Coping (or not) With the Increased Need for Interdisciplinary Synergies in the Computing Disciplines

Over the last few years, computing has become more and more associated with many areas besides the traditional links with engineering and science, such as with commerce and e-commerce, the role of management in the operation of computer related systems, the rise of the web and its multitude of applications, security and encryption, publishing and library services, digital electronics in entertainment such as video, music, art, toys, games and gaming, the humanities as in text analysis, medicine from diagnosis to information systems, new computation in the sciences such as the human geno project and forensic science, health, law, multi-media in general, instructional design and technology in education, desktop applications for home and industry and industrial design just as a few examples. In relationship with the engineering disciplines, the twining of computing and engineering is extensive already and is twined together for most of the items in the previous list. This paper discusses this phenomena and its effects on the curriculum of Computer and IT related degrees. This includes the relationships and synergies of the computer discipline unit/school/faculty to other discipline areas in providing the content, teaching experiences and supporting research initiatives required. Use is made of the experiences of the School of Computing and Information Technology at the University of Western Sydney to illustrate some of these issues.