

Welcome at Introduction Content and Knowledge Engineering

<http://www.informationscience.nl/>

Language

- **English**
unless everyone is fluent in Dutch



Content and Knowledge Engineering

CKE

- Content Design
- Interaction Design
- Information & Knowledge
 - management and engineering



CKE: Core Areas

- **Content design**
 - document modeling
 - publication of content
 - content management and retrieval
- **Interaction design**
 - human computer interaction
 - cognition and communication process & problems
 - games: training and entertainment
- **Information & Knowledge management and engineering**
 - knowledge engineering, sharing, management
 - agents: cooperation, reasoning



General setup

- Duration: two years: 120 ects (1 ects \approx 28h)
 - 1 course = 7,5 ects (\approx 210h)
- Year one:
 - 4 periods, 2 courses per block
- Year two:
 - period 1: 2 courses
 - period 2-4: thesis project (45 ects)



Program setup

| | 1 | 2 | 3 | 4 |
|--------------------------|---|---|---|--|
| Year 1 60 ECTS | Content Design Optional/ Deficiency | Development of Knowledge Systems Optional/ Deficiency | Use of Content & Knowledge Systems Optional/ Deficiency | Knowledge Management Optional/ Deficiency |
| Year 2 60 ECTS | Suggested: Enterprise Information Architecture Suggested: Advanced Research Methods | Thesis | | |



Choices to be made

- Research or industry oriented master?
- Which optional courses?
 - Bounded choices
 - Free choices



Setup of R-master track

- Maximal two deficiency courses (0-15 ects)
- Four compulsory courses (30 ects)
- Bounded choice of courses (min 22.5 ects)
- Final research project (45 ects)
- Free choice courses
 - To complete 120 ects (max. 22.5 ects)
 - From CKE master program
 - From MBI master program
 - In consultation with study advisor
 - From Computer Science programs
 - From other master programs (internal and external)



Setup of I-master track

- Max. two deficiency courses (0-15 ects)
- Four compulsory courses (30 ects)
- **External project or 4 MBI courses (30 ects)**
- Final (external) research project (45 ects)
- Free choice from all master programs
 - To complete 120 ects (max. 22.5 ects)
 - From CKE master program
 - From MBI master program
 - In consultation with study advisor
 - From Computer Science programs
 - From other master programs (internal and external)



Types of courses

- Regular courses (Osiris)
 - Lectures, practical work, working groups
- Seminars (Osiris)
 - Group discussion of literature
- External courses (only in free choice block)
- Special projects
 - Literature study
 - Design/experimentation projects
 - **Always subject to approval!**

Study plan

- Individual for each student
 - Includes deficiency, compulsory, bounded and free choices
- Plan is decided at start of program
 - Together with student advisor
 - Main lines
- Changes must be approved
- During period 1 make an appointment with Virginia
 - Tuesday 19 september
 - Thursday 21 september
 - This week: Mail virginia@cs.uu.nl indicating preference (am/pm)



Deficiency courses

- For students coming for programs other than BSc Information Science
- max 15 ects (2 regular BSc courses)
- Often, for HBO'ers:
 - KAM: Knowledge Acquisition and Modeling (period 3)
- Depending on background:
 - HCI: Human-computer interaction
 - UWT: Exchange Languages (XML technology, ...)
 - WO: Research methods (Statistics, SSPS, ...)
 - Cf. prerequisite knowledge



Compulsory courses

- **Content Design** (period 1)
 - XML-publishing, authoring, storage, delivery
 - Lecturers: Jörgen van den Berg, Hans Voorbij
- **Development of Knowledge Systems** (period 2)
 - expert systems, ontologies, reasoning and interaction
 - Lecturers: Virginia Dignum
- **Use of Content and Knowledge Systems** (period 3)
 - navigation, personalization, multimedia, retrieval
 - Lecturers: Herre van Oostendorp
- **Knowledge Management** (period 4)
 - knowledge organization, processes, evaluation, analysis
 - Lecturers: Eleonore ten Thij, Remko Helms



Bounded choices

- Minimal 2 of the following:
- Advanced Research Methods (period 1) * * *
- Enterprise Information Architecture (period 1) * * *
- Extended Enterprise (period 1)
- Animation and 3D Models (period 2)
- Seminar Semantic Web (period 3)
- Seminar CKE (period 4)
- Usability evaluation methods (period 4)



Free choice courses

- From the list of bounded choices
- From other Master programs
 - UU Information Sciences: MBI
 - UU Computer Sciences
 - Other UU Masters
 - Other Masters
- Approval is necessary
 - Always contact the student advisor



Seminars 2006/2007

- Period 3: **Semantic Web**
 - Topic: tools and technologies for search and semantic integration of web content
 - Coordinator: Virginia Dignum
- Period 4: **Seminar Content and Knowledge Engineering**
 - Topic: Service-Oriented Architectures and the Future of Content Management and Knowledge Sharing Techniques
 - Coordinator: Jörgen van den Berg
- Student takes initiative
 - presentations, papers, workshop participation
 - perform theoretical and experimental analyses
- Docent is coach (rather than lecturer)



Special projects

- Part of the free choice block
 - Value (ects) depends on project
- Link to current research in Center for CKE
 -
- Possibilities:
 - Literature study
 - Design/experimentation projects
 - Usability lab
 - Content lab
- Own initiative or in collaboration with lecturer
 - Approval necessary



Thesis projects - 1

- Admission
 - max 2 open courses (15 ects)
 - subject to approval of proposal to be submitted by student
 - Proposal must be approved by thesis committee
- Intern/extern, possibly abroad
- Thesis in English
 - unless host organization requires otherwise
- Suggested projects:
 - CKE site: <http://www.informationscience.nl>
 - <http://www.cs.uu.nl/education/vak/afst45>
 - Ask lecturers of courses that you find interesting
 - In all cases: also contact your student's advisor

Thesis projects - 2

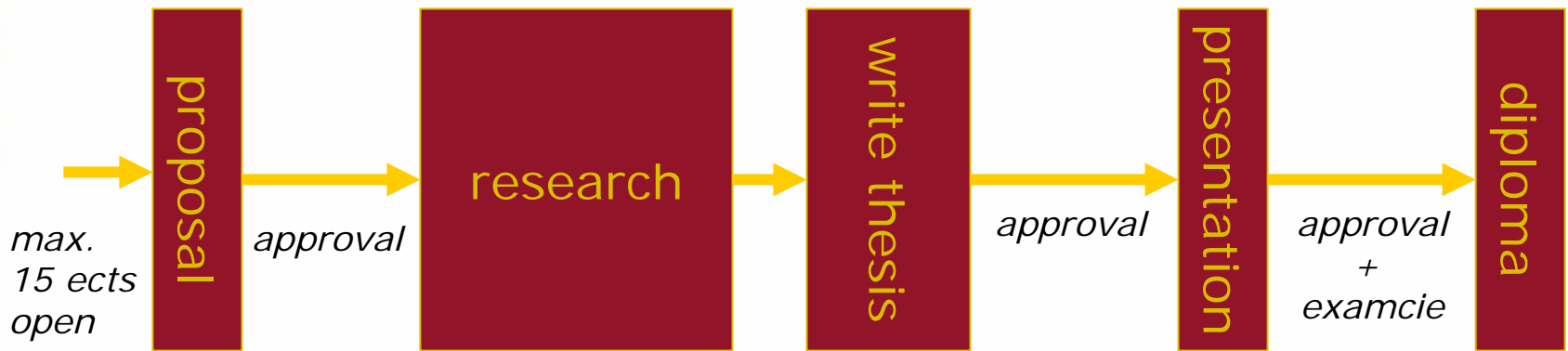
- Current contacts:

- University of Cardiff, UK
- University of Melbourne, Australia
- University of Texas at Austin, USA
- University of Trento, Italy
- University of Aberdeen, UK
- Royal Academy of Technology, Sweden
- Future University Hakodate, Japan

- Airbus, Germany
- Cibit
- Elsevier
- NedTrain
- ThiemeMeulenhoff
- TNO
- V-Step
- ...



Thesis project process



Thesis meeting

- **Tuesday, 26 September, 11.00 – 13.00**
- Presentation
 - Available projects
 - Possibilities abroad
 - Thesis process and supervision
- CKE students
- IS 3rd year bachelor students



Practical Issues

- Colloquium
 - Regular presentations of researchers, students and visitors
 - Developments and open research issues in IS
- BSCW: via course coordinators
- more info
 - CKE web site: www.informationscience.nl
 - ICS education site: www.cs.uu.nl/education
 - OER
 - statutes
 - thesis protocol





Questions?



Universiteit Utrecht