

Liverpool John Moores University

Title: IDENTITY AND TRUST
Status: Definitive
Code: **7108COMP** (121330)
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Robert Askwith	Y

Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 36
Total Learning Hours: 200 **Private Study:** 164

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	12
Seminar	24

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Research and design of a PET	100	

Aims

To allow students to develop advanced understanding of the complex information security concepts of identity and trust. The closely related problem of privacy will be explored in the context of identity and trust. By studying existing solutions for identity and trust in computer systems students will be able to propose their own design for a particular application.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand the complexity of the relationship between identity and trust.
- 2 Demonstrate a critical awareness of how privacy intersects with identity and trust.
- 3 Critically evaluate technology solutions for identity, trust and privacy.
- 4 Show originality in the design of identity and trust solutions for applications.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Research and design of a	1	2	3	4
PET				

Outline Syllabus

Defining the concepts of identity and trust

Identity and trust in the offline world

Identity Theft

Cryptographic solutions for identity and trust

Public Key Infrastructure (PKI)

Identity Management – Authorization, Authentication, Accounting (AAA)

Directory Services

Single Sign-On

Protocols; WS-Security, OpenID, WS-Trust, SAML, OAuth

Privacy; concepts, problems, legal status

Privacy Enhancing Technologies (PETs)

Anonymity – concepts, benefits and problems with anonymity

TOR

Learning Activities

The module will have a theoretical focus for the study of identity and trust issues. This will involve the study of current solutions and investigation of problems relating to identity, trust and privacy that exist in real applications. Assessment will involve literature review of research papers and a design relating to a contemporary identity and trust problem.

Notes

The module approaches the difficult security problems of identity and trust through a mostly theoretical lens, but considers practical solutions in use by practitioners. The module ends with an in depth consideration of privacy and how it relates to identity and trust.