Subject Knowledge

**Aims** The aim of this course is to teach the students the concepts, technologies and techniques for creating large-scale distributed software system using the Service oriented Paradigm.

**Learning Outcomes** At the end of the course the student should be able to: understand the fundamental ideas and standards underlying Web Service Technology; discuss concepts at the frontier of industrial practice and emerging standards; link the concepts of services and business processes and understand the role and functionality of BPEL; discriminate between the major frameworks allowing to develop web services and to develop web services using the .Net framework and apply BPEL4WS.

**Methods** Lectures, tutorials and practical sessions together with course notes, recommended reading, worksheets and some additional handouts.

**Assessment** Assessed coursework; traditional written exam

Skills

**Aims** To teach students problem solving skills.

**Learning Outcomes** Students will be able to: solve abstract and concrete problems (both routine seen, and simple unseen).

**Methods** Class sessions together with worksheets.

Explanation of Prerequisites

**Course Description** Service oriented Computing and their predominant implementation as Web Services are at the forefront of industrial practice in software engineering. There are two major technologies supporting their development: Microsoft’s .net and Java based technologies. In this course we will use the former.

One crucial aspect of SoA is the marrying of IT artefacts with business processes and objectives, so part of the course will concentrate on business processes and their relation to services.

**Detailed Syllabus** Topics to be covered include fundamental ideas and standards underlying Web Service Technology, concepts at the frontier of industrial practice, emerging standards and business processes.

**Reading List**


**Resources** Course notes, web page, study guide, worksheets, handouts, lecture rooms with two OHPs, past examination papers, past tests.
Module Evaluation  Course questionnaires, course review.