

Module Title	Socio-Technical Analysis of Requirements
Level	4
Reference No	BIF-4-SAR
Credit Value	20
Student Study Hours	Total:200 Contact hours: 65 Student managed learning hours:135
Pre-requisite Learning	None
Co-requisites	None
Excluded combinations	None
Module co-ordinator	Nigel Phillips
Faculty/Department	Informatics
Short Description	The module will provide you with a first course in systems theory and the analysis of requirements from a socio-technical perspective. The module explores the modelling of both hard and soft requirements from human, data and process centred perspectives. You will study requirements analysis as the expression of the business rules of an organisation. Elements of organisational theory, organisational behaviour with particular reference to technology and culture are introduced alongside systems architectures, the systems development life cycle and aspects of change management. UML is used throughout.
Aims	To encourage you to adopt a holistic view of organisations and the relationships between people, technology, organisational structure and culture and provide you with practical experience in representing a range of different views of organisations in accordance with established good practice and industry standards.
Learning Outcomes	<p>Knowledge and Understanding. You will be able to:</p> <ul style="list-style-type: none"> Describe and compare a range of the most common tools and techniques for information systems requirements gathering and representation. <p>Intellectual Skills. You will be able to:</p> <ul style="list-style-type: none"> Discuss and evaluate the human, social and management issues associated with information systems development. <p>Practical Skills. You will be able to:</p> <ul style="list-style-type: none"> Create technical representations of user requirements from a variety of contexts and select appropriate methods with which to meet them.. <p>Transferable Skills. You will be able to:</p> <ul style="list-style-type: none"> Demonstrate personal and team management skills including presentation and formal report writing.
Employability	The ability to identify requirements and communicate these effectively along with rigorous critical evaluation of the relative merits of alternative means realising these requirements and the associated skills sets are fundamental to a successful career in all branches of the IT industry.
Teaching and learning pattern	Weekly contact time will typically comprise: a one hour 'lecture based' presentation, although this may take the form of a workshop session, rather than a conventional lecture. two x two hour lab-based tutorial where students will work independently on exercises exploring weekly themes
Indicative content	Language, techniques and conceptual frameworks from the following thematic areas will be introduced and explore experientially. Requirements specification Systems analysis Systems design Unified Modelling Language

	<p>CASE tools Change management</p>
<p>Assessment <i>Elements & weighting</i></p>	<p>100% Coursework The coursework component will typically consist of: A series of analysis and design exercises and requirements specification report 70% and the integrative assignment 30%</p>
<p>Indicative Sources <i>(Reading lists)</i></p>	<p>The main source of supportive material will be lecture notes on Blackboard and references on the World Wide Web. These will be informed by the following publications</p> <p>Core Wazlawick , R.S. (2014) <i>Object-Oriented Analysis and Design for Information Systems: Modeling with UML, OCL, and IFML</i>. Morgan Kauffman Publishing</p> <p>Background Vernon, V. (2013) <i>Implementing Domain Driven Design</i>. Addison Wesley Adzic, G. (2012) <i>Impact Mapping</i>, Provoking Thoughts. Leffingwell, D. (2010) <i>Agile Software Requirements: Lean Requirements Practices for Teams, Programs, and the Enterprise (Agile Software Development)</i>. Addison Wesley.</p>