



Module code	THF_PCOM7E	NQF level	7
Credit value	10	Study duration	6 weeks

# The Human Factor

## Module description

Cyber security faces challenges associated with human interaction with computing systems. Hence, there is a need to understand, and manage or mitigate the risks posed by socio-technical systems in an organisation. This module offers an inter-disciplinary perspective, involving Psychology, and Computer Science, to equip students with the skills and knowledge to develop pragmatic methods to meet human factor cyber security challenges.

### This module aims to:

- Develop an understanding of the security issues and risks associated with how people interact with computing systems
- Develop the knowledge and skills required to manage and mitigate cyber risks in socio-technical systems

## Learning outcomes

On completion of this module, students will be able to:

- review the concepts and principles of human behaviour within the context of cyber security
- develop an in-depth understanding of the elements of risk in a socio-technical system
- critically examine effective strategies to promote and manage the human factor in cyber security
- critically evaluate the social and ethical considerations in developing and applying usable security

## Syllabus

- Human behaviour and its implications in designing computing systems within the context of cyber security
- The 'accessibility' concept within the context of cyber security
- User models and their impact on security decisions
- Ethical considerations for usability in cyber security
- Introduction to usability evaluation techniques within the context of cyber security
- Usability issues in current and emergent technologies

## Learning and teaching methods

The module will be delivered through the provision of specified reading materials on the virtual learning platform, which shall be supported by specified online discussion forums and lecturecasts. The flexible and participative approach of the module will develop a collaborative research inquiry in the advancement of computing, enabling them to accelerate in their chosen career.

Students will demonstrate their ability and strengths through evidence and reflections by maintaining an e-portfolio. The e-portfolio will also act as a means for assessment on evidence of personal growth and CPD.

Synchronous sessions will give students the opportunity to interact with fellow students and for tutor contact. The sessions will include live coding sessions to help students contextualise their knowledge. These synchronous sessions will be recorded in order to ensure that all students can access the material in their own time.

At pre-arranged days and agreed times during the module (usually weekly, prior to a synchronous session), the module tutor will be available for a drop in telephone or preparatory learning liaison session. This is to give students the opportunity to ask specific and general questions relating to the week's learning opportunities and enable them to contextualise their learning.

For team activities in this module, students will be grouped according to time zones to ensure team members can communicate easily with each other. Details on the process for team activities and peer assessment will be made available to students at the outset of the module.

Description of unit of assessment	Length/Duration	Submission date	Weighting
Individual essay - viewpoint outlining problems	800 words	Week 3	40%
Peer review comments x2	200 words each	Week 4	20%
Individual presentation proposing solution to problems identified	10 minutes	Week 6	40%