APPLIES TO ACADEMIC YEAR 2001/2002

GRA 2354 Enterprise Modeling with UML

Program
Specialization Course

Responsible for the course
Erik Stensrud

Department
Technology Management

Term
Winter

ECTS Credits
6

Information technology (IT) is a crucial "enabler" of business performance improvement. Successful implementation of software in a business setting starts with clear, concise, unambiguous, detailed specifications of the system requirements. A lot of failed IT projects are due to poor specification of the requirements.

The Unified Modeling Language™ (UML) has emerged as the de facto industry-standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems. The UML provides the application modeling language for:

- Business process modeling with use cases.
- Class and object modeling.
- Component modeling.
- Distribution and deployment modeling.

The course is highly relevant to students who desire to work as IT management consultants in firms like Accenture and Cap Gemini Ernst & Young. It is also relevant to general/functional managers and to CIO's (chief information officers) because fluency in UML will facilitate the communication with software engineers.

Objective

The learning objective of this course is to learn the UML concepts and methodology and the associated software tools, and thereafter apply the knowledge to analyse businesses and specify systems. A system in this context is the human organisation plus the "enabling" IT.

Prerequisites
Systems development or business process modeling knowledge is an advantage but not required.

Compulsory literature

Hans-Erik Eriksson and Magnus Penker, 'Business modeling with UML: Business patterns at work', Wiley Computer Publishing, New York 2000
UML 1.3 Documentation, http://www.rational.com/uml/resources/documentation/index.jsp

Recommended literature

None

Course outline

Introduction to course

- Overview of UML
- Business process modeling with use cases.
- Class and object modeling.
- Component modeling.
- Distribution and deployment modeling.

Computer-based tools
Required:

UML software
Internet browser (Netscape or Internet Exlorer is preferred)
MS Office (Word, Powerpoint)
E-mail (Any Internet mail compatible)

Course structure
The course has 30 contact hours which includes lectures, student presentations, discussions and case studies. Class participation is
mandatory. The course will be scheduled in as seminars and workshops during the term. We intend to invite guest lecturers from the IT/Management consulting firms and industry

Evaluation
Term paper of group project

Group Project:
Students will work in groups of three to undertake a modeling project pertaining to a software system implementation. They will report back to the whole class in the form of a project report, poster exhibition, presentation and handouts. The idea is to get hands-on with UML modelling in an industrial context to supplement the theoretical ideas covered in class. Once the local organisation has been cleared with the instructor, students will proceed with the research project. The students should maintain regular communication with the instructor through email on their progress and also reach agreement with him or her on the final table of contents for the project. To foster shared learning, students will be given an opportunity to make two presentations of their research projects to the class during Week 5 (progress reports) and Week 10 (final presentations). Besides handouts for distribution, students should also prepare a short handout summarising their project findings for the rest of the class. Given that a key objective of the research project is to provide a mechanism for students to learn from each other about enterprise modeling in different industries, each group's project report will be made available to all other students.

Evaluation code(s)
GRA 23541|

Aids at the examination
Not applicable.

Makeup exam
At the next time the course is offered.