CS2160   Professional and Social Aspects of Computing

Level: 2   Credits: 10   Teaching Period: 1   Module Tutor: Dr D O'Sullivan

Aims

To acquaint students with the professional, legal, ethical and social issues relating to information systems engineering.
To impart awareness that external factors may affect the work of the computing professional and must receive appropriate attention.

Content

Professional
Professions and the professional; professional bodies and institutions; professional ethics and responsibilities.
Professional standards and best practice.
Introduction to project management and professional competencies

Legal
Legal background, sources of law; civil and criminal law, the courts; the impact of the European Union.
Intellectual property rights, software copyright, patents, designs, trade marks and passing off; copyright and webpages, Internet domain names, protection of computer imagers and icons, jurisdiction; confidentiality.
Contractual and tortious liability; defamation, pornography and spam on the Internet.
Data protection law; freedom of movement of personal data; privacy issues.
Computer crime; fraud; computer misuse.

Ethical
Society and ethics, ethical theories, ethical issues in software engineering and computer science, software and hardware reliability, case studies: notable system failures

Social
Social aspects of the workplace/society at large
The impact of IT on society.

Teaching

Lectures: 20 hours (2 hours/week)
Tutorials: 4 hours (1 hour every other week)

Assessment

Assessment:
Written exam: 85% (2 hours, May/June)
Assessed Tutorials: 15% (3 tutorials where students must engage in group discussion and debate on pre-assigned case studies, marked at t 5% per tutorial)

Feedback:
Feedback on CS2160 is individual, such as discussion with individuals during a tutorial or during appointed meetings during office hours. Feedback is also collective, such as comments to the whole class during tutorials.

In addition feedback will include publishing the solutions for exercises attempted in class and sample exam papers on Blackboard

Module outcomes *What the student should gain from successful completion of the module*	Teaching/Learning Methods	Assessment Methods
Knowledge and Understanding		
Understanding of the responsibilities of the information systems professional. Appreciation of related social effects and ethical issues. Appreciation of the legal problems and opportunities associated with the introduction and proliferation of new technologies. Awareness of general and specific legislation concerning information systems. Understanding of the legal constraints governing the use of information technology and the dissemination of information including private and	Lectures and tutorials	Examination and assessed tutorials

Intellectual Skills		
Capable of contextualizing information systems scenarios and analyzing them from the point of view of the IT professional	Lectures and tutorials Additional directed reading on specific case studies	Examination and assessed tutorials
Professional/Subject-Specific Skills		
Ability to analyse an information systems scenario and identify aspects that may raise professional, legal, ethical or social issues	Lectures and tutorials	Examination and assessed tutorials
Transferable Skills		
An awareness of factors that affect employment and associated terms, conditions and responsibilities of the computing professional.	Lectures and tutorials	Examination and assessed tutorials

Learning resources

www.bcs.org.uk

Baase, Sara (2003) Title A gift of fire: social, legal, and ethical issues for computers and the Internet, Prentice Hall.

Bott, Frank (2005) Professional issues in information technology, British Computer Society

Quinn, Michael J (2009, 2006) Ethics for the information age Addison-Wesley

Other study requirements to take this module

None