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NEWS RELEASE

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ACM AND AIS RELEASE IS2020 CURRICULUM

Information Systems Degrees Bridge Business and Computing Worlds

New York, NY, June 3, 2021 – A joint task force of The Association for Computing Machinery (ACM) and the Association for Information Systems (AIS) recently released the report IS2020: Competency Model for Undergraduate Programs in Information Systems. Traditionally, the study of Information Systems (IS) was related to the use of technology for business. While Information Systems still focuses on the practical applications of computing in business, the field has continued to expand beyond internal business analytics to encompass how business technologies must relate to many new applications within and outside their respective organizations.

As its name indicates, Information Systems take a wholistic view, encompassing technology, people and processes. This is a slightly different focus from the related Information Technology discipline, which emphasizes the technology products used in information processing. In the past, organizational and managerial professionals within a business were located in a separate department from their colleagues in the Computer Science and Engineering departments.

In hiring Information Systems majors, companies hope to have individuals who can understand both the organizational needs of a business as well as its computing/engineering needs. Today, students earning Bachelor's degrees in Information Systems can become database administrators, business analysts, programmers, network administrators, project managers, or computer technicians.

The previous model curriculum, IS2010, was a major effort to expand IS curricula guidelines from a primarily business school context to other domains. IS2020 builds on IS2010 in attempting to ensure students have the practical skills they need upon graduation, while also allowing for flexibility, both in terms of how computing technology is constantly evolving as well as the setting in which a student earns their degree. For example, IS2020 provides curricula guidelines for students who earn an IS degree in a Business School setting, or who earn their degrees in a Computer Science/Engineering department.

As with other recent updates in curricula guidelines issued by ACM and other professional societies, IS2020 emphasizes the idea of *competencies* comprising specific knowledge and skillsets. The goal of educators in emphasizing competencies is to prepare students to be adaptable and meet new challenges creatively in a continuously changing field.

"The last time ACM and AIS presented a model curriculum was 2010, and 10 years is a long time in the technology education field, where new research is continually being published, causing us to fundamentally rethink our approaches," explains Paul Leidig, Co-chair, ACM-AIS IS2020 Task Force, and Professor, Grand Valley State University. "But in addition to new ideas about best practices in Information Systems education, IS2020 especially reflects the growth and proliferation of ubiquitous digital technologies, and how these technologies have impacted all areas of business and computing."

The guidelines presented in IS2020 incorporate comments, suggestions and feedback from senior scholars, numerous panels, presentations, and solicitations in many forms, to the IS community at large. This report is grounded in the expected requirements of industry, represents the views of organizations employing the graduates, and is supported by other IS-related organizations. IS2020 was also intended to have an international focus, comprising members from five countries, and representing geographic regions including North America, Europe, Africa, and Asia/Pacific.

"Broadening the reach of IS2020 did not mean we moved away from emphasizing strong technical foundations," added Hannu Salmela, Co-chair, ACM-AIS IS2020 Task Force, and Professor, Turku School of Economics (Finland). "We did not invalidate any of the core requirements or recommendations from the IS2010 report. In fact, based on feedback from industry representatives, we included application development and logical design as *core* IS competencies, rather than *elective* IS competencies, as they had been listed in the 2010 report."

Overall, the IS2020 report identifies 19 competency areas, defining 10 of them as required and nine as elective. To manage the increasing number and variety of IS competencies, IS2020 groups competency areas into six broad IS competency realms: IS foundations, and data, technology, development, organizational and integration competencies.

Additionally, IS2020 is one of the first guidelines that will be published as a living document with changing technological needs regularly propagated to a publicly available website, where discussion and feedback are welcomed.

About ACM
ACM, the Association for Computing Machinery, is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.