

Standards for Criterion I: Objectives, Outcomes and Assessment

The program has documented measurable objectives and expected outcomes for graduating students, based on the needs of the program's constituencies. The program uses a documented process to regularly assess the extent to which its objectives and expected outcomes are being met. The results of the assessments are used to develop and implement plans to effect continuous improvement of the program.

- I-1. The program must have documented, measurable objectives.
- I-2. The program must have documented, measurable expected outcomes for graduating students.
- I-3. Documented processes must be in place to periodically review the program relative to its objectives and expected outcomes.
- I-4. The assessment process must involve the collection, documentation and evaluation of relevant data.
- I-5. The assessment process must take into account the needs of the program's various constituencies.
- I-6. The results of the program's assessments must be used to develop and implement plans for program improvement.
- I-7. The assessment process must include planned periodic review of the program's objectives and expected outcomes.
- I-8. The results of the program's assessments and the actions taken based on the results must be documented.
- I-9. The program's expected learning outcomes must include the following:
 - (a) Use and apply current technical concepts and practices in the core information technologies;
 - (b) Analyze, identify and define the requirements that must be satisfied to address problems or opportunities faced by organizations or individuals;
 - (c) Design effective and usable IT-based solutions and integrate them into the user environment;
 - (d) Assist in the creation of an effective project plan;
 - (e) Identify and evaluate current and emerging technologies and assess their applicability to address the users' needs;
 - (f) Analyze the impact of technology on individuals, organizations and society, including ethical, legal and policy issues;
 - (g) Demonstrate an understanding of best practices and standards and their application;
 - (h) Demonstrate independent critical thinking and problem solving skills;
 - (i) Collaborate in teams to accomplish a common goal by integrating personal initiative and group cooperation;
 - (j) Communicate effectively and efficiently with clients, users and peers both verbally and in writing, using appropriate terminology;
 - (k) Recognize the need for continued learning throughout their career.

Addition to Criterion II: Student Support

Students can complete the program in a reasonable amount of time. Students have ample opportunity to interact with their instructors. Students are offered timely, qualified advising about the program's requirements and their career alternatives. Students who graduate from the

DRAFT Information Technology Specific Criteria
September 2003

program meet all program requirements. In addition to the general criteria, students are offered timely feedback on their performance.

Standards for Criterion II: Student Support

- II-1. Courses must be offered with sufficient frequency for students to complete the program in a timely manner.
- II-2. Courses must be structured to ensure effective interaction between instructors and students.
- II-3. Students must be given instructive and timely feedback on their performance.
- II-4. Timely, qualified advising on program completion, course selection and career opportunities must be available to all students.
- II-5. There must be established standards and procedures to ensure that graduates meet the requirements of the program.
- II-6. There must be established standards and procedures regarding the acceptance of courses taken elsewhere.

Standards for Criterion III: Faculty Qualifications

Faculty members are current and active in the computing discipline associated with the program. Collectively, they have the technical breadth and depth necessary to support the program.

- III-1. Each faculty member must remain abreast of current developments in the discipline.
- III-2. The collective interests and qualifications of the faculty members must be sufficient to teach the courses and to plan and modify the courses and curriculum.
- III-3. All faculty members must have a level of competence that would normally be obtained through graduate work in the discipline or a closely related field.
- III-4. Some full-time faculty members must hold a terminal degree appropriate to the discipline.

Standards for Criterion IV: Faculty Size and Workload

There are enough faculty members to provide continuity and stability, to cover the curriculum reasonably, and to allow an appropriate mix of teaching, professional development and scholarly activities for each faculty member.

- IV-1. There must be enough full-time faculty members with primary commitment to the program to provide continuity and stability.
- IV-2. Full-time faculty members must oversee all course work.
- IV-3. Full-time faculty members must cover most of the total classroom instruction.
- IV-4. All full-time faculty members must have sufficient time for scholarly activities and professional development.
- IV-5. Where faculty members have advising duties, such duties must be a recognized part of their workload.

Standards for Criterion V: Curriculum

The program's requirements are consistent with its objectives and expected outcomes. The curriculum combines technical and professional requirements with general education requirements and electives to prepare students for a professional career and further study in the computing discipline associated with the program, and for functioning in modern society. The technical and professional requirements include up-to-date coverage of basic and advanced topics in the computing discipline associated with the program, and appropriate mathematics.

- V-1. The curriculum must be consistent with the documented objectives of the program.
- V-2. The curriculum must enable students to meet the program's expected outcomes.
- V-3. There must be a detailed course outline for each course, which indicates the role of the course in the curriculum, the specific learning outcomes for the course, the topics to be covered in the course, and the assessment procedure for the course.
- V-4. Where a course is a required component of the program, the course outline must state to which of the program's expected learning outcomes for graduating students the course contributes.
- V-5. Collaborative skills must be developed and applied in the program.
- V-6. Critical thinking and problem solving skills must be developed and applied throughout the program.
- V-7. The curriculum must be designed to encourage the formation of life-long learning habits.
- V-8. The oral communications skills of the student must be developed and applied in the program.
- V-9. The written communications skills of the student must be developed and applied in the program.
- V-10. To broaden the background of the student, the curriculum must include a sufficient number of hours of study in general education and other areas outside of the discipline. The general education courses must be consistent with the institution's mission, and will typically enhance the student's generic skills and their ability to function as educated members of society.
- V-11. The program must consist of minimally 120 credit hours, of which minimally 40 are information technology courses, and the remainder general education courses, supporting courses and electives, which may or may not be in information technology.
- V-12. All students must take a broad-based core of fundamental material appropriate to information technology.
- V-13. The curriculum must stress fundamental concepts and underlying principles in information technology.
- V-14. There must be sufficient coverage of social and ethical implications of computing to give students an understanding of a broad range of issues in this area.
- V-15. The curriculum must stress the importance of users and their requirements in the deployment of information technology solutions.
- V-16. The curriculum must stress the importance of best practices and standards.
- V-17. The curriculum must enable students to develop project management skills.
- V-18. All students must become proficient in the core information technologies of programming, computer networking and hardware, databases, web technologies, as well as the human-computer interaction design principles related to these technologies.

DRAFT Information Technology Specific Criteria
September 2003

- V-19. All students must take advanced coursework in Information Technology that provides breadth and builds on the computing core to provide depth.
- V-20. The advanced coursework must enable students to attain expert level expertise in one of the core information technologies.
- V-21. The curriculum must contain sufficient coverage of mathematics to allow students to attain the formulated program outcomes. Typically, this requires a minimum of 6 credit hours of mathematics, which includes discrete mathematics and probability and statistics. The mathematics courses cannot count towards the 40 credits of required information technology courses.
- V-22. The curriculum must contain sufficient coverage of relevant science to allow students to attain the formulated program outcomes. The type of science required and the amount will depend on the student's Information Technology specialization. The science courses cannot count towards the 40 credits of required information technology courses.

Standards for Criteria VI: Technology Infrastructure

Computing resources are available, accessible, and adequately supported to enable students to achieve the program's expected outcomes and to support faculty teaching needs and scholarly activities.

- VI-1. Each student must have adequate and reasonable access to the systems needed for each course.
- VI-2. Documentation for hardware and software must be readily accessible to faculty and students.
- VI-3. All faculty members must have access to adequate computing resources for class preparation and for scholarly activities.
- VI-4. There must be adequate support personnel to install and maintain the computing resources and laboratories.
- VI-5. Instructional assistance must be provided for the computing resources and laboratories.

Standards for Criterion VII: Institutional Support and Financial Resources

The institution's support for the program and the financial resources available to the program are sufficient to provide an environment in which the program can achieve its objectives and expected outcomes. Support and resources are sufficient to provide assurance that the program will retain its strength throughout the period of accreditation.

- VII-1. Support for faculty must be sufficient to enable the program to attract and retain high-quality faculty capable of supporting the program's objectives.
- VII-2. There must be sufficient support and financial resources to allow all faculty members to attend national technical meetings with sufficient frequency to maintain competence as teachers and scholars.
- VII-3. There must be support and recognition of professional development and scholarly activities.

DRAFT Information Technology Specific Criteria
September 2003

- VII-4. There must be office support consistent with the type of program, level of scholarly activity, and needs of the faculty members.
- VII-5. Adequate time must be assigned for the administration of the program.
- VII-6. Upper levels of administration must provide the program with the resources and atmosphere to function effectively with the rest of the institution.
- VII-7. Resources must be provided to acquire and maintain computing resources and laboratories that meet the needs of the program.
- VII-8. Resources must be provided to support library and related information retrieval facilities that meet the needs of the program.
- VII-9. There must be evidence that there will be continuity of institutional support and financial resources throughout the period of accreditation.

Standards for Criterion VIII: Institutional Facilities

Institutional facilities including the library, other electronic information retrieval systems, computer networks, classrooms, and offices are adequate to support the objectives and expected outcomes of the program.

- VIII-1. The library that serves the program must be adequately staffed with professional librarians and support personnel.
- VIII-2. The library's technical collection must include up-to-date textbooks, reference works, and publications of appropriate professional and research organizations.
- VIII-3. Systems for locating and obtaining electronic information must be available.
- VIII-4. Classrooms must be adequately equipped for the courses taught.
- VIII-5. Faculty offices must be adequate to enable faculty members to meet their responsibilities to students and for their professional needs.