



# Information about first semester courses on the Joint Master's Degree in Program Development

# The Joint Master Programme

- The programme is shared between UiB and HiB
- Two branches:
  - Software Engineering (HiB)
  - Programming theory (UiB)
- Projects are supervised by faculty from either UiB or HiB
- Courses are given by either UiB or HiB

# Mandatory Elements - Software Engineering

- Courses

- INF234 Algorithms

- MOD250

- Advanced Software Technologies

- MOD251

- Modern System Development Methods

# Mandatory Elements - Programming Theory

- Courses

- INF234 Algorithms

- Three of  
INF210, INF220, INF223,  
INF225, INF227, INF329

# First semester courses

2016 Fall	INF234	
2017 Spring		
2017 Fall	Project	
2018 Spring	Project	



# Elective Courses at HiB

- **MOD252 Agent Technologies**
  - **Fall semester**
- **MOD351 Grid Computing**
  - **Fall semester**
- MOD350 Model Based Software Development
  - Spring semester
- MOD253 Advance Computer Graphics
  - Spring semester

# MOD250 - Modern Software Technologies

- The course focuses on software technologies supporting the design and implementation of enterprise and distributed applications.
- Emphasis is on tools and frameworks for web- and cloud-based enterprise applications, in particular software frameworks and application servers in the context of the Java Enterprise Edition.
- The course consists of 6 hours of combined lectures and hands-on exercises per week. In addition, there are smaller mandatory programming assignments and a larger technology evaluation project. In the project, the participants explore a recent software technology of their own choice, and develop a prototype to assess the use and capabilities of the technology.



# MOD351 - Grid Computing

- This course presents technology and principles of grid and cloud computing, and gives a practical introduction to grid middleware.
- The course also covers topics from current research in development and use of grid technologies, including the use of cloud resources for grid computing.
- This course is a prerequisite for all CERN-related projects.



# MOD252 - Agent Technologies

- The course gives an introduction to fundamental theoretical principles for design and construction of multi-agent systems.
- Practical assignments using the JADE framework.
- At the center of the curriculum is the term "intelligent agent". Properties of intelligent agents, different types of agents and their patterns of interaction will be explored in the course. Examples of applications of intelligent agents will also be analyzed and implemented.

# What next?

- First lecture MOD252
  - Tuesday August **23rd** at 08.15
  - Room J202 at HiB, 2nd floor
- First lecture MOD250
  - Tuesday August **23rd** at 10.15
  - Room E206 at HiB, 2nd floor
- First lecture MOD351
  - Thursday August **25th** at 08.15
  - Room J202 at HiB, 2st floor

# What next after that?

- Social event at the end of next week.
  - Pizza
  - Meeting with senior students
- Sign up for the 14HDPU-MA Facebook group