team reports and conducts annual hearings during which it accepts or modifies the recommendation, and affirms or determines the terms of Accreditation
- Terms of ATMAE Accreditation are:
 - Accreditation
 - ❖ Accreditation with a progress report in two years
 - ❖ Accreditation with a progress report and visit in two years
 - Non-Accreditation

Step 6: Implementation

- The program addresses deficiencies as they relate to the standards
- The program is responsible to provide student performance and achievements to the public

Preparing the Self-Study

- Is there a team in place including a representative portion of the administrative staff, teaching faculty, and students to provide input in developing the self-study addressing each of the degree programs seeking Accreditation?
- Have multiple team members attended ATMAE Accreditation training?
- Do you have a copy of the ATMAE Accreditation Handbook?
- Do you have a self-study report template?
- Will you be able to complete the self-study report by the end of January or February (30 days prior to your on-site visit)?

ATMAE Accreditation Standards

Standard 1 – Preparation of Self-Study

- Is the Self-Study report provided in time and in the correct format?
- Was the report completed by a representative of the institution that is directly related to the program(s)?
- Were students involved in the process?

Standard 2 – Program Definition

- Are all programs and option requirements clearly specified?
- Are any exclusions of options specified?

Program Inputs: Standards 3-11

Standard 3 - Program Title, Mission & General Outcomes

- Have you documented that your institution is legally authorized under applicable state law to provide degree programs beyond the secondary level?
- Have you documented that the institution is regionally accredited?
- How do you plan to document that each program title, definition, and mission is compatible with the ATMAE definition of Technology, Management, and Applied Engineering?
- How will you document that each Degree Program prepares individuals for positions that involve the management of complex technological systems?

Standard 3 - Program Title, Mission & General Outcomes (continued)

- Have you established general outcomes for each program to provide a framework for the development of specific measurable competencies as program results?
- Have you conducted validation of the general outcomes for each degree program through a combination of external experts and industrial advisory committees?
- Have you conducted follow-up studies of each programs' graduates?

Standard 4 - Competency Identification & Validation

- Are **measurable** competencies identified and validated for each degree program?
- How will you document that the competencies are closely related to the general outcomes established for the program?
- Have you **validated** the competencies through a combination of external experts and industrial advisory committees?
- Have you conducted follow-up studies of program graduates to assess competency attainment because of each of the degree programs?

Standard 5 - Program Structure & Course Sequencing

- Does each degree program meet the minimum and maximum foundation semester hour requirements ?
- Do you have justification if any degree program exceeds any maximum foundation semester hour requirements?
- Can you provide a specific list of courses and credit hours that are being counted toward each category for each degree program when writing the self-study report?

Standard 5 - Program Structure & Course Sequencing (continued)

- Can you provide evidence of appropriate sequencing of courses in each program/option to ensure that applications of mathematics, science, written and oral communications are covered in technical and management courses?
- How will you provide evidence of sequencing that ensure that advanced level courses build upon concepts covered in beginning level courses?
- If on a quarter system, calculate to semester hours

Standard 5 - Program Structure & Course Sequencing (continued)

Associate's Degree: Programs/options shall be a minimum of 60 semester hours and shall meet the following foundation semester hour requirements:

Communications (both oral and written course): 6-9

Mathematics: 3-12

Physical Sciences*: 3-12

Management and/or Technical: 9-45

General Electives: 0-12

Bachelor's Degree: Programs/options shall be a minimum of 120 semester hours and shall meet the following foundation semester hour requirements:

General Education (oral and written communications): 18-36

Mathematics: 6-18

Physical Sciences*: 6-18

Management: 12-24

Technical: 24-36

Electives: 0-18

Standard 5 - Program Structure & Course Sequencing (continued)

Master's Degree: Programs/options shall be a minimum of 30 semester hours and shall meet the following foundation semester hour requirements:

Communications and/or Problem Solving: 6-12

Research: 6-12

Management and/or Technical: 12-18

Electives: 0-6

Standard 6 - Student Admission & Retention Standards

- Can you provide evidence showing that the quality of each program's technology students is comparable to the quality of students enrolled in other majors at the institution?
- Do you have evidence that the standards for admission and retention of technology, management, and applied engineering students shall compare favorably with institutional standards (Sources of admission information may include test scores and grade rankings)?
- Can you provide retention information including general grade point averages of technology, management, and applied engineering students compared to programs in other institutional programs?

Standard 7 - Transfer Course Work

- What are the institutional policies to ensure that coursework transferred to the programs are evaluated and approved by the programs' faculty?
- How do you assure that all transfer coursework accepted meets the ATMAE foundation course requirements for the programs?

Standard 8 - Student Enrollment

- Can you provide evidence of an adequate number of majors to sustain and efficiently/effectively operate each degree program applying for Accreditation?
- Can you explain how each program's enrollment is tracked and verified?

Standard 9 - Administrative Support & Faculty Qualifications

- How will you provide evidence of appropriate administrative support from the institution for the degree programs applying for ATMAE Accreditation including appropriately qualified administrators, an adequate number of full time faculty members and budgets sufficient to support program/option goals?
- Can you document having full time appropriately qualified faculty assigned to teach courses in each degree program?
- How will you document that faculty qualifications include emphasis upon the extent, currency, and pertinence of the following?
 - academic preparation
 - industrial professional experience such as technical supervision and management
 - applied industrial experience such as applied applications
 - membership and participation in appropriate technology, management, and applied engineering professional organizations
 - scholarly activities

Standard 9 - Administrative Support & Faculty Qualifications (continued)

- Does each degree program under consideration have a minimum of 50 percent of the regular tenure track, or tenured full-time faculty assigned to teach in the program have an earned doctorate or other appropriate terminal degree as defined by the institution?
- Can you provide policies and procedures for faculty selection, appointment, reappointment, and tenure clearly specified and conducive to the maintenance of high quality instruction?

Standard 9 - Administrative Support & Faculty Qualifications (continued)

- How will you document that faculty teaching, advising, and service loads are reasonable and comparable to the faculty in other professional program areas?
- How will you document having policies and procedures for faculty selection, appointment, reappointment and tenure are clearly specified and conducive to the maintenance of high quality instruction?
- Have you documented that faculty teaching, advising, and service loads are reasonable and comparable to the faculty in other professional program areas?

Standard 10 - Facilities, Equipment & Technical Support

- How will you document the facilities and equipment, including the technical personnel support necessary for maintenance, is adequate to support each program's goals?
- Can you provide evidence showing the availability of computer equipment and software programs to cover functions and applications in each degree program area under review?
- How will you provide evidence that facility and equipment needs are included in the long-range goals for each program?

Standard 11 – Program Goals

- How do you plan to document that each degree program under ATMAE Accreditation consideration has current short- and long-range goals, and plans for achieving them?

Program Operation

Standard 12 - Program/Option Operation

- How will you provide evidence showing the adequacy of instruction including:
 - motivation and program advising of students
 - scheduling of instruction
 - quality of instruction
 - observance of safety standards
 - availability of resource materials
 - teaching and measurement of competencies (*specific measurable competencies shall be identified for each course along with the assessment measures used to determine student mastery of the competencies*)
 - supervision of instruction
 - placement services available to graduates

Standard 12 - Program/Option Operation

(continued)

- Can you document each degree program's management and/or technical course syllabi have clearly written and appropriate course objectives, content, references utilized, student activities, and evaluation criteria?
- Will you have representative examples of student's management and/or technical graded work available for each course for the self-study and campus visit?

Outcome Measures: Standards 12-21

Standard 13 - Graduate Satisfaction with Program

- Can each program provide evidence of graduate evaluations of the program under accreditation consideration on a regular basis (two to five years)?
- Do these evaluations include attitudes related to the importance of the general outcomes and specific competencies identified for each program?
- Can you provide summary data for graduate evaluations of the each program?

Standard 14 - Employment of Graduates

- Can you provide evidence that placement, job titles, and salaries of graduates in each degree program are tracked on a regular basis (two to five years)?
- Are the jobs held by graduates of each degree program consistent with the program's goals?
- Can you provide summary data for the employment of graduates of each degree program?

Standard 15 - Job Advancement of Graduates

- Can you document that the advancement of graduates within organizations is tracked on a regular basis (two to five years) to ensure promotion to positions of increasing responsibility?
- Do you have summary data available for the job advancement of graduates of each degree program under ATMAE Accreditation consideration?

Standard 16 - Employer Satisfaction with Job Performance

- Can you document that employer satisfaction with the job performance of graduates are tracked on a regular basis (two to five years) including employer attitudes related to the importance of the specific competencies identified for the each program?
- Do you have summary data available showing employer satisfaction with the job performance of each degree program's graduates?

Standard 17 - Graduate Success in Advanced Program

- Do any of the degree programs under ATMAE Accreditation consideration have a goal(s) to prepare students for advanced studies?
- If yes, can you provide documentation of alumni success in the advanced study programs is tracked and confirmed?
- Can you provide summary data shall be available showing success in advanced programs?

Standard 18 - Student Success in Passing Certification Exams

- Do any of the degree programs under ATMAE Accreditation have a goal to prepare students to pass certification examinations?
- If yes, is student success in passing these examinations tracked and confirmed?
- Can you provide summary data shall be available showing success in passing certification exams?

Standard 19 - Advisory Committee Approval of Overall Program

- Can you document an industrial advisory committee exists for EACH degree program under consideration?
- How will you show each committee participates in general outcome and competency validation and the evaluation of overall program success?
- Do you have appropriately qualified industrial representatives for each degree program?
- Can you provide a roster of advisory committee members and minutes of EACH program's advisory committee meetings?

Standard 19 - Advisory Committee

Approval of Overall Program (continued)

- Can you document having policies for each advisory committee including:
 - criteria for member selection
 - procedures for selecting members
 - length of member appointment
 - committee responsibilities
 - frequency of meetings (at least one per year)
 - methods of conducting business

Standard 20 - Outcome Measures Used to Improve Program

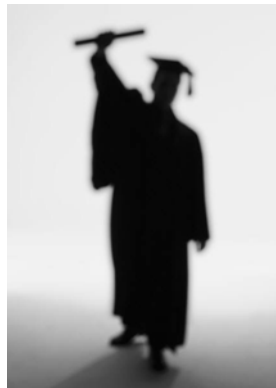
- How do you plan to provide evidence of how multiple outcome measures are used for program and instructional improvement in each degree program under ATMAE Accreditation?
- Examples may include, but are not limited to, graduate satisfaction with each degree program, employment of graduates, job advancement of graduates, employer satisfaction with job performance, graduate success in advanced programs, student success in passing certification exams, and advisory committee approval of program and other summative measures as a result of completing the degree program.
- Do you have evidence that program stakeholders participated in this process?

Standard 21 - Program Responsibility to Provide Information to the Public

- Did the program provide live website link to where the public can access information on student performance?
- Sources of potential information include, but are not limited to: student graduation rates from the program; average starting salaries; mean grade point averages; promotions achieved; time to secure first position; average years to complete the degree; and student awards/scholarships received.

The Result?

Continuous growth in the overall quality of professional education and the development of capable new professionals.



Tips for Getting Business & Industry Involved

- Determine which industries should be involved
- Seek a distribution of size and type; medium and small companies also provide valuable perspectives
- This is a high-touch activity and requires personal contact
- Identify businesses that hire people with the job descriptions representing your curriculum
- HR representation is good, but first-line managers are better because they are often subject matter experts
- Invite all faculty to attend the meetings as observers

Tips for Getting Business & Industry Involved (continued)

- Early morning meetings usually work better
- Take minutes; meet quarterly
- Explain how important the participants are to your program and what their companies stand to gain from their involvement
- Ask for feedback on industry trends which help you determine what students will need to know in the future

Tips for Getting Business & Industry Involved (continued)

- Determine what you want from the council:
 - Time commitment each quarter
 - Job skills validation
 - Course and curriculum validation and modification
 - Job forecasting (anecdotal and from surveys)

Tips for Getting Business & Industry Involved (continued)

- Other ways they can help:
 - Internships
 - Job shadowing
 - Setting up labs
 - Donating equipment and other resources
 - Providing speakers
 - Helping with recruitment
 - Teaching case study courses
 - Consulting with students

Frequently Asked Questions



Q. **When do accreditation visits take place?**

A. Between March 1 and May 1

Q. **What can I expect during a team visit?**

A. See “Diary of an On–Site Visit” at ATMAE.org

Q. **How many members are on a team?**

A. Usually three, however, there can be as many as five depending on the number of programs and options being reviewed.

Q. **Who chooses the team members?**

A. The Accreditation Personnel and Policy Committee

Q. **Do institutions have the opportunity to review the selected team members?**

A. Yes. Changes for cause can be requested.

Frequently Asked Questions (continued)



Q. When will I find out who is on the team?

A. Usually in mid-January for spring visits.

Q. What is the cost?

A. There is a one-time initial Accreditation fee and annual maintenance fees thereafter.
See the fee schedule at ATMAE.org

Q. How much does reaccreditation cost?

A. There is no fee for re-accreditation. Annual fees cover the cost of re-accreditation visits.

Q. When do we find out if we have achieved accreditation?

A. During the annual hearings in the fall.

2017 Fee Schedule

Initial Accreditation Visit	\$5,000 flat fee
Annual Accreditation Fee	\$2,650 flat fee
Extra Team Members; Extra Days on Campus	Actual expenses
Withdrawal of Request for Accreditation	Actual expenses
Reaccreditation Visits	No fee
Follow-up Visits	Actual expenses + \$200
Consultant Visit and Report Preparation (2 day min)	Actual expenses + \$500/day

For More Information

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