



Professional Issues: Introduction



informatics

This Course

- 18 Contact hours
- 9 * 2 hour meeting slots
- The sessions are interactive
- To be successful, you need to be prepared
- I'll take some of the sessions, some will be guest talks, some will be given by our commercialisation people.

What it's about

- Much of your degree course is technical - you are gaining a deep understanding of Information, Computation and Communication.
- In the world there are many additional constraints and interests that need to be taken into account in exercising the skills you acquire on your course.
- Professional Issues considers the wider context in which you are likely to work and how that wider context shapes technical decisions.

Learning Outcomes - 1

- After completing the course successfully:
 - Given a work context, you should be able to identify how attributes of computing graduates can make an effective contribution to tasks in that context
 - Given a scenario involving professional conduct, you should be able to identify failures of professionalism and successes and justify this with reference to appropriate codes of conduct.
 - Given a situation where a computing system could be deployed you should be able to identify how and where social and ethical implications arise in that potential deployment

Learning Outcomes - 2

- After completing the course successfully:
 - Given the description of a particular work setting you should be able to identify likely legal issues that are relevant to that setting and how account should be taken of those issues in the setting
 - Given a description of the structure and operation of commercial computing organisations you should be able to assess whether the structure is appropriate for the kind of business the organisation undertakes
 - Given a description of a deployed or planned computing system you should be able to identify the relationships between scientific, technical & engineering issues and the deployed system and be able to assess the consequences of those relationships
 - You should be able to communicate effectively in writing

PI is different from what you're used to...

- Typical Science/Engineering topic - all required information is in the lectures, only one answer.
- PI more like Social Science - you need to draw on experience from real world; may be no single or right answer.
- This is not a bad thing

PI Syllabus - 1

- **Personal Attributes:**
 - study skills, personal development, interpersonal skills; employers' views and expectations of graduates; verbal, writing and presentation skills.
- **The Computing Profession:**
 - professional bodies; codes of conduct and practice
- **Social and Ethical:**
 - security, privacy, software ownership
- **People:**
 - management, work psychology, groups, dealing with change, a bit about you (

PI Syllabus - 2

- Legal:
 - legal and regulatory frameworks; software contracts and liability; intellectual property, copyright and patents; computer misuse, data protection; health and safety.
- Commercial:
 - organisational structures; finance, accounting, audit; resource management.
- Computing Projects:
 - design, prototype and product; product development cycle; marketing and market research; project management and team working, change management.

Book List

- "Professional Issues in Information Technology", Bott, BCS, 2005 [***] £19.00
- "Scientists Must Write", R Barrass, Routledge, 2002 [***]
- "Computer Ethics and Professional Responsibility", Bynum Rogerson (eds), Blackwell, 2004 [**]
- "The Essence of Professional Issues in Computing", R Ayres, Prentice Hall, 1999 [**]
- "Law and the Internet", L Edwards C Waelde, Hart, 1997 [*]
- "Zen and the Art of Motorcycle Maintenance" Robert M Pirsig, Corgi, 1974/1999. [*]

Assessment

- Lectures:
 - Copies of slides will be handed out and made available via the course website
- Assessment:
 - Coursework essay 15%
 - Examination paper 85%
- Clarity of expression will be taken into account in marking both
- You'll declare that the essay is your own work

Lecture Timetable (provisional – firm by next week)



- 13-01-09 Introduction; Professions and professionals
- 20-01-09 The Computing Profession and the BCS
- BCS Industry Structure Model
- You, your degree, employers and personal attributes
- 27-01-09 Groups, teams, personalities, organisation
- 03-02-09 Communicating in English
- 10-02-09 Management, work psychology, people and change
- Legal Issues (1 - Computer Contracts, IPR)
- 17-02-09 Legal Issues (2 - Health Safety, Software Safety)
- 24-02-09 Change Management
- 03-03-09 Project Management
- 10-03-09 Ethical issues