Integrating standards in computer science at Middlesex University

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Middlesex University London
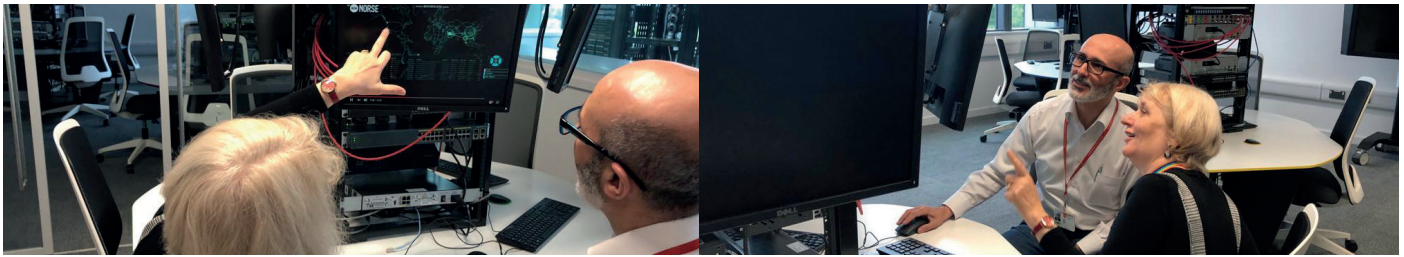
Academic and standards-maker

I've been an academic at Middlesex University for over 17 years, teaching mainly in the area of digital inclusion and researching on the use of communication systems used by older people and people with disabilities. I currently teach legislation and regulation to students in the Department of Computer Science.

As well as being an academic, I'm also a standards-maker for digital society and accessibility standards through my membership of ANEC - The European consumer voice in standardization. In addition, for many years I've contributed to the work of BSI's Consumer and Policy Network (CPIN) and OFCOM's Consumer Forum for Communications.

Teaching standards and standardization

Middlesex University's Department of Computer Science aims to equip students with the knowledge and skills necessary to solve real-world problems. Students are taught about standards on the BSc Cyber Security and Digital Forensics and BSc Business Information Systems degree programmes. The latter being a solid basis for a wide range of business and computer-based careers, including organisational management, systems architects, chief information officer and enterprise architects.

"We make use of the full text of standards"

Both degrees explore the key issues surrounding organization data breaches, vulnerabilities and threats, with students getting to grips with the latest information on standards regarding data management and compliance. Students on the BSc Computer Networks also learn about standards on their project management and professional practice course as a way of preparing them for working as networking professionals. As well as being integrated across a number of modules on these degree programmes, students also take modules with a specific focus on standards. We make use of the full text of standards (via British Standards Online - BSOL), as well as other support material and invited speakers, such as standards writers. Staff members and student alumni are also used to share their experiences of using standards in a range of sector contexts.

Learning outcomes

All students on the BSc Cyber Security and Digital Forensics Degree take the module CST2530 - Cyber Security & Digital Forensics Compliance in their second year. Through it they get to understand the requirements for cybersecurity legislation and standards and the effects of compliance with them. The module includes consideration of the language and terminology of regulation and standards and how 'in house' regulation can be written to facilitate the following of best practice and legal requirements by a wide range of end users. Importantly, students become familiar with how standards are made and applied.

Students on the BSc Business Information Systems Degree can take the module CST3330 - Innovation and Technology Management in their third year, which explores the role, control and management of innovation in information systems. It also equips them with the ability to evaluate, consider and create recommendations or action plans with respect to the societal drivers for innovation, the legal and standardization drivers and controls of innovation, and the use of management techniques to support innovation. By using real life case studies the students are enabled to evaluate the benefit and drawbacks of technology and to consider how current innovations will affect the future.

Learn more at: www.mdx.ac.uk/courses/computer-science-engineering-and-maths/computer-and-communications-engineering

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About BSI Education

Universities make a significant contribution to standardization by teaching about standards, contributing academic research, and being standards-makers. BSI Education builds relationships and creates programmes with universities to help raise awareness of the benefits of standards to society and the economy and to encourage and increase participation in standards-making.

For more information visit bsigroup.com/education or contact education@bsigroup.com

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