Computing Accreditation Commission

CRITERIA FOR ACCREDITING

COMPUTING PROGRAMS

Effective for Reviews during the 2026-2027 Accreditation Cycle

Incorporates all changes approved by the ABET Board of Delegates
Computing Area Delegation as of October 24, 2025

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Definitions

While ABET recognizes and supports the prerogative of institutions to adopt and use the terminology of their choice, it is necessary for ABET volunteers and staff to have a consistent understanding of terminology. With that purpose in mind, the Commissions will use the following basic definitions:

Program Educational Objectives

Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

Program Constituencies

Program constituencies are groups, including external groups, identified by the program that have a common interest in the program and can provide meaningful input regarding the program educational objectives.

Student Outcomes

Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.

Assessment

Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process.

Evaluation

Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained. Evaluation results in decisions and actions regarding program improvement.

Respectful Environment

A respectful environment supports, values, and treats all members fairly and with dignity.

The Computing Accreditation Commission (CAC) of ABET recognizes that its constituents may consider certain terms to have certain meanings; however, it is necessary for the CAC to have consistent terminology. Thus the CAC will use the following definition in applying the criteria.

Professional Dispositions

Professional dispositions are behaviors desired in the workplace.

The criteria for accreditation are in two sections.

General Criteria

General Criteria apply to all programs accredited by an ABET commission. Each program accredited by an ABET commission must satisfy every Criterion that is in the General Criteria for that commission.

Program Criteria

The Program Criteria provide discipline specific accreditation criteria. Programs must show that they satisfy all of the specific Program Criteria implied by the program title. Any overlapping requirements need be satisfied only once.

All programs seeking accreditation from the Computing Accreditation Commission of ABET must demonstrate that they satisfy all the General Criteria.

I. GENERAL CRITERIA

Criterion 1. Students

Student performance must be evaluated. Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain program educational objectives. Students must be advised regarding curriculum and career matters.

The program must have and enforce policies for accepting both new and transfer students, awarding appropriate academic credit for courses taken at other institutions, and awarding appropriate academic credit for work in lieu of courses taken at the institution. The program must have and enforce procedures to ensure and document that students who graduate meet all graduation requirements.

Criterion 2. Program Educational Objectives

The program must have published program educational objectives, as defined in these criteria, that are consistent with the mission of the institution and the needs of the program's various constituencies. There must be a documented, systematically utilized, and effective process, involving all constituencies identified by the program, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission and the needs of the program's constituencies.

Criterion 3. Student Outcomes

The program must have documented and publicly stated student outcomes that include (1) through (5) below and any outcomes required by applicable Program Criteria. The program may define additional outcomes.

Graduates of the program will have an ability to:

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

Criterion 4. Continuous Improvement

The program must regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The results of these evaluations must be systematically utilized as input for the program's continuous improvement actions. Other available information may also be used to assist in the continuous improvement of the program.

Criterion 5. Curriculum

The program's requirements must be consistent with its program educational objectives and designed in such a way that each of the student outcomes can be attained. The curriculum must combine technical, professional, and general education components to prepare students for a career, further study, and lifelong professional development in the computing discipline associated with the program.

The curriculum requirements specify topics, but do not prescribe specific courses. The program must include mathematics, statistics, and science appropriate to the discipline and at least 30 semester credit hours (or equivalent) of up-to-date coverage of fundamental and advanced computing topics that provide both breadth and depth. The computing topics must include:

1. Techniques, skills, and tools necessary for computing practice.
2. Principles and practices of security and privacy in computing.
3. Local and global impacts of computing solutions on individuals, organizations, and society.
4. A comprehensive project or experience appropriate to the discipline which: 1) builds on technical knowledge and skills acquired in prior advanced work, and 2) enables the application of appropriate professional dispositions.

Criterion 6. Faculty

Each faculty member teaching in the program must have competency and currency within the program's discipline consistent with the contributions to the program expected from the faculty member. The competency of faculty members must be demonstrated by such factors as education, professional credentials and certifications, professional experience, ongoing professional development, contributions to the discipline, teaching effectiveness, and communication skills. Collectively, the faculty must have the breadth and depth to cover all curricular areas of the program.

The faculty serving in the program must be of sufficient number to maintain continuity, stability, oversight, student interaction, and advising. The faculty must have sufficient responsibility and authority to improve the program through definition and revision of program educational objectives and student outcomes as well as through the implementation of a program of study that fosters the attainment of student outcomes.

Criterion 7. Facilities

Classrooms, offices, laboratories, and associated equipment must be adequate to support attainment of the student outcomes and to provide an atmosphere conducive to learning. Modern tools, equipment, computing resources, and laboratories appropriate to the program must be available and systematically maintained and upgraded to enable students to attain the student outcomes and to support program needs. Students must be provided appropriate guidance regarding the use of the tools, equipment, computing resources, and laboratories available to the program.

The library services and the computing and information infrastructure must be adequate to support the scholarly and professional activities of the students and faculty.

Criterion 8. Institutional Support

Institutional support, resources, and leadership must be sufficient to: a) ensure the quality and continuity of the program; b) attract, retain, and provide for the continued professional development of a qualified faculty; c) acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program; and d) create and foster a respectful environment among the program's students, faculty, staff, and administrators such that the student outcomes can be attained. Resources include institutional services and policies, financial support, and administrative and technical staff.

II. GENERAL CRITERIA FOR ASSOCIATE LEVEL PROGRAMS

Criterion 1. Students

Student performance must be evaluated. Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain program educational objectives. Students must be advised regarding curriculum and career matters.

The program must have and enforce policies for accepting both new and transfer students, awarding appropriate academic credit for courses taken at other institutions, and awarding appropriate academic credit for work in lieu of courses taken at the institution. The program must have and enforce procedures to ensure and document that students who graduate meet all graduation requirements.

Criterion 2. Program Educational Objectives

The program must have published program educational objectives that are consistent with the mission of the institution, the needs of the program's various constituencies, and these criteria. There must be a documented, systematically utilized, and effective process, involving program constituencies, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission, the program's constituents' needs and these criteria.

Criterion 3. Student Outcomes

The program must have documented and publicly stated student outcomes that include (1) through (5) below and any outcomes required by applicable Program Criteria. The program may define additional outcomes.

Graduates of the program will have an ability to:

1. analyze a broadly defined problem in the program's domain and apply principles of the discipline to identify solutions,
2. design and implement solutions to meet a given set of computing requirements in the context of the program's discipline,
3. communicate effectively in a variety of professional contexts,
4. recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles, and
5. function effectively as a member of a team engaged in activities appropriate to the program's discipline.

Criterion 4. Continuous Improvement

The program must regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The results of these evaluations must be systematically utilized as input for the program's continuous improvement actions. Other available information may also be used to assist in the continuous improvement of the program.

Criterion 5. Curriculum

The program's requirements must be consistent with its program educational objectives and designed in such a way that each of the student outcomes can be attained. The curriculum must combine technical, professional, and general education components to prepare students for a career, further study, and lifelong professional development in the computing discipline associated with the program.

The curriculum requirements specify topics, but do not prescribe specific courses. The program must ensure its students have the mathematical or statistical skills required for practice in the program's discipline, and to meet its student outcomes and program educational objectives.

The program must include at least 16 semester credit hours (or equivalent) of up-to-date coverage of:

1. application of techniques, skills and tools necessary for computing practice,
2. practices of privacy and security in computing, and
3. local and global impacts of computing solutions on individuals, organizations, and society.

Criterion 6. Faculty

Each faculty member teaching in the program must have competency and currency within the program's discipline consistent with the contributions to the program expected from the faculty member. The competency of faculty members must be demonstrated by such factors as education, professional credentials and certifications, professional experience, ongoing professional development, contributions to the discipline, teaching effectiveness, and communication skills. Collectively, the faculty must have the breadth and depth to cover all curricular areas of the program.

The faculty serving in the program must be of sufficient number to maintain continuity, stability, oversight, student interaction, and advising. The faculty must have sufficient responsibility and authority to improve the program through definition and revision of program educational objectives and student outcomes as well as through the implementation of a program of study that fosters the attainment of student outcomes.

Criterion 7. Facilities

Classrooms, offices, laboratories, and associated equipment must be adequate to support attainment of the student outcomes and to provide an atmosphere conducive to learning. Modern tools, equipment, computing resources, and laboratories appropriate to the program must be available and systematically maintained and upgraded to enable students to attain the student outcomes and to support program needs. Students must be provided appropriate guidance regarding the use of the tools, equipment, computing resources, and laboratories available to the program.

The library services and the computing and information infrastructure must be adequate to support the scholarly and professional activities of the students and faculty.

Criterion 8. Institutional Support

Institutional support, resources, and leadership must be sufficient to: a) ensure the quality and continuity of the program; b) attract, retain, and provide for the continued professional development of a qualified faculty; c) acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program; and d) create and foster a respectful environment among the program's students, faculty, staff, and administrators such that the student outcomes can be attained. Resources include institutional services and policies, financial support, and administrative and technical staff.

III. GENERAL CRITERIA FOR MASTER'S LEVEL PROGRAMS

General Criteria for Stand-Alone Master's Programs

Criterion MS1. Students

Student performance and progress toward completion of programs of study must be monitored and evaluated. The program must have and enforce policies and procedures to ensure that a program of study with specific educational goals is developed for each student. The program must document and enforce procedures to ensure that students who graduate meet all graduation requirements.

Criterion MS2. Program Educational Objectives

The program must have published program educational objectives that are consistent with the mission of the institution, the needs of the program's various constituencies, and these criteria. There must be a documented, systematically utilized, and effective process, involving program constituencies, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission, the program's constituents' needs, and these criteria.

Criterion MS3. Student Outcomes

The program must have documented and publicly stated student outcomes that enable graduates to attain a mastery of a specific field of study or area of professional practice consistent with the program's discipline. These outcomes must include (1) through (5) below and any outcomes required by applicable Program Criteria. The program may define additional outcomes.

Graduates of the program will have an ability to:

1. analyze a complex problem and apply principles of computing and other relevant disciplines to elaborate solutions to it,
2. design, implement, and evaluate a computing-based solution to meet a given set of requirements in the context of the program's discipline,
3. communicate effectively in a variety of professional contexts,
4. recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles, and
5. function effectively as a member and leader of a team engaged in activities appropriate to the program's discipline.

Criterion MS4. Continuous Improvement

The program must regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The results of these evaluations must be systematically utilized as input for the program's continuous improvement actions. Other available information may also be used to assist in the continuous improvement of the program.

Criterion MS5. Curriculum

The program curriculum must provide adequate content for each element of the curriculum, consistent with the student outcomes and program educational objectives, to ensure that students are prepared to enter the profession. The curriculum must include:

1. a minimum of 30 semester credit hours (or equivalent) beyond the baccalaureate level,
2. topics in a specific field of study or area of professional practice consistent with the program name and at a level beyond baccalaureate-level programs, and
3. a project or research activity resulting in a set of deliverables that demonstrates both the mastery of the subject matter and a high level of communication skills.

Additionally, graduates of the program must have completed a set of educational and professional experiences of at least 30 semester credit hours (or equivalent) that includes mathematics appropriate to the discipline as well as up-to-date coverage of fundamental and advanced computing topics that provide both breadth and depth. The documented experiences must include computing topics covering:

1. techniques, skills, and tools necessary for computing practice,
2. principles and practices of privacy and security in computing, and
3. local and global impacts of computing solutions on individuals, organizations, and society.

Each student's overall program of post-secondary educational and professional experience must satisfy the curricular components of the Program Criteria relevant to the master's level program name.

Criterion MS6. Faculty

Each faculty member teaching in the program must have competency and currency within the program's discipline consistent with the contributions to the program expected from the faculty member. The competency of faculty members must be demonstrated by such factors as education, professional credentials and certifications, professional experience, ongoing professional development, contributions to the discipline, teaching effectiveness, and communication skills. Collectively, the faculty must have the breadth and depth to cover all curricular areas of the program.

The faculty serving in the program must be of sufficient number to maintain continuity, stability, oversight, student interaction, and advising. The faculty must have sufficient responsibility and authority to improve the program through definition and revision of program educational objectives and student outcomes as well as through the implementation of a program of study that fosters the attainment of student outcomes. Faculty teaching graduate-level courses must have appropriate educational qualifications by education or experience.

Criterion MS7. Facilities

Classrooms, offices, laboratories, and associated equipment must be adequate to support attainment of the student outcomes and to provide an atmosphere conducive to learning. Modern tools, equipment, computing resources, and laboratories appropriate to the program must be available and systematically maintained and upgraded to enable students to attain the student outcomes and to support program needs. Students must be provided appropriate guidance

regarding the use of the tools, equipment, computing resources, and laboratories available to the program.

The library services and the computing and information infrastructure must be adequate to support the scholarly and professional activities of the students and faculty.

Criterion MS8. Institutional Support

Institutional support, resources, and leadership must be sufficient to: a) ensure the quality and continuity of the program; b) attract, retain, and provide for the continued professional development of a qualified faculty; c) acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program; and d) create and foster a respectful environment among the program's students, faculty, staff, and administrators such that the student outcomes can be attained. Resources include institutional services and policies, financial support, and administrative and technical staff.

General Criteria for Integrated Baccalaureate-Master's Programs

Criterion MI1. Students

Student performance must be evaluated. Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain program educational objectives. Students must be advised regarding curriculum and career matters.

The program must have and enforce policies for accepting both new and transfer students, awarding appropriate academic credit for courses taken at other institutions, and awarding appropriate academic credit for work in lieu of courses taken at the institution. The program must have and enforce procedures to ensure and document that students who graduate meet all graduation requirements. The program must have and enforce policies and procedures to ensure that an individual program of study with specific educational goals is developed for each student as part of the master's level component of the program.

Criterion MI2. Program Educational Objectives

The program must have published program educational objectives that are consistent with the mission of the institution, the needs of the program's various constituencies, and these criteria. There must be a documented, systematically utilized, and effective process, involving program constituencies, for the periodic review of these program educational objectives that ensures they remain consistent with the institutional mission, the program's constituents' needs, and these criteria.

Criterion MI3. Student Outcomes

The baccalaureate-level component of the program must support student outcomes specified in Criterion 3 of the General Criteria for Baccalaureate Level Computing Programs and any outcomes required by applicable baccalaureate Program Criteria appropriate to the program's discipline.

In addition, the program must have outcomes for the master's level component that prepare graduates to attain a mastery of a specific field of study or area of professional practice consistent with the program name.

Criterion MI4. Continuous Improvement

The baccalaureate-level component of the program must support the process of continuous improvement as prescribed in Criterion 4 of the General Criteria for Baccalaureate Level Computing Programs. The master's level component of the program must have a documented and operational process for assessing, maintaining and enhancing the quality of the program.

Criterion MI5. Curriculum

The program's requirements must be consistent with its program educational objectives and designed in such a way that each of the student outcomes can be attained.

The baccalaureate-level curriculum component of the program must be consistent with the requirements of Criterion 5 of the General Criteria for Baccalaureate Level Computing Programs and any curriculum required by applicable baccalaureate Program Criteria appropriate to the program's discipline.

The curriculum must also include:

1. a minimum of 30 semester credit hours (or equivalent) beyond the baccalaureate level,
2. a limited number of credit hours may be shared between the baccalaureate and master's programs but must be credit hours allowable in the master's level curriculum, and
3. topics in a specific field of study or area of professional practice consistent with the program name and at a level beyond the baccalaureate level.

Criterion MI6. Faculty

Each faculty member teaching in the program must have competency and currency within the program's discipline consistent with the contributions to the program expected from the faculty member. The competency of faculty members must be demonstrated by such factors as education, professional credentials and certifications, professional experience, ongoing professional development, contributions to the discipline, teaching effectiveness, and communication skills. Collectively, the faculty must have the breadth and depth to cover all curricular areas of the program.

The faculty serving in the program must be of sufficient number to maintain continuity, stability, oversight, student interaction, and advising. The faculty must have sufficient responsibility and authority to improve the program through definition and revision of program educational objectives and student outcomes as well as through the implementation of a program of study that fosters the attainment of student outcomes.

In addition, faculty teaching graduate level courses must have appropriate educational qualifications by education or experience.

Criterion MI7. Facilities

Classrooms, offices, laboratories, modern tools, computing resources, and associated equipment must be safely and systematically maintained and upgraded, and must be adequate to support attainment of the student outcomes, provide an atmosphere conducive to learning, and to support

program needs. Students must be provided guidance on the appropriate and safe use of the tools, equipment, computing resources, laboratories, and other resources available to them.

The library services and the computing and information infrastructure must be adequate to support the scholarly and professional activities of the students and faculty.

Criterion MI8. Institutional Support

Institutional support, resources, and leadership must be sufficient to: a) ensure the quality and continuity of the program; b) attract, retain, and provide for the continued professional development of a qualified faculty; c) acquire, maintain, and operate infrastructures, facilities and equipment appropriate for the program; and d) create and foster a respectful environment among the program's students, faculty, staff, and administrators such that the student outcomes can be attained. Resources include institutional services and policies, financial support, and administrative and technical staff.

IV. PROGRAM CRITERIA

All programs seeking accreditation from the Computing Accreditation Commission of ABET must demonstrate that they satisfy all of the specific Program Criteria implied by the program title.

Computer Science and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using computer science or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Apply computer science theory and software development fundamentals to produce computing-based solutions. [CS]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

These requirements are:

a. Computer science: At least 40 semester credit hours (or equivalent) that must include:
    1. Substantial coverage of algorithms and complexity, computer science theory, concepts of programming languages, and software development.
    2. Substantial coverage of at least one general-purpose programming language.
    3. Exposure to computer architecture and organization, information management, networking and communication, operating systems, and parallel and distributed computing.
    4. The study of computing-based systems at varying levels of abstraction.
    5. A major project that requires integration and application of knowledge and skills acquired in earlier course work.
b. Mathematics and Statistics: At least 15 semester credit hours (or equivalent) that must include discrete mathematics, probability, and statistics and must have mathematical rigor at least equivalent to introductory calculus.
c. Science: Coursework that develops and applies the scientific method in a non-computing area.

6. Faculty

In addition to the General Criteria faculty requirements, some full-time faculty members must have a Ph.D. in computer science.

Cybersecurity and Similarly Named Associate Level Computing Programs

Lead Society: CSAB

These program criteria apply to associate level computing programs using cybersecurity, cyber operations, computer security, information assurance, information security, computer forensics, or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will have an ability to:

6. Apply security principles and practices to maintain operations in the presence of risks and threats.

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses. The program must require at least 30 semester credit hours (or equivalent) of computing and cybersecurity coursework that must include the following:

1. Application of the crosscutting concepts of confidentiality, integrity, availability, risk, adversarial thinking and systems thinking.
2. Cybersecurity topics from each of the following areas:
    a) Data Security: protection of data at rest, during processing, and in transit.
    b) Software Security: development and use of software that reliably preserves the security properties of the protected information and systems.
    c) Component Security: the security aspects of the design, procurement, testing, analysis, and maintenance of components integrated into larger systems.
    d) Connection Security: security of the connections between components, both physical and logical.
    e) System Security: security aspects of systems that use software and are composed of components and connections.
    f) Human Security: the study of human behavior in the context of data protection, privacy, and threat mitigation.
    g) Organizational Security: protecting organizations from cybersecurity threats and managing risk to support successful accomplishment of the organizations' missions.
    h) Societal Security: aspects of cybersecurity that broadly impact society as a whole.
3. Programming or scripting skills.
4. Advanced cybersecurity topics that build on the above crosscutting concepts and cybersecurity topics.

Cybersecurity and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using cybersecurity, cyber operations, computer security, information assurance, information security, computer forensics, or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Apply security principles and practices to maintain operations in the presence of risks and threats. [CY]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses. These requirements are:

(a) At least 45 semester credit hours (or equivalent) of computing and cybersecurity course work. The course work must include:
   1. Application of the crosscutting concepts of confidentiality, integrity, availability, risk, adversarial thinking, and systems thinking.
   2. Fundamental topics from each of the following:
      a) Data Security: protection of data at rest, during processing, and in transit.
      b) Software Security: development and use of software that reliably preserves the security properties of the protected information and systems.
      c) Component Security: the security aspects of the design, procurement, testing, analysis, and maintenance of components integrated into larger systems.
      d) Connection Security: security of the connections between components, both physical and logical.
      e) System Security: security aspects of systems that use software and are composed of components and connections.
      f) Human Security: the study of human behavior in the context of data protection, privacy, and threat mitigation.
      g) Organizational Security: protecting organizations from cybersecurity threats and managing risk to support successful accomplishment of the organizations' missions.
      h) Societal Security: aspects of cybersecurity that broadly impact society as a whole.
   3. Advanced cybersecurity topics that build on crosscutting concepts and fundamental topics to provide depth.

(b) At least 6 semester credit hours (or equivalent) of mathematics that must include discrete mathematics and statistics.

Data Science, Data Analytics and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using data science, data analytics or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Apply theory, techniques, and tools throughout the data science lifecycle and employ the resulting knowledge to satisfy stakeholders' needs. [DS]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

These requirements are:

At least 45 semester credit hours (or equivalent) of data science course work that must cover:

1. Fundamental data science lifecycle topics:
    a) Data acquisition and representativeness
    b) Data management
    c) Data preparation and integration
    d) Data analysis
    e) Model development and deployment
    f) Visualization and communication of the knowledge obtained from the data
2. Concepts that span and are applied to the data science lifecycle:
    a) Data ethics including legitimate use and algorithmic fairness
    b) Governance including privacy, security, and stewardship
    c) Applied Statistical and mathematical topics including inference, modeling, linear algebra, probability, and optimization
    d) Computing including data structures and algorithms
3. Advanced data science coursework that provides depth.
4. Coverage of at least one application area that provides a context for data science activities.
5. A major project that incorporates an application area and requires integration and application of knowledge and skills acquired in earlier course work.

Information Systems and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using information systems or similar terms in their titles.

Definition

Information Systems Environment

> An information systems environment is an organized domain of activity within which information systems are used to support and enable the goals of the activity. Examples of information systems environments include (but are not limited to) business, health care, government, not-for-profit organizations, and scientific disciplines.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Support the delivery, use, and management of information systems within an information systems environment. [IS]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

These requirements are:

a. Information systems: At least 30 semester credit hours (or equivalent) that include coverage of fundamentals and applied practice in application development; programming; data and information management; information technology infrastructure; systems analysis, design and acquisition; project management; and the role of information systems in organizations;
b. Information systems environment: At least 15 additional semester credit hours (or equivalent) of a cohesive set of topics that provide an understanding of an information systems environment;
c. A major project that requires integration and application of knowledge and skills acquired in earlier course work; and
d. Appropriate mathematical and statistical models and techniques to solve a broad range of problems in Information Systems.

6. Faculty

In addition to the General Criteria faculty requirements, some full-time faculty members, including those responsible for the information systems curriculum development, must hold a terminal degree with a program of study in information systems.

Information Technology and Similarly Named Associate Level Computing Programs

Lead Society: CSAB

These program criteria apply to associate level computing programs using information technology or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Use established approaches to apply, integrate, and administer secure computing technologies to accomplish user goals.

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

These requirements are:

At least 21 semester credit hours (or equivalent) of Information Technology coursework that must include:

1. Fundamentals and applied practice in each of the following areas:
    a) substantial coverage of:
        1. information management,
        2. networking,
        3. software development and management;
    b) exposure to:
        1. integrated systems,
        2. platform technologies,
        3. system paradigms,
        4. user experience design,
        5. web and mobile systems;
2. Supplemental information technology topics that build on fundamentals and are appropriate to the program; and
3. Experiential learning appropriate to the program.

Information Technology and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using information technology or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Use systemic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals. [IT]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

The requirements are:

(a) Information Technology: At least 45 semester credit hours (or equivalent) that must include:
    1. Fundamentals and applied practice in:
        a. information management
        b. integrated systems
        c. platform technologies
        d. system paradigms
        e. user experience design
        f. networking
        g. software development and management
        h. web and mobile systems
    2. Advanced and supplemental IT topics that build on fundamentals and applied practice to provide depth.
    3. Experiential learning appropriate to the program.
    4. Principles and practices of IT project management.

(b) Mathematics: At least six semester credit hours (or equivalent) of appropriate mathematical topics that includes relevant discrete mathematics.

V. PROPOSED CHANGES TO THE CRITERIA

The following section presents proposed changes to these criteria as approved by the ABET Computing Area Delegation on October 24, 2025 for a 180-day review and public comment period. Comments will be considered until June 15, 2026. The ABET Computing Area Delegation will determine, based on the comments received and on the advice of the CAC, the content of the adopted criteria. The adopted criteria will then become effective following the ABET Computing Area Delegation Meeting in the fall of 2026 and would first be applied by the CAC for accreditation reviews during the 2027-28 review cycle.

Proposed Program Criteria for Artificial Intelligence, Machine Learning, and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using artificial intelligence, machine learning, or similar terms in their titles.

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Apply artificial intelligence theories, models, and techniques to design and implement AI-based solutions that solve complex problems. [AI]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses. These requirements are:

a. At least 42 semester credit hours (or equivalent) of artificial intelligence (AI) coursework that must cover the following:
    1. Fundamental AI topics:
        a. AI foundations, such as reasoning, heuristic search, and knowledge representation.
        b. Programming, data structures, and algorithms.
        c. Data and knowledge engineering.
        d. Machine learning, including deep learning.
        e. Design and implementation of AI solutions.
        f. AI system architecture and infrastructure.
        g. Ethics and responsible AI.
    2. Advanced AI topics that build on the fundamental AI topics to provide depth.
    3. Application area: Coverage of at least one application area that uses AI.
    4. A major project that requires integrating and applying knowledge and skills acquired in earlier course work.
b. Mathematics and Statistics: At least 9 semester credit hours (or equivalent) must include statistical inference and modeling, linear algebra, probability, data visualization, and optimization topics.

Proposed Program Criteria for Information Systems and Similarly Named Computing Programs

Lead Society: CSAB

These program criteria apply to computing programs using information systems or similar terms in their titles.

~~Definition~~

~~**Information Systems Environment**~~

> ~~An information systems environment is an organized domain of activity within which information systems are used to support and enable the goals of the activity. Examples of information systems environments include (but are not limited to) business, health care, government, not-for-profit organizations, and scientific disciplines.~~

3. Student Outcomes

In addition to outcomes 1 through 5, graduates of the program will also have an ability to:

6. Support the delivery, use, and management of information systems within an information systems environment. [IS]

5. Curriculum

The curriculum requirements are in addition to the General Criteria curriculum requirements and specify topics, but do not prescribe specific courses.

These requirements are:

a. Information systems: At least 30 semester credit hours (or equivalent) that include coverage of fundamentals and applied practice in application development; programming; data and information management; information technology infrastructure; systems analysis, design and acquisition; project management; and the role of information systems in organizations;
b. Information systems environment: At least 15 additional semester credit hours (or equivalent) of a cohesive set of topics ~~that provide an understanding of an information systems environment~~ distinct from computing topics, that constitute a single domain of activity in which information systems are applied to support and enable the goals of that activity. Examples of domains of activity include (but are not limited to) business, healthcare, government, not-for-profit organizations, and scientific disciplines;
c. A major project that requires integration and application of knowledge and skills acquired in earlier course work; and
d. Appropriate mathematical and statistical models and techniques to solve a broad range of problems in Information Systems.

6. Faculty

In addition to the General Criteria faculty requirements, some full-time faculty members~~, including those responsible for the information systems curriculum development,~~ must hold a terminal degree with a program of study in information systems.