Module Information

Module Identifier	**CS38220**
Module Title	**Professional Issues in the Computing Industry**
Academic Year	**2015/2016**
Co-ordinator	**Mr Rhys Parry (mailto:rrp@aber.ac.uk?subject=CS38220)**
Semester	**Semester 2**
Other Staff	**Mr Michael Francis Bott (mailto:mfb@aber.ac.uk?subject=CS38220)** **Mr Rhys Parry (mailto:rrp@aber.ac.uk?subject=CS38220)**

Course Delivery

Delivery Type	Delivery length / details
Lecture	44 hours

Assessment

Assessment Type	Assessment length / details	Proportion
Semester Assessment	Poster providing details of major project progress	10%
Semester Assessment	Job application: up to 4 pages	20%
Semester Exam	3 Hours Written exam	70%
Supplementary Exam	3 Hours supplementary exam Resit failed examination and/or resubmission of failed/non-submitted coursework components or ones of equivalent value	70%

Learning Outcomes

On successful completion of this module students should be able to:

1. critically assess the annual report and accounts of a small computing company;

2. apply professional codes of conduct and relevant computing-related legislation to day-to-day situations that arise in business;

3. assess the type of work done by a computer company and infer the types of career opportunities and challenges available within that company;

4. evaluate the management implications for a company of issues in health and safety, green IT, security management and human resources

5. communicate succinctly to higher management the progress made on a computing project

Aims

The purpose of this module is to present material in the key areas of professionalism and careers, finance, health and safety, environmental concerns, law and intellectual property in a unified fashion, in the context of the software industry. Some introductory material of this kind is taught at appropriate points in other modules at lower levels. This module brings all of that material together at an appropriate level for a graduate entering the software industry.

Brief description

This module addresses many of the non-technical issues that are vital for students intending to pursue a professional career in the software industry. The subjects covered in this module will enable students to understand many of the issues that will arise as they pursue a career in computing. In particular, our degrees are accredited by the BCS (the Chartered Institute for IT), and the kinds of topics that are addressed in this module are seen by the BCS as a necessary part of the education of any chartered IT professional.

Content

1. Organisations and their Structures
Legal background. Limited companies, private and public; partnerships; sole traders, statutory bodies. Special features of limited companies; responsibilities of directors.

2. Setting up a New Company
The need for capital; investment and working capital; sources of funds. Cash flow and its importance. Costing: fixed costs and variable costs; overheads; opportunity costs; depreciation. Problems of cost allocation. Budgeting. Financial accounts: balance sheets, profit and loss accounts, cash flow statements. The treatment of software in company accounts. Business Plans.

3. The Computing Industry
The structure of the Computing Industry. Examples of computing companies (guest lectures from industry). Careers in computing. Globalisation.

4. Legislation Relevant to Computing
The Health and Safety at Work Act 1974. Consumer Protection Act 1987, liability and negligence. Intellectual Property and its relevance to the software industry; software contracts. Data protection, privacy and freedom of information, RIPA, PIDA. Computer Misuse Act and international implications. Defamation and spamming.

5. Management
Practising 360 degree management. Effective communication. Sustainability. Human resource issues. Security management. Procurement. Supply chain management.

6. The Engineering Profession
The structure of the engineering profession, both in the UK and abroad. Professional codes of conduct and codes of practice.

Module Skills

Skills Type	Skills details
Application of Number	Through financial material, assessed in exam
Communication	In all practical assignments
Improving own Learning and Performance	In job application and poster
Information Technology	
Personal Development and Career planning	Understanding of organisations important for career; Development of job application skills
Problem solving	In all practical assignments
Research skills	In Technical report
Subject Specific Skills	
Team work	

Notes

This module is at CQFW (http://wales.gov.uk/topics/educationandskills/qualificationsinwales/creditqualificationsframework/?lang=en) Level 6