

**ISCG7423: Systems Analysis and Software Development**

<b>Course number:</b>	ISCG7423	<b>Level:</b>	7	<b>Credits:</b>	15
<b>Main programme:</b>	BCS				
<b>Pre-requisites:</b>	For BCS: (ISCG6414 or ISCG6234 or ISCG7132 or ISCG7142) and (ISCG6421 or ISCG6222) For GDCMP: (ISCG6414 or ISCG6234 or ISCG7132 or ISCG7142) and (ISCG6421 or ISCG6222)				
<b>Co-requisites:</b>	None				
<b>Restrictions:</b>	ISCG7252				
<b>Compulsory/elective:</b>	Elective				

**Learning time: 150 hours**

(Lecturer) Contact hours	Non-contact hours	Total hours
32.5	117.5	150

**Level descriptor:** The student is able to carry out processes that

- require a command of highly specialised technical or scholastic and basic research skills across a major discipline
- involve the full range of procedures in a major discipline
- are applied in complex, variable and specialised contexts requiring
  - knowledge of a major discipline with areas of specialisation in depth
  - the analysis, transformation and evaluation of abstract data and concepts
  - the creation of appropriate responses to resolve given or contextual abstract problems and applied
    - in planning, resourcing and managing processes
    - within broad parameters and functions
    - with complete accountability for determining, achieving and evaluating personal and/or group outcomes.

Critically examine

Evaluate

Derive

Design

Predict

Anticipate

Decide

Recognise

**Course aim:** This course deals with advanced analysis and design principles using the concepts of object-orientation. The students should produce documentation and an application using object based techniques.

**Learning outcomes:**

	Learning outcomes
1.	Apply the principles of object-oriented analysis and design in an iterative system development life cycle for a case study.
2.	Produce system documentation using a CASE tool.
3.	Design and develop an object oriented application and test plan for a case study.
4.	Present a professional design solution.
5.	Critically reflect on team dynamics and development processes.