Accreditation Council for Space Education (ACSE)

Accreditation Standards & Handbook

Version 1.4

Contents

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About Us

The **Accreditation Council for Space Education** (ACSE) was created in 2022 under the auspices of the Space Foundation to help build a bridge between space industry needs and academic programs. ACSE grew out of higher education institutions and the global space industry calling for a quality assurance accreditation agency that is responsive to the dynamic and burgeoning global space ecosystem. There was no existing agency to accredit interdisciplinary space-related master's programs such as space operations, space policy, space entrepreneurship, space security and others, and there was no single professional society to take on that task. ACSE, can tap into the academic and industry expertise needed to evaluate programs using academic peer review and industry-informed standards.

Institutional accreditation in the United States is the process used to ensure that institutions meet and maintain standards of quality and integrity in academic, administrative and related services. Institutional accreditation applies to entire institutions, whereas program accreditation applies only to a specific program. Professional societies often develop procedures and standards for program accreditation within a specific field to encourage programs to educate students for successful careers in their chosen fields.

Institutional accreditation is required for students to be eligible for federal financial aid. Program accreditation is required for professional licensure in some fields. Accreditation by ACSE involves an academic peer review of a program using industry-informed standards and is entirely voluntary.

Programmatic accreditation by organizations like ACSE helps distinguish legitimate programs of value for students and employers, and it creates a framework for future employers and academic institutions to reach a common understanding of what standards should be included and expected in academic programs.

Accreditation is an accountability framework to ensure that programs are well-developed and prepare students for their careers. Writing the extensive, reflective self-study required of each program is a valuable process that examines the curriculum, student outcomes, student support, faculty and resources. It points out deficiencies as well as opportunities. Programs that become accredited know and can advertise that their program meets standards developed by the space community.

Standards are broad statements of goals and are intentionally neither a checklist nor prescriptive. Programs describe in detail within their self-study how they meet or exceed those goals.

Analogous to other programmatic accreditors, representatives of employers of future graduates help to define what students should know and be able to do after graduation. ACSE consults with advisors, including representatives from industry, government, military and academia, to define space education standards.

After an academic institution applies for program accreditation and completes a self-study, trained reviewers perform a site visit and peer review. Subsequently, the reviewers provide a written report and recommendation to ACSE for a final determination.

Vision

ACSE-accredited programs will be recognized as the gold standard for quality academic programs that serve the needs of the global space industry.

Mission

The mission of ACSE is to promote and ensure quality space education by providing expert and industry-based accreditation for college and university programs that meet the needs of the dynamic and burgeoning global space ecosystem. To accomplish its mission, ACSE:
- Designs, implements and regulates interdisciplinary space education accreditation processes to ensure program quality assurance, continuous improvement and innovation
- Organizes consistent and transparent formative and summative peer review of higher education institutions seeking interdisciplinary space education accreditation while respecting institutional context, diversity and autonomy
- Offers collaboration opportunities for higher education faculty and administrators engaged in interdisciplinary space education accreditation
- Facilitates alignment between industry and academia to address the workforce needs of the global space ecosystem

Core Values

The core values of ACSE reflect its vision and mission:
- Quality Assurance
- Continuous Improvement
- Innovation
- Interdisciplinary, Global Collaboration
- Industry–Academia Alignment

Commitment to Diversity, Equity and Inclusion

ACSE is committed to diversity, equity and inclusion within the organization, among its staff, in its operations and in its accredited programs. Exploring the universe requires the very best of who we are as humans. ACSE believes that understanding, embracing and prioritizing diversity, equity and inclusion throughout the global space industry attracts a smarter, more creative workforce that will produce more innovative solutions and extraordinary achievements. As a pipeline for that workforce, higher education programs must seek out and develop talent among diverse populations.

Leadership

The Space Foundation Board appoints the chair of the Accreditation Council for Space Education, who has the authority to appoint members to the Council to serve renewable 3-year terms. The Space Foundation assigns staff to ACSE and provides administrative support (HR, accounting, legal, etc.) and office space as needed. The Space Foundation Board of Directors

also appoints two directors to serve on the committee. The Accreditation Council has the sole authority to define standards and procedures for accreditation and to make decisions regarding program accreditation activities, reviews and actions.

Chair

Kathryn C. Thornton, Ph.D., Professor Emeritus at the University of Virginia in the School of Engineering and Applied Science, Department of Mechanical and Aerospace Engineering, former chairwoman of the Space Foundation Board of Directors and a former astronaut. She earned her B.S. in physics from Auburn University and her M.S. and Ph.D. in physics from the University of Virginia.

Accreditation Council Members

The Accreditation Council, established by the ACSE bylaws, is responsible for all accreditation decisions. Council members include active and retired faculty members, space industry professionals and members of the public. All members are well-versed in the ACSE accreditation standards, policies and processes. Brief bios of Council members are found at ACSE WEBSITE.

Each member of the Accreditation Council signs a Consulting Services Agreement with the Space Foundation that defines standards of work, conflicts of interest and standards of conduct. ACSE staff, as Space Foundation employees, agree to similar ethical standards.

Individuals who reviewed the standards are listed below with their affiliations for identification only. We appreciate input from our reviewers and incorporated many of their thoughts, comments, suggestions and ideas. However, ACSE is solely responsible for the content of the standards.

Industry Reviewers

Raul Diaz
Employer — Omni Federal
Job Title — Senior Vice President, Space Business Development
Raul has extensive experience working on space systems, including missile warning, missile defense, space domain, satellite command and control, and defensive cyberspace operations. He was the transition manager on the Net-Centric demo for space. He was handpicked as the first technical director in the 50th Space Wing Network Operations Group (Delta 6), where he helped develop the DCO and MDT concepts for Space Force.

Michelle Hanlon
Employer — For All Moonkind
Job Title — President and CEO
Michelle is the cofounder, president and CEO of For All Moonkind. She leads all legal efforts, with particular emphasis on space law. Michelle is also executive director of the Center for Air and Space Law and professor of practice of aviation and space law at the University of Mississippi School of Law. Michelle is also a founding partner of ABH Aerospace, LLC, a consulting firm that provides advice and counsel on all aspects of air, space and cyber law. She is

on the advisory boards of several start-ups involved in commercial space activities, including orbital debris removal, remote sensing and the support of lunar resource extraction. Michelle is the editor-in-chief of the *Journal of Space Law* and the *Journal of Drone Law and Policy*.

Lon Levin

Employer — SkySevenVentures
Job Title — President
Lon Levin is an executive and entrepreneur with over 30 years of experience in space, new media and telecommunications industries. Lon is president of SkySevenVentures, which manages, advises and invests in new technology companies, including space-based businesses.

Dr. Scott Pace

Employer — Elliott School of International Affairs, The George Washington University
Job Title — Director of the Space Policy Institute and Professor of Practice in International Affairs
From 2017 to 2020, Dr. Pace served on the National Space Council as executive secretary and deputy assistant to the president. In this role, he was responsible for all aspects of the National Space Council across national security, civil, commercial and international space sectors.

Elizebeth Varghese

Job Title — Global Business Leader, Board Director, Author
Elizebeth Varghese partners with boards and C-suite leaders to create powerful business outcomes and experiences for organizations worldwide. Elizabeth has almost two decades of business and operational experience managing significant P/Ls. As a business leader, trusted C-suite advisor and board director, Elizebeth transforms organizations and furthers people and technology strategies with solutions in artificial intelligence, blockchain and robotics. She is a board member of the Columbia Business School Women's Circle and the cochair of the Innovation and Entrepreneurship Committee. She is on the board of trustees for the SETI Institute, which works with NASA and other space agencies to explore, understand and explain the origin and nature of life in the universe and the evolution of intelligence.

Dr. Shouhuai Xu

Employer — University of Colorado Colorado Springs
Job title — Gallogly Endowed Engineering Chair
Dr. Xu is the Gallogly chair professor in cybersecurity, Department of Computer Science, College of Engineering and Applied Science, University of Colorado Colorado Springs (UCCS). He pioneered a systematic approach, "cybersecurity dynamics," to modeling and quantifying cybersecurity from a holistic perspective. This approach has three orthogonal research thrusts: cybersecurity metrics, cybersecurity data analytics and cybersecurity first-principle modeling (for seeking cybersecurity laws). His research has won several awards, including the 2019 worldwide adversarial malware classification challenge organized by the MIT Lincoln Lab and a USCYBERCOM CyberRecon'2023 Analyst Award. Dr. Xu co-initiated the International Conference on Science of Cyber Security (SciSec) and is its steering committee chair. He has been an associate editor of *IEEE Transactions on Dependable and Secure Computing* (*IEEE TDSC*), *IEEE Transactions on Information Forensics and Security* (*IEEE T-IFS*), *IEEE*

Transactions on Network Science and Engineering (*IEEE TNSE*) and *Scientific Reports*. More information about his research can be found at https://xu-lab.org.

SECTION 1: ACSE Accreditation Overview

ACSE's accreditation process focuses on innovation, curriculum, student outcomes, teaching excellence and support for continuous improvement to ensure students can gain the skills that employers require.

SECTION 2: ACSE Accreditation Standards

The ACSE standards are designed to provide a common framework for quality interdisciplinary space education programs and to encourage continuous improvement and innovation that is responsive to the workforce needs of the global space ecosystem.

ACSE accreditation is not for STEM-related disciplines, for which mechanisms already exist. Nor is it for humanities, such as science, technology and society. Rather, the focus is on interdisciplinary space studies that overlap with science, engineering, public policy, public administration, law and international relations.

The standards include attention to program mission and educational objectives, students, curriculum, student learning outcomes, quality assurance and continuous improvement, faculty and staff, facilities and resources, and institutional support and leadership. The standards are grounded in common professional practice and stakeholder input, including guidance from representatives in the global space industry.

Standard 1: Program Mission and Educational Objectives

Programs must:

1A: Publish a program mission statement that describes the program's mission and connection to the institution's mission, the needs of the program's external and internal stakeholders and the ACSE accreditation standards. The program mission statement is a concise statement of the broad purpose of the program, the general values and principles that guide the curriculum and the identification of program stakeholders.

1B: Publish program educational objectives consistent with the institution's mission, the needs of the program's external and internal stakeholders and the outlined standards. Program educational objectives are broad statements about what students will have attained upon the completion of degree requirements.

1C: Document and systematically involve external and internal program stakeholders to review the program mission and educational objectives to ensure they are consistent with and applicable to the institution's mission, stakeholders' needs and ACSE standards.

Standard 2: Students

Programs must:

2A: Publish goals and provide evidence for recruiting high-quality students from a broad range of backgrounds and diverse individuals who reflect the diversity of the population served by their institution.

2B: Publish and enforce procedures for selecting and admitting students who hold an earned baccalaureate degree from a regionally accredited institution of higher education (or international equivalent) that prepares them to attain mastery of a specific field of study consistent with the program in space education. Students may be admitted provisionally with a plan to compensate for any deficiencies to ensure they can be successful in the program.

2C: Publish and enforce policies for accepting new and transfer students, awarding appropriate academic credit for courses taken at other institutions and awarding appropriate academic credit for work instead of courses taken at the institution.

2D: Publish and enforce procedures to ensure and document that students who graduate meet all graduation requirements and demonstrate mastery beyond the minimum requirements of a baccalaureate degree level.

2E: Publish and enforce policies and procedures that ensure a program of study with specific educational and career goals is developed for each student.

2F: Ensure a system is in place to maintain records of student complaints and document resolution. Student complaint policies and procedures must be published, enforced and reasonable.

2G: Provide an equitable and inclusive admission process, along with mechanisms to support flexible and alternative mechanisms of education funding.

Standard 3: Curriculum

Programs must:

3A: Publish and enforce procedures for verifying that each student has completed a set of interdisciplinary space education master's level educational and professional experiences that support the attainment of student outcomes defined in Standard 4: Student Learning Outcomes. Examples of an interdisciplinary approach to space education may be curricula that focus on general space studies, space policy, space technical studies, space security/cybersecurity, space communications, space leadership, space business and entrepreneurship, space operations, space economy, international relations in space, space law and ethics, etc.

3B: Programs must provide procedures ensuring students complete practical training to prepare for space careers, such as a space education capstone project, internship or other opportunity for students to engage in hands-on experience.

Standard 4: Student Learning Outcomes

Programs must:

4A: Publish program student learning outcomes (SLOs) that support the program's mission and educational objectives and prepare graduates to enter professional practice in the global space ecosystem. Student outcomes include the knowledge, skills and behaviors students are expected to develop in the program and demonstrate by graduation. Student outcomes must include at least the following seven items:

- SLO 1 — Interdisciplinary and Technical Knowledge: A deep interdisciplinary and technical understanding of space, space operations and impacts of space activities
- SLO 2 — Global View: An ability to understand the interconnectivity of the global space economy and geopolitical landscape to ensure that the solutions and outcomes are complete
- SLO 3 — Research Skills: An ability to conduct research, analyze data and draw conclusions on space topics
- SLO 4 — Professional Responsibility: An ability to assume professional responsibility in the space field and to make ethical and informed judgments that consider the economic, environmental and societal impact of those judgments
- SLO 5 — Communication: An ability to communicate in speaking and writing with diverse audiences
- SLO 6 — Teamwork: An ability to function on a diverse team, provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives
- SLO 7 — Problem-Solving: An ability to find meaningful and sustainable solutions to difficult or complex problems

4B: Publish and enforce policies and procedures that ensure student progress and performance are being monitored and evaluated to foster meeting student learning outcomes and enabling graduates to achieve the program mission and educational objectives.

4C: If applicable, publish and enforce policies and procedures that ensure student progress and performance are monitored and evaluated to foster success in attaining any additional student learning outcomes identified as appropriate to satisfy program mission, educational objectives and institutional and other accrediting body requirements.

Standard 5: Quality Assurance and Continuous Improvement

Programs must:

5A: Document and publish a plan and the results of the regular assessment and evaluation of program quality and continuous improvement efforts through quantitative and qualitative metrics. Measurable goals must be identified for each ACSE standard area (program mission and educational objectives, students, curriculum, student learning outcomes, quality assurance and continuous improvement, faculty and staff, facilities and resources, and institutional support and leadership). Include timelines, metrics and responsibilities for assessing the goals and goal evidence. Include how data are collected, archived and analyzed.

5B: Provide evidence indicating evaluation results are systematically utilized in program decision-making and actions regarding continuous program improvement efforts and that such evidence is shared with internal and external stakeholders.

5C: Document and publish student acceptance, retention and graduation rates. Data must be disaggregated and analyzed based on demographic categories such as gender, race/ethnicity, socioeconomic status and other categories relevant to the institution's mission (for cell counts of more than five students).

5D: Document and publish graduate employment rates and types of employment. Data must be disaggregated and analyzed based on demographic categories such as gender, race/ethnicity, socioeconomic status and other categories relevant to the institution's mission (for cell counts of more than five students).

Standard 6: Faculty and Staff

Institutions must:

6A: Designate enough faculty (regular and adjunct) with appropriate competencies to cover all curricular areas of the program as determined by the program's mission and educational objectives. Programs support assertions with data and narrative.

6B: Designate at least one full-time faculty member to be the director or administrator with faculty rank to manage and oversee the program.

6C: Ensure faculty possess the appropriate qualifications, by virtue of education, experience or professional licensure, to teach at the master's level. The overall competence of the faculty may be judged by such factors as graduate educational credentials, research expertise, space education experience, understanding of current professional practice in the global space ecosystem, teaching effectiveness and experience, diversity of backgrounds, ability to communicate, level of scholarship, participation in professional disciplinary societies and relationships with industry.

6D: Ensure faculty are responsible for and have the authority to define, revise, implement and achieve program mission and educational objectives.

6E: Ensure faculty engage in teaching, research and service in accordance with the institution's standards for other faculty in comparable disciplines. Faculty are expected to teach courses; advise students; engage in peer-reviewed publications, refereed presentations and grant activities; participate in university service activities and professional development; and interact with industry professionals and employers of students/graduates.

6F: Ensure faculty recruitment and selection are consistent with the institution's standards for other faculty in comparable disciplines.

6G: Ensure faculty rank, professional development, opportunities for promotion and tenure, evaluation process, and salaries and working conditions are consistent with the institution's standards for other faculty in comparable disciplines.

6H: Designate sufficient support staff (full- and part-time administrative and technical) as determined by student enrollment and the program mission and educational objectives.

Standard 7: Facilities and Resources

Institutions must:

7A: Provide adequate physical and/or virtual classrooms, offices, laboratories and associated equipment and supplies to support the program mission, educational objectives, curriculum and student learning outcomes to ensure an atmosphere conducive to learning.

7B: Provide appropriate physical and/or virtual facilities, tools and computing resources that represent current professional best practices in space education and ensure their accessibility, maintenance and upgrade for faculty and students.

7C: Provide appropriate communication, guidance and training regarding the use of available facilities and resources to faculty and students.

7D: Provide adequate library and information services, computing and laboratory infrastructure, and equipment and supplies to support the education of students and the scholarly and professional activities of the faculty.

Standard 8: Institutional Support and Leadership

Institutions must:

8A: Provide adequate support and leadership to ensure the quality and continuity of the program throughout the accreditation period.

8B: Provide adequate resources designated to the program, including institutional services, financial support and support staff (both administrative and technical) to meet program needs.

8C: Provide sufficient resources to acquire, maintain and operate infrastructure, facilities and equipment appropriate for the program to provide an environment where student learning outcomes can be attained.

8D: Provide sufficient resources to attract, retain and provide for the continued professional development of qualified faculty.

SECTION 3: ACSE Accreditation Evidence

The evidence programs provide to support that they have met the ACSE accreditation standards will be the sole basis for accreditation decisions. Thus, the evidence provided is critical to ensuring all standards are met and that programs have a system for collecting, archiving and analyzing data. This system demonstrates a commitment to quality assurance, continuous improvement and innovation. Evidence will be provided through the program self-study and program annual reports. Two types of evidence are called for in the ACSE standards. One is *document* evidence of program information, such as program mission, program of study, policies and procedures. The other is *data* evidence on student and graduate performance. Programs must describe how data are collected (e.g., specific coursework, internships, capstones, graduation

surveys), archived (e.g., stored and retrieved) and analyzed (e.g., quantitative, qualitative or mixed methods measures). Other indicators of effective data-sharing include:

- Relying on current evidence (i.e., generally from the most recently completed three academic years, cohorts or classes)
- Reporting expected student performance benchmarks
- Using multiple consistent direct and indirect student performance measures
- Detailing the quality of the data (i.e., quantitative measures must demonstrate validity and reliability, and qualitative measures must demonstrate trustworthiness)
- Disaggregating deidentified data based on demographic categories such as gender, race/ethnicity, socioeconomic status and other categories relevant to the institution's mission (when applicable and possible)
- Describing data collection, archiving and analysis weaknesses and how these activities will be strengthened in the future
- Documenting the systematic evidence of a feedback loop between the program and internal and external stakeholders

Examples of potential data evidence that could be used to document student and graduate performance can be found in Table X. Please note that this table is neither exhaustive nor prescriptive.

Table X: Evidence Examples

Evidence	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5
Course assessments		x			x
Capstone performance ratings				x	
Internship performance ratings	x		x		

Examples only

The context must be shared for each evidence point used to demonstrate student and graduate performance. Below is an example of a table displaying evidence context.

Table X: Evidence Context Example

Evidence	Course and Assignment Name	Data Year	SLOs	Rater	Assessment Method	Performance Benchmark
Course assessment	SPACE 5111: Space Case Law Presentation	2022	1, 2, 3, 4	Course faculty	Rubric (LINK TO ASSIGNME	80% will earn at least 80/100

					NT AND RUBRIC)	

A program must also demonstrate a commitment to quality assurance, continuous improvement and innovation. Examples of program evaluation tools to demonstrate how a program monitors for quality assurance can include:

- Program exit survey
- Program exit focus group
- First-year graduate survey
- Second-year graduate focus group
- Employer survey
- Employer focus group
- Institutional survey

Again, this list is neither exhaustive nor prescriptive.

A program may also demonstrate where feedback collected from quality assurance tools was implemented to improve the program using a context example table such as the example above.

SECTION 4: ACSE Accreditation Process

The ACSE accreditation process relies on consistent and transparent formative and summative peer review of higher education institutions seeking interdisciplinary space education accreditation. This work is conducted while respecting institutional context, diversity and autonomy. Peer review is emblematic of quality assurance processes adopted by higher education institutions worldwide. Additional resources are available on the "Member Resources" pages of the ACSE Accreditation website (acseaccreditation.org).

Section 4A: Application

The ACSE initial accreditation process begins when a member institution submits a letter of intent and application. ACSE will review the documents for acceptance criteria within 30 days of receipt. If the acceptance criteria are unmet, ACSE staff will immediately schedule a meeting with the program leadership to discuss the letter and/or application, including any areas to remedy. Once ACSE confirms the acceptance criteria are met, ACSE will appoint a mentor to guide the institution through the 12-to-24-month self-study process. When the self-study is submitted, a site visit is scheduled. The visitor will review the program during the visit, provide feedback to the program and submit a recommendation to the council. The graphic below illustrates the steps:

Accreditation Council for Space Education Accreditation Process

	Initiate Process	Institution submits a Letter of Intent and application to ACSE.
	Acceptance of Application	ACSE evaluates application for acceptance criteria.
	Begin Self Study	ACSE mentor supports institution during preparation period.
	Submission of Self Study	Institution submits self study. Site visit scheduled.
	Site Visit	Site visitor completes an evaluation. The institution responds, and the site visitor submits recommendation to council.
	Accreditation	Fees paid
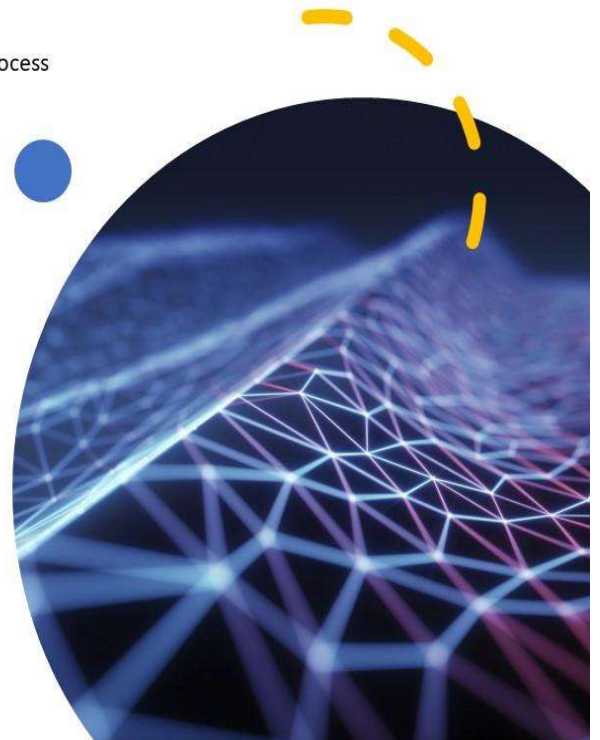
Multicampus Considerations

Programs offering content substantially the same across multiple campuses may apply for a single accreditation covering the whole program offered by the university in various locations. Programs offering content in multiple modalities (on campus, online or a blend) that substantially differ (in terms of content, design, assessment methods or resources) may need to pursue separate accreditation processes for each modality. Please contact us for individual guidance.

Accreditation Timeline

Year 1
- Become a member.
  - Institutions can become members to initiate the accreditation process and obtain benefits offered to members only.
  - Login credentials are provided.

- Apply for accreditation.
  - Member institutions can begin the process by creating a letter of intent, using the sample as a guide.
  - Submit the letter of intent and application with the initial application fee.
- The letter of intent and application are evaluated for qualifications necessary for the program to enter the accreditation process.

- - A decision is released to the program in 14–21 days.
  - Programs are notified of acceptance by email.
  - ACSE mentor is assigned.
- ACSE mentors:
  - Maintain consistent and regular communication with program liaisons as they prepare for their self-study and site visit.
  - Become well-acquainted with the program and institutional context through regular communication with the program.
  - Serve as the main point of ACSE contact to support accreditation.
  - Sign a confidentiality agreement.
- After acceptance, the program begins to compile the self-study narrative and evidence necessary to support alignment with ACSE standards.
  - Programs should review each standard, provide a narrative describing how the program aligns with the standard and include evidence within the body of the document or as an appendix to support claims made in the narrative.
  - Programs continue to work with the assigned ACSE mentor throughout the process to prepare the final self-study.

Year 2

- Continue to work with the assigned mentor to create self-study.
- From the date the program's letter of intent and application were accepted, the program will have one year to complete and submit the self-study.
- Once the program submits the self-study, the review process will begin.
  - An ACSE staff member will review the self-study for completeness.
  - ACSE may contact the program with questions and/or requests for clarification.
  - Once the program addresses all ACSE questions and/or requests for clarification, the site visitor selection process begins.
    - ACSE provides a list of potential, trained site visitors to the program.
    - The program identifies any potential site visitors who may have a conflict of interest.
    - ACSE selects site visitors from the remaining list.
- ACSE and the program coordinate the site visit.
- Post-site visit:
  - The site visit team compiles a report within two weeks after the visit concludes and provides an opportunity for the program to respond with factual corrections within two weeks from receipt of the report.
  - The site visit team makes a recommendation to the Council.
- ACSE reviews site visit team recommendations and votes on a decision at the next biannual meeting. Decisions include:
  - Full accreditation for the full time frame of seven years
  - Approved with provisions and a re-review in one year
  - Declined
- Programs are advised of decisions 30 days after the council meeting. Concurrently, ACSE will inform the public of the program's accreditation status

(and reasons for provisions or decline) within 30 days of the Council decision by posting the decision on the ACSE website.

After the accreditation decision is received, the program maintains compliance with the standards. See Ongoing Requirements for details.

Section 4B: Self-Study

The self-study serves as the evidence-based case a program submits to support that they have met the ACSE accreditation standards and that the program qualifies for ACSE accreditation. A substantive case is made when accuracy, relevancy, quality and utility are the focus. For instance, data evidence presented must include only three years, cohorts or classes of data, even if the program has five years of data. The ACSE self-study template outlines the case and includes narrative and data upload options for quality assurance, continuous improvement and innovation. The completed template must be submitted two months before the site visit. The self-study must be appropriately organized to ensure accessibility and clarity for program stakeholders, the site review team, the Council members and the broader space education community. Thus, jargon, acronyms and abbreviations must be avoided while giving a clear, detailed and contextual understanding of the program and its evidence of meeting ACSE accreditation standards. ACSE encourages programs to take advantage of opportunities for guidance in writing the self-study from the ACSE mentor and various professional development offerings.

If the submitted self-study is deemed unacceptable when reviewed, the ACSE staff or mentor will immediately schedule a meeting with the program leadership to discuss areas to be remedied.

Section 4C: ACSE Site Review — A Peer Review Process

The ACSE peer review process relies on the expertise and professional judgment of space education academic and industry professionals who volunteer their time in supporting program accreditation. Peer review imparts credibility, integrity and trustworthiness to the accreditation process and is a tradition of higher education accreditation processes. Part of peer review includes respecting institutional context, diversity and autonomy, which makes this volunteer work critical to program quality assurance, continuous improvement and innovation.

Reviewers include academic and industry professionals in space education. Participation from across the space ecosystem brings the benefits of varied expertise and perspectives that strengthen the ACSE accreditation process. Representation from industry is especially valued on ACSE site visits, which always include at least one locally selected member. ACSE membership is not a prerequisite for participating as a site visit reviewer.

Section 4D: Accreditation Decision

The Accreditation Council meets biannually (June and December) and as needed to ensure prompt accreditation decisions. When an accreditation decision is to be made, all Council

members review the self-study and site visit report, and one Council member presents the case for voting. The program is advised of the decision within 30 days.

Possible decisions include award accreditation or provisional accreditation; or renew, deny, revoke or defer accreditation. Decisions to award or renew accreditation are made when the self-study and site visit report are complete and evidence supports that the program has met the ACSE accreditation standards. These decisions can be made with suggested actions for future improvement. Award and renew decisions can occur with full accreditation for seven years or provisional accreditation for two years. Provisional accreditation occurs when all standards are met, but provisions are set to address areas of concern that threaten future accreditation. Provisions require action that must be resolved and communicated within two years through annual report submissions but may require a subsequent site visit. The Council determines if provisions are met. The Council can award full accreditation for the remainder of the seven years, extend the provisional accreditation period, or revoke the provisional accreditation.

Accreditation decisions will be posted on the [ACSE website](#) within 30 days of the decision-making meeting. The decision, reason and accreditation expiration date will be displayed on the website in the following format:

Decision	Reason	Expiration Date
Accredited	Fully meets all standards.	(7 years)
Provisionally accredited	1–2 deficiencies to be corrected by the expiration date.	(2 years)
Renewed	Renewal term based on deficiencies identified (if any).	2–7 years
Deferred	Multiple deficiencies. Decision is deferred until deficiencies are corrected.	No date
Denied	Program substantially does not meet standards.	No date
Revoked	Unresolved provisional accreditation.	

Accredited: An accredited decision indicates that the program was found to be compliant with the standards.

Provisionally Accredited: Programs receiving a provisionally accredited decision must rectify any identified deficiencies within the time frame provided. The Council will re-

review the program at the next meeting following submission of evidence that the deficiencies were rectified. Although programs are allowed two years to address deficiencies, programs are expected to provide evidence of compliance in time for reconsideration at the Council's next meeting.

Renewed: Renewed programs are accredited programs that have undergone the renewal process and demonstrated continued compliance with ACSE accreditation standards.

Deferred: Programs substantially lacking compliance will be deferred until they demonstrate substantial evidence of compliance with the standards. ACSE will continue to work with deferred programs to provide guidance. A program may resubmit a self-study, including the rectified items, when the issues have been resolved. A new site visit may be required at that time, and additional fees will be assessed.

Denied: Although the Council reserves the right to deny, it is expected that this will rarely occur. ACSE intends to guide programs through the process in a supportive manner so that issues preventing a favorable decision are identified and rectified early. Issues outside the scope of ACSE accreditation authority or outside the scope of influence for the program to resolve could lead to a denial.

A decision to deny is made when the self-study and site visit report are incomplete, and submitted evidence is insufficient to demonstrate that the program meets ACSE accreditation standards. This decision is improbable, as such a case is unlikely to come before the Council. The ACSE mentor will support the program through the preparation process and provide guidance to ensure the program's self-study is complete.

Revoked: A decision to revoke could occur when a program does not resolve provisions set with provisional accreditation or if an ACSE-accredited program does not comply with accreditation obligations (e.g., does not submit sufficient annual reports or pay dues and fees).

Within 30 days after the Council meets and an accreditation decision is made, the program will be sent a decision package that includes the official accreditation decision (and any provisions) and a media kit with public-reporting information. The accreditation decision is also posted publicly on the ACSE website to inform the public of the program's accreditation decision (and reasons for any provisions) within 30 days of the Council's decision.

All ACSE accreditation decisions can be appealed. Appeals must occur in writing within 60 days of a decision. Programs that receive a deny, revoke, or defer decision can resubmit for accreditation one year after the Council's decision.

Section 4E: Ongoing Requirements

ACSE-accredited institutions should maintain alignment with the ACSE standards as asserted in the initial accreditation documents. Programs should maintain current membership each year and collect data for the Mid-Cycle Review. The Mid-Cycle Review will require the program to

provide an update in an abbreviated form. The program's mentor will provide guidance as to the requirements. No site visit is required, and no Council decisions are made.

After initial accreditation in Year 2 (or beyond):

>   Year 3 — Maintain Program Standards
>   Year 4 — Maintain Program Standards & submit Mid-Cycle Report
>   Year 5 — Maintain Program Standards
>   Year 6 — Prepare for Reaffirmation Review
>   Year 7 — Complete Reaffirmation Review

Forms

Forms, tables and templates are available to assist programs in compiling data and evidence to support the self study. Please see the ACSE website under Member Resources.

Accreditation Costs

		Accreditation Pricing	
Pre-Accreditation	Membership fee ($2450 applied the first year)		$2,450
	Application fee		$2,490
	Year 1 Total		**$5,350**
	2nd Year		
	Membership fee		$2,450
	Year 2 Total		**$2,450**
	3rd Year		
	Membership fee		$2,450
	Site visit deposit		$5,000
	Year 3 Total		**$7,450**

Post Accreditation		
	4th Year	
	Membership fee	$2,450
	Year 4 Total	**$2,450**
	5th Year	
	Mid-Cycle Report	$1,500
	Membership fee	$2,450
	Year 5 Total	**$3,950**
	6th Year	
	Membership fee	$2,450
	Year 6 Total	**$2,450**
	7th Year	
	Membership fee	$2,450
	Site visit deposit	$5,000
	Year 7 Total	**$7,450**

After the initial accreditation occurs, programs continue to maintain compliance with ACSE standards, including maintenance of membership in good standing, as follows:

4th Year	Annual Membership Fee
5th Year	Annual Membership Fee, Mid-Cycle Report Fees
6th Year	Annual Membership Fee
7th Year	Annual Membership, Reaffirmation and Site Visit Fees

Each of the fees is invoiced as incurred. Site visit fees are invoiced at the time the site visit is scheduled, and the program reimburses costs incurred by the site visitor. Reaffirmation fees are invoiced when a program is up for reaffirmation.

International Programs

Capacity and Competence

ACSE is committed to accrediting international programs and maintains the capacity and competence to accredit international institutions. This includes having the necessary resources, expertise and infrastructure to conduct accreditation evaluations effectively and ethically on a global scale. ACSE maintains a dedicated team with the expertise and qualifications to effectively carry out international accreditation activities.

Notification and Guidance

When an international program applies for accreditation, the Council notifies the appropriate international authorities of its intent and seeks guidance regarding the accrediting organization's current and proposed activities. ACSE will establish formal communication channels with relevant international authorities and agencies to ensure a transparent and collaborative approach to accreditation in the relevant international jurisdiction.

Substantially Comparable

ACSE is committed to applying accreditation standards that are substantially comparable to those used for U.S. institutions and programs, where applicable. In cases where modifications to standards are necessary to accommodate international contexts, ACSE will make information about these modifications publicly available. This includes providing clear documentation and explanations of any deviations from U.S. standards.

ACSE will regularly review its accreditation standards to ensure they align with international best practices and are substantially comparable to U.S. standards.

Membership

ACSE offers both individual and program membership.

Institutional Membership

Candidacy

Program membership allows programs to become candidates for accreditation. By becoming a candidate for accreditation, universities can demonstrate their commitment to providing high-quality space education programs to their students. This can enhance the university's reputation and help attract top students and faculty.

Networking

ACSE offers opportunities for universities to connect with other institutions, industry professionals and government agencies involved in space education. This can lead to collaborations, partnerships and new initiatives that benefit the university and its students.

Program membership is $2,450 per year. The membership fee for the first year is waived when a program applies for accreditation.

Individual Membership

Individuals may sign up for membership and obtain access to benefits such as access to publications, job postings and networking opportunities.

Individual membership is $250 per year. Student membership is $50 per year.

Complaint Process

ACSE is committed to promptly responding to all public concerns and complaints regarding an ACSE-accredited program/institution or ACSE itself. Complaints must be related to the unethical application of or noncompliance with ACSE standards, policies or procedures for ACSE to act. In general, ACSE expects individuals within an institution to attempt to resolve a matter directly with the program/institution before formally submitting a complaint to ACSE. Complaints from students, faculty, staff, higher education institutions, state/federal agencies or the public against the program/institution or ACSE must be detailed by the complainant and submitted fully through the online ACSE Complaint Form or by printing the form and mailing or submitting it as an email attachment. Complainants will be notified within 10 business days of receipt of the complaint form.

The complaint must be investigated to determine if it 1) falls under ACSE purview and requires further investigation or 2) does not fall under ACSE purview.

If a complaint is determined to be unrelated to ACSE standards, policies or procedures, the ACSE executive director will notify the complainant in writing within 10 business days of the decision, and the matter is considered resolved. The determination of the ACSE executive director is final. ACSE does not act upon any complaints submitted with defamatory, hostile or profane language. Where a complainant has threatened or filed legal action against the program/institution involved, ACSE will hold complaints in abeyance pending resolution of the legal issues, and the complainant will be notified about this practice in writing within 10 business days. ACSE does not seek legal compensation or damages on an individual's behalf.

If a program/institution-related complaint is determined to be related to ACSE standards, policies or procedures, the matter will be submitted to the program/institution for response. A response from the program/institution must occur within 30 days of receipt. The complainant also will be notified of the status of their complaint when the program/institution is notified. Complainant anonymity will be maintained, and confidentiality of the matter will be preserved to the extent that any such information is not necessary to resolve the complaint. Upon receipt of a response from the program/institution, the ACSE executive director may request additional information.

If, after an investigation, there is insufficient evidence of unethical application or noncompliance with ACSE standards, policies or procedures, the ACSE executive director will notify the complainant and program/institution within 10 days in writing of that fact, and the matter is considered resolved. The decision of the ACSE executive director is final.

If there is sufficient evidence of unethical application or noncompliance, the ACSE executive director will notify the complainant and program/institution within 10 days in writing of that fact, and the complaint and all relevant documentation will be forwarded to the ACSE Board chair immediately. The ACSE Board chair can request further investigation of the matter, which may include further determining the facts of the matter, the validity of the complaint and the purported resolution. The investigation may take up to 90 days. If, based on the complaint and investigation, ACSE finds an institution has engaged in unethical application or noncompliance, the ACSE Board may 1) authorize a focused visit to further examine documents and interview

personnel on this matter to determine if any adverse action will be taken against the program/institution, 2) aid the program/institution in resolving the matter and/or 3) immediately revoke program accreditation status.

If a complaint is determined to be related to unethical application or noncompliance with ACSE standards, policies or procedures by ACSE personnel, the matter will be submitted to the Space Foundation Board for investigation. The complainant also will be notified about how their complaint is proceeding when the Space Foundation is notified. The investigation will include determining the facts of the matter and the validity of the complaint. The investigation may take up to 90 days. Complainant anonymity will be maintained, and confidentiality of the case will be preserved to the extent that any such information is not necessary to resolve the complaint. If, based on the investigation, ACSE is found to have engaged in unethical or noncompliant conduct, further action will occur, such as staff removal or immediate changes to policies and procedures. Once a resolution is reached, the Space Foundation Board will notify the complainant within 10 days.

All complaints and their resolutions brought to ACSE will be kept on file in perpetuity. A record of complaints regarding a specific program/institution or ACSE will be held for consideration to determine if a pattern of unethical or noncompliant conduct exists. If a pattern is found, programs/institutions will be required to address the pattern directly with the ACSE Board. If a pattern is seen with ACSE, the pattern must be addressed directly with the Space Foundation Board.

ACSE Self-Evaluation and Review Cycle

ACSE reviews its standards and procedures **annually** in conjunction with academic and industry advisors, with the goal of maintaining currency in the space industry and continuous improvement. ACSE publishes revisions to the *ACSE Standards and Handbook* each academic year.

Staff Contact Information

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