Approved and Proposed Computing Criteria Changes

1. **General Criteria C2 (PEOs)** – All additions are noted in gold, and deletions are noted by ~~strikethrough~~; the changes apply to all associates, bachelors, and masters level criteria. This is approved by the Computing Area Delegation (CAD) for implementation effective Fall 2026.

> 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~~, and these criteria~~. There must be a documented, systematically utilized, and effective process, involving ~~program~~ 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 ~~constituents' needs, and these criteria~~ constituencies.
>
> New Harmonized Definition:
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> 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.

2. **General Criteria C5 (Curriculum)** – All additions are noted in gold, and deletions are noted by ~~strikethrough~~. The addition of C5.4 applies only to bachelors level programs. This is approved by the Computing Area Delegation (CAD) for implementation effective Fall 2026.

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 course work, and 2) enables the application of appropriate professional dispositions.

New Definitions:

Professional dispositions are defined as behaviors desired in the workplace.

3. **Information Systems Program Criteria C5 (Curriculum)** – All additions are noted in gold and deletions are noted by ~~strikethrough~~. This is a proposal approved by the Computing Area Delegation (CAD) for a year of feedback / comment (aka “first reading”).

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.

4. **Information Systems Program Criteria C6 (Faculty)** – All additions are noted in gold and deletions are noted by ~~strikethrough~~. This is a proposal approved by the Computing Area Delegation (CAD) for a year of feedback / comment (aka “first reading”).

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.

5. **Bachelors Level AI / ML Program Criteria –** This is a proposal approved by the Computing Area Delegation (CAD) for a year of feedback / comment (aka “first reading”).

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

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.

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 topics to provide depth.
   3. Application area: Coverage of at least one application area at uses AI.
   4. A major project that requires integrating and applying knowledge and skills acquired in earlier coursework.

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.