

ITNP92 Object Oriented Software Design**Lecturers**

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Learning Outcomes

The student should know and understand:

- How to analyse and model requirements and develop software using object-oriented analysis and design.
- How to express object models in UML
- How to use CASE tools for software design.
- How to work as a member of a team.

Transferable Skills

The unit will develop skills in problem solving, the use of case tools and group working.

Content

- The software development process.
- Object concepts.
- The Unified Modelling Language (UML): class diagrams, use case diagrams, interaction diagrams, state diagrams.
- Use of a CASE tool.
- Analysis and design models.
- Case studies in use-case modelling, object-oriented analysis and object-oriented design.
- Components and re-use in software engineering.

Assessment

- Group Assignment (50%)
- Examination (50%)

Textbooks

- Learning UML 2.0, R Miles and K Hamilton, O'Reilly, 2006, ISBN 0596009828[Recommended]
- Software Engineering 7th Edition, Ian Sommerville, ISBN 0-321-210265, [Background]
- Using UML : Software Engineering With Objects and Components, Rob Pooley, Perdita Stevens, ISBN 0201648601, [Background]