

CS133-15 Professional Skills

23/24

Department

Computer Science

Level

Undergraduate Level 1

Module leader

Mike Joy

Credit value

15

Module duration

20 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

The aim of this module is to introduce the key skills required of the computing professional, comprising oral and written communication, operating systems proficiency and awareness of professional aspects of computing practice.

Module aims

The three components of the module address, respectively:

- developing skills in summarising, quoting, paraphrasing, critical analysis, grammar, referencing and oral presentation, and teaching writing as a process approach to composing academic papers;
- giving students a basic understanding of operating systems concepts together with a working knowledge of computing systems and associated tools and applications that will subsequently be used;
- introducing students to the concept of professional ethics and behaviour, the place of computers in society and the legal aspects of computing, and the importance of personal development planning.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

The module will cover the following topics relating to communication skills:

- writing as a process
 - composing effective paragraphs
 - paraphrasing and quoting
 - avoiding plagiarism
 - writing a summary
 - writing a critical analysis
 - decoding topics and titles
 - grammar
 - soliciting feedback on writing
 - writing an abstract or proposal
 - writing an academic paper
 - giving an oral presentation
- together with the following topics relating to practical operating systems skills:
- Files and file organisation: directories and file structures, access control and security, file formats
 - Operating systems: the kernel, shells, window managers, processes
 - Networks: communication tools and protocols, security
 - Command-line interfaces: processes, tools and utilities
 - Comparative operating systems: proprietary and open-source alternatives
 - Standard applications: spreadsheets, databases, presentation tools and word processors
- and the following topics relating to professional aspects of computing:
- Professional bodies: Historic factors leading to their creation; evolution of UK professions and the roles of typical major bodies; typical structure, organisation and functions of a professional body; constitutional powers and legal status of bodies; statutory and regulatory functions; professional standards and disciplinary powers
 - Commercial aspects of industry: structure of organisations
 - Management: Project planning and management; health and safety legislation
 - Legal aspects of software: Overview of UK law; Data Protection Act; Copyright Designs and Patents Act; Computer Misuse Act; Regulation of Investigatory Powers Act
 - Social aspects of computing

and the following topics relating to continuing professional development:

- Approaches to continuing professional development
- Construction of a personal development plan

Learning outcomes

By the end of the module, students should be able to:

- Judge and improve their own writing with increased confidence, utilise appropriate methods for referring and citing sources, and be familiar with the idea of writing as a process.
- Understand basic computing and operating systems concepts, apply them to a networked computer system, and use standard applications and system tools.

- Practice presentation skills and use information systems available via the network at Warwick.
- Understand the relevance for professional computing practice of basic computer law, professional bodies, and the social impact of computer technology.
- Understand the importance of continuing professional development and demonstrate their understanding through development of a personal development plan.

Indicative reading list

Please see Talis Aspire link for most up to date list.

[View reading list on Talis Aspire](#)

Research element

Students are introduced to basic research skills and required to research a professional, social or ethical aspect of computer science and present their findings in an essay.

Subject specific skills

Competency with Linux

Transferable skills

Communication - written and verbal

Presentation

Academic writing

Teamwork

Personal development planning

Study

Study time

Type	Required
Lectures	30 sessions of 1 hour (20%)
Seminars	10 sessions of 1 hour (7%)
Practical classes	9 sessions of 1 hour (6%)
Private study	101 hours (67%)
Total	150 hours

Private study description

Background reading
Use of computer systems
Revision
Reflection on material learned and recording CPD

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group A2

	Weighting	Study time	Eligible for self-certification
Lab Mark Points	20%		No
Class test	15%		No
Personal development plan	20%		No
Essay	30%		No
Presentation	15%		No

Assessment group R1

	Weighting	Study time	Eligible for self-certification
Resit Assignment	100%		No
Resit assignment			

Feedback on assessment

Lab Mark points - during labs
Class test - general feedback via Tabula after test marked
Personal development plan - on Tabula
Essay - on Tabula
Presentation - during seminars

Availability

Courses

This module is Core for:

- Year 1 of UCSA-G500 Undergraduate Computer Science
- UCSA-G503 Undergraduate Computer Science MEng
 - Year 1 of G500 Computer Science
 - Year 1 of G503 Computer Science MEng
- Year 1 of UCSA-I1N1 Undergraduate Computer Science with Business Studies
- Year 1 of UCSA-G406 Undergraduate Computer Systems Engineering
- Year 1 of UCSA-G408 Undergraduate Computer Systems Engineering

This module is Option list B for:

- Year 1 of UCSA-G4G1 Undergraduate Discrete Mathematics
- Year 1 of UCSA-G4G3 Undergraduate Discrete Mathematics