ABET

Computing Accreditation Commission

**PROGRAM EVALUATOR WORKSHEET**

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| **Institution** | **Name of institution on RFE** |  |  |
| **Program Name** | **Name of program on RFE** | **Team Chair** | **Team Chair name** |
| **Visit Dates** | **Dates of visit** | **Program Evaluator** | **Your name** |

**Use “C” for concern, “W” for weakness, and “D” for deficiency in the appropriate line.**

**The result for each criterion will be the union of any C, W, or D within that criterion’s elements.**

|  | **Last**  **Visit** | **Pre-**  **Visit** | **Day**  **0** | **Day**  **1** | **Exit**  **Stmt** | **For each Deficiency (D), Weakness (W), and/or Concern (C), identify the basis for your conclusion** |
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| **Criterion 1. STUDENTS** |  |  |  |  |  |  |
| Student performance must be evaluated. |  |  |  |  |  |  |
| Student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to obtain program 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. |  |  |  |  |  |  |
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| **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. |  |  |  |  |  |  |
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| **Criterion 3. STUDENT OUTCOMES** |  |  |  |  |  |  |
| The program must have documented student outcomes that prepare graduates to attain the program educational objectives. |  |  |  |  |  |  |
| There must be a documented and effective process for the periodic review and revision of these student outcomes. |  |  |  |  |  |  |
| The program must enable students to attain, by the time of graduation: |  |  |  |  |  |  |
| 1. An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline |  |  |  |  |  |  |
| 1. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution |  |  |  |  |  |  |
| 1. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs |  |  |  |  |  |  |
| 1. An ability to function effectively on teams to accomplish a common goal |  |  |  |  |  |  |
| 1. An understanding of professional, ethical, legal, security, and social issues and responsibilities |  |  |  |  |  |  |
| 1. An ability to communicate effectively with a range of audiences |  |  |  |  |  |  |
| 1. An ability to analyze the local and global impact of computing on individuals, organizations, and society |  |  |  |  |  |  |
| 1. Recognition of the need for and an ability to engage in continuing professional development |  |  |  |  |  |  |
| 1. An ability to use current techniques, skills, and tools necessary for computing practice |  |  |  |  |  |  |
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| **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 continuous improvement of the program. |  |  |  |  |  |  |
| Other available information may also be used to assist in the continuous improvement of the program. |  |  |  |  |  |  |
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| **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 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 must include at least one year of up-to-date coverage of fundamental and advanced topics in the computing discipline associated with the program. |  |  |  |  |  |  |
| In addition, the program must include mathematics appropriate to the discipline beyond the pre-calculus level. |  |  |  |  |  |  |
| For each course in the major required of all students, its content, expected performance criteria, and place in the overall program of study must be published. |  |  |  |  |  |  |
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| **Criterion 6. FACULTY** |  |  |  |  |  |  |
| Each faculty member teaching in the program must have expertise and educational background consistent with the contributions to the program expected from the faculty member. |  |  |  |  |  |  |
| The competence 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. |  |  |  |  |  |  |
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| **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, accessible, 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. |  |  |  |  |  |  |
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| **Criterion 8. INSTITUTIONAL SUPPORT** |  |  |  |  |  |  |
| Institutional support and leadership must be adequate to ensure the quality and continuity of the program. |  |  |  |  |  |  |
| Resources including institutional services, financial support, and staff (both administrative and technical) provided to the program must be adequate to meet program needs. |  |  |  |  |  |  |
| The resources available to the program must be sufficient to attract, retain, and provide for the continued professional development of a qualified faculty. |  |  |  |  |  |  |
| The resources available to the program must be sufficient to acquire, maintain, and operate infrastructures, facilities and equipment appropriate  for the program, and to provide an environment in which student outcomes can be attained. |  |  |  |  |  |  |
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| **ABET POLICIES AND PROCEDURES** |  |  |  |  |  |  |
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**Program Criterion: Each program must satisfy applicable Program Criteria (if any). Program Criteria provide the specificity needed for interpretation of the General Criteria as applicable to a given discipline. If a program, by virtue of its title, becomes subject to two or more sets of Program Criteria, then that program must satisfy each set of Program Criteria; however, overlapping requirements need to be satisfied only once.**

**For a program that is evaluated under specific program criteria, complete the applicable pages and delete the others.**

**Program Criteria for Computer Science and Similarly Named Computing Programs**

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| **PROGRAM CRITERIA (Computer Science)** |  |  |  |  |  |  |
| **3. Student Outcomes** |  |  |  |  |  |  |
| The program must enable students to attain, by the time of graduation: |  |  |  |  |  |  |
| (j) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices. [CS] |  |  |  |  |  |  |
| (k) An ability to apply design and development principles in the construction of software systems of varying complexity. [CS] |  |  |  |  |  |  |
| **5. Curriculum** |  |  |  |  |  |  |
| Students must have the following amounts of course work or equivalent educational experience: |  |  |  |  |  |  |
| a. Computer Science: One and one-third year that must include |  |  |  |  |  |  |
| 1. Coverage of the fundamentals of algorithms, data structures, software design, concepts of programming languages and computer organization and architecture. [CS] |  |  |  |  |  |  |
| 1. An exposure to a variety of programming languages and systems. [CS] |  |  |  |  |  |  |
| 1. Proficiency in at least one higher-level language. [CS] |  |  |  |  |  |  |
| 1. Advanced course work that builds on the fundamental course work to provide depth. [CS] |  |  |  |  |  |  |
| b. One year of science and mathematics |  |  |  |  |  |  |
| 1. Mathematics: At least one-half year that must include discrete mathematics. The additional mathematics might consist of courses in areas such as calculus, linear algebra, numerical methods, probability, statistics, number theory, geometry, or symbolic logic. [CS] |  |  |  |  |  |  |
| 1. Science: A science component that develops an understanding of the scientific method and provides students with an opportunity to experience this mode of inquiry in courses for science or engineering majors that provide some exposure to laboratory work. [CS] |  |  |  |  |  |  |
| **6. Faculty** |  |  |  |  |  |  |
| Some full time faculty members have a Ph.D. in computer science. |  |  |  |  |  |  |

**Program Criteria for Information Systems and Similarly Named Computing Programs**

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| **PROGRAM CRITERIA (Information Systems)** |  |  |  |  |  |  |
| **3. Program Outcomes** |  |  |  |  |  |  |
| The program must enable students to attain, by the time of graduation: |  |  |  |  |  |  |
| 1. An understanding of and an ability to support the use, delivery, and management of information systems within an Information Systems environment. [IS] |  |  |  |  |  |  |
| **5. Curriculum** |  |  |  |  |  |  |
| Students must have course work or an equivalent educational experience that includes: |  |  |  |  |  |  |
| 1. Information Systems: One year that must include: |  |  |  |  |  |  |
| 1. Coverage of the fundamentals of application development, data management, networking and data communications, security of information systems, systems analysis and design and the role of Information Systems in organizations. [IS] |  |  |  |  |  |  |
| 1. Advanced course work that builds on the fundamental coursework to provide depth. [IS] |  |  |  |  |  |  |
| 1. Information Systems Environment: One-half year of course work that must include a cohesive set of topics that provide an understanding of an environment in which the information systems will be applied professionally. [IS] |  |  |  |  |  |  |
| 1. Quantitative analysis or methods including statistics. [IS] |  |  |  |  |  |  |
| **6. Faculty** |  |  |  |  |  |  |
| Some full-time faculty members, including those responsible for the IS curriculum development, must hold a terminal degree with a program of study in information systems. [IS] |  |  |  |  |  |  |

**Program Criteria for Information Technology and Similarly Named Computing Programs**

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| **PROGRAM CRITERIA (Information Technology)** |  |  |  |  |  |  |
| **3. Program Outcomes** |  |  |  |  |  |  |
| The program must enable students to attain, by the time of graduation: |  |  |  |  |  |  |
| 1. An ability to use and apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, and web systems and technologies. [IT] |  |  |  |  |  |  |
| 1. An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems. [IT] |  |  |  |  |  |  |
| 1. An ability to effectively integrate IT-based solutions into the user environment. [IT] |  |  |  |  |  |  |
| 1. An understanding of best practices and standards and their application. [IT] |  |  |  |  |  |  |
| 1. An ability to assist in the creation of an effective project plan. [IT] |  |  |  |  |  |  |
| **5. Curriculum** |  |  |  |  |  |  |
| Students must have course work or an equivalent educational experience that includes: |  |  |  |  |  |  |
| 1. Coverage of the fundamentals of |  |  |  |  |  |  |
| 1. The core information technologies of human computer interaction, information management, programming, networking, web systems and technologies. [IT] |  |  |  |  |  |  |
| 1. Information assurance and security. [IT] |  |  |  |  |  |  |
| 1. System administration and maintenance. [IT] |  |  |  |  |  |  |
| 1. System integration and architecture. [IT] |  |  |  |  |  |  |
| 1. Advanced course work that builds on the fundamental course work to provide depth. [IT] |  |  |  |  |  |  |