Real Estate & Facilities Management Master education at NTNU

ERES education seminar, TU-Delft, 27th November 2015
Professor Dr.-Ing. Antje Junghans, NTNU Trondheim Centre for Real Estate and Facilities Management
NTNU in Trondheim, Norway
Master programs Real Estate and Facilities Management

- Real Estate and Facilities Management (eiendomsutvikling og forvaltning, konsekutive Master program), 2-years-full-time,
- Eiendomsutvikling og –forvaltning, erfaringsbasert Master, 3 years-part-time
Centre for Real Estate and Facilities Management

Established with support from the Norwegian Research Council through the project "Metamorphosis 2005"

The centre is sustained by NTNU, in cooperation with
- Several trade organisations
- Public and private organisations in the area
- Research institutes and ministries.

Our principle objective is to develop a network centre and research school in the area of real estate and facilities management.
10 years Real Estate & FM at NTNU (2015)

Centre for Real Estate and Facilities Management

Metamorphosis - Centre for Real Estate and Facilities Management is a working and meeting place for teaching and research in this field. The centre is part of the Faculty of Architecture and Fine Arts, and collaborates with the Department of Civil and Transport Engineering, and SINTEF.
Master program Real Estate and Facilities Management – 2-years-full-time
Objectives RE&FM Master
2-years-full-time

• Comprehensive qualifications within real estate development and management
• Equips the students to practice within projecting, physical planning, research and education in private and public sectors
• Starting point is existing urban areas and buildings and infrastructure
Course plan – RE&FM Master

- Built form & Urban Design (7,5)
- Facilities Management (7,5)
- Planning & building process (7,5)
- Business Management & added value (7,5)
- Programming and Evaluation of Buildings (7,5)
- Refurbishment, Renovation and Management (7,5)
- Elective course (7,5), Experts in Teams (7,5)
- Real estate development (7,5)
- Sustainable Facilities Management (7,5)
- Elective course (7,5), Theory and Methods (7,5).
- Master thesis (30)
Master program Real Estate and Facilities Management – course content examples

AAR 4827 Facilities Management

Facilities Management (AAR4827), thought in English, in first semester, 7.5 ECTS.
Sustainable FM (AAR4821), thought in English, in third semester, 7.5 ECTS.
Results have been presented at European student poster competitions.

European Facility Management Conference (EFMC),
4 – 6 June 2014 in Berlin
International course, AAR4901

3rd FM&REM WinterSchool: 29 January – 5 February 2014 in Kufstein/Austria
Short background; Professor Geir K Hansen

CENTRE FOR REAL ESTATE AND FACILITIES MANAGEMENT
www.metamorfose.ntnu.no

- Focus on maintenance and operation from early 1980’ies
- Growing focus on FM from mid 1990’ies
- Development of courses for architect and building engineers students
  - Metamorphosis course from 2000.
    Transformation of buildings, real estate, urban areas
  - Courses in strategic space management/design
  - Courses in programing and evaluation of buildings in use
- **Metamophosis 2005. Centre for Real Estate and FM**
  R&D project NTNU 2002 – 2006 financed by Norwegian Research Council in cooperation with several trade organisations, public and private organisations in the area, research institutes and ministries.
- Post graduate 3 years Master program in Facility Management, 2005
- An ordinary 2 years Master program in Facility Management, 2006
- Overview FM educational program and courses in Norway;
  https://www.ntnu.no/wiki/display/eiendomsstudier/Studietilbud
Post graduate Master program in Facility Management

Masterprogram i eiendomsutvikling og -forvaltning.
- Master of Facility Management

CURRICULUM

- Introduction to the field and overview of master program
- Facilities Management
- Real Estate Development and Planning
- Refurbishment, Renovation and Management
- Real Estate Economics

- Strategic Space Management
- Organization and Management in Project Development
- Real Estate Laws and Legislation
- Scientific Theory and Methods

All modules 7.5 ECTS

- MASTER THESIS (30 ECTS)