ABET

Computing Accreditation Commission

THE INFORMATION SYSTEMS ENVIRONMENT ∙

The Program Criteria for CAC Information Systems accreditation require “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.” An ***information systems environment*** is an area of practice in which information systems professionals integrate management systems and technology skills professionally to support the area’s goals. An ***environment*** does not and cannot constitute a single, narrowly focused knowledge area. Instead, an environment represents a broader application domain within which information systems are employed. The environment encompasses and influences the systems and technologies within it and is also impacted by the systems and technologies that support it. The inputs, processes and outputs of the environment are closely intertwined with the information systems within the environment.

Table 1 shows several examples of IS environments (Column 1) and IS Curriculum examples (Column 2). Column 3 consists of examples that would not fulfill the concept of an IS environment.

The examples in this document are not intended to be the only means of satisfying the criteria.



* Adapted from Yaverbaum, G., Feinstein, D., Gorgone, J.,Topi, H., Kasper, G., Valacich, J., Zant, R. Information Systems Environment, Penn State Harrisburg, SBA Working Paper Series, #35, 2004, <http://www.personal.psu.edu/gjy1/ISEnvironmentWorkingPaper.pdf>.

\* 15 semester-hours for programs operating under “semester-hours”

C323 IS Environmental Advisory

**Table 1**

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| **IS Environment Examples** (*note:* The environment represents the ecosystem in which information systems are employed) | **IS Curriculum Related to the Environment**  This includes IS Management, IS Systems, Technologies, and  Applications | **Related Examples that Do Not Constitute an IS Environment** |
| **Business processes and functional business areas,** such as human resources management, accounting, marketing, finance, operations management, and other processes that integrate the areas specified above. | Management Information Systems including core technologies plus advanced systems and technologies with management and/or business applications. | Discussion and applications only on technologies such as telecommunications, database, programming courses, systems analysis and design. Courses that do not have the application area focus such as statistics or  economics. |
| **Health care**: Health care and patient management, health insurance, health finance and accounting, service marketing. | Technology and issues core to health-related applications. For example, data warehousing and data mining, imaging, and HIPAA software applications are all  applicable to the application area. | Sole focus on digital imaging, intelligent diagnostic devices, telemedicine, and other medical technologies. |
| **E-business**: International or general accounting and finance, web management, e-marketing, the psychology of interface design, logistics and supply chain  management | Technology core, advanced technologies related to the web, for example, e-commerce applications, client-server, advanced networking, web development technologies, etc. | Sole focus on Web technologies/WEB Management, XML, JavaScript, Visual Basic  .NET, user interface  programming, telecommunications, database. |
| **Government and non-profit environments**: management in the non-profit sector, finance and accounting; economics; marketing of non-profits; government accounting | Core technologies plus advanced technologies with public sector applications, web applications, social services applications, public administration applications and  issues | Sole focus on specific government applications such as electronic voting systems. |
| **Museums:** Museum management, museum financial management, marketing for non-profit organizations, art history; docent  management/training | Core technologies, museum applications such as financial, audio development, art database applications, museum management,  etc. | Sole focus on supporting technologies, such as imaging, art and the computer, object databases, etc. |
| **GIS**: Homeland Security Issues and Policies, Regional (or more widespread) Geography, State and Regional Planning, Management in the public sector, Public Policy | All core technologies e.g. programming, database, telecommunications, etc. Data Warehousing, user interface design and application, Security related to GIS, Geographic Information Systems Applications, Traffic  management systems | Sole focus on specific GIS applications and technologies, such as wireless security, database applications for GIS |