



# International management standards at Swansea University's School of Management



I started my academic research career working on some landmark lean manufacturing projects, including for Toyota Motor Corporation in Japan, one of the original innovators of the approach. My research spread into all areas of manufacturing and quality systems for high performance businesses. Multi-million-pound projects were conducted for companies in a wide range of industries, from nuclear fuel rods and steel production, to contact lens manufacture and helicopter maintenance.

Most recently I've expanded my research interests to embrace quality for healthcare and 'high reliability' organizations in the nuclear, aviation and passenger transportation sectors, giving me the opportunity to work alongside academics in the UK, USA, Saudi Arabia, New Zealand and many other collaborators across the world.

## A university founded by industrialists

Swansea University was founded by industrialists and therefore we're proud of our track record of collaboration with industry, commerce and the not-for-profit sectors. Over the years, the School of Management has developed a strong reputation in teaching and research in the areas of lean manufacturing, innovation, healthcare and tourism.

## International Standards at Swansea

In the School of Management standards teaching is provided at both undergraduate and postgraduate levels through elective modules. Our management programmes explore the relationships between standards and management consulting, lean operations, service management, international management systems, supply-chain management and asset management. We also hold one-off lectures and seminars on the role of standards in the modern economy.

## Tools and resources

In 2018 we ran a MA design brief that looked to critically engage with the world of standards in order to understand, and then subvert, reimagine or 'hack' into existing standards. Some of these were *de-facto* standards, but some of them were specific *de jure* standards. Students developed design projects that hijacked the written and visual language of standards-making in order to produce new objects and then disseminate their new standards to a public audience.

## Learning outcomes

A blend of tools and resources is used for the students, including books, papers and reports, as well as self-study and case reviews. We find this results in better questions and insights. Our teaching is supplemented with access to BSI's British Standards Online (BSOL), giving students and academics access to the full BSI database of standards. Guest talks and lectures – including from BSI - video, case studies and industrial visits are also used to help bring standards content to life. Our close relationship with BSI has also led us to co-host successful public consultation events for international management standards.

## Standards and world-class performance

Our 'big picture' approach to management standards education means students get to understand all the key features of the individual standards, how they are developed, and how standards relate to world class levels of performance, including Six Sigma, lean manufacturing, TPM, learning organisation and auditing. In essence, we're helping students develop their consultancy skills, and to understand how to use their knowledge and skills effectively in real life business situations. We use a lot of case studies to showcase the use of standards in organizations, including the role of certification.

"We use a lot of case studies to showcase the use of standards"

## Standards as employability knowledge

Standards knowledge is important. No management student should be exposed to an employer without understanding the role and importance of international standards for how organizations perform.



Learn more at: [www.swansea.ac.uk/som](http://www.swansea.ac.uk/som)



**Nick Rich**

Professor of Operations Management and Sociotechnical Systems Design, School of Management, Swansea University

## 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](http://bsigroup.com/education) or contact [education@bsigroup.com](mailto:education@bsigroup.com)

**bsi.**

BSI Group  
389 Chiswick High Road  
London, W4 4AL  
United Kingdom

T: 0208 996 6353  
E: [cservices@bsigroup.com](mailto:cservices@bsigroup.com)  
[bsigroup.com/education](http://bsigroup.com/education)