Course Description Business Intelligence

Keywords: Business Intelligence, OLAP

Target Group:	**6th Semester WKB**	**Module Number:**	**WKB 671**
Workload:	**5 ECTS**		**150 h**
Divided into:	**Contact time**		**60 h**
	Self-study		**60 h**
	Exam preparations		**30 h**
Course language:	**German**		
Module director:	**Prof. Dr. Dirk Hesse**		
Valid from:	**01.03.2014**		

Requirements:

Business Information Systems 1-2
Database Systems 1-2

Overall Aims of the Module:

Students will learn about the holistic concepts of intelligent decision support. They will be able to implement theoretical approaches of economic and technical decision support in real systems. They will know the composition and design of data compression and report creation systems. They will master data analysis instruments, information compression, and data representation. Students will also learn about various application examples for business intelligence systems in different operational, economic, and technical function domains.

Contents:

- Definition and terminology
- Data provision in multi-dimensional data rooms
- BI analysis systems (OLAP)
- Conception and implementation of operational integrated BI approaches
- Operational BI in the industrial production

Literature:

Kemper, Hans-Georg, et al.: Business Intelligence - Grundlagen und praktische Anwendungen. Eine Einführung in die IT-basierte Managementunterstützung, Vieweg und Teubner, 3. Auflage 2010.

Offered:

Every semester

Submodules and Assessment:

Type of instruction/learning:	Lecture with self-study and exam preparations
Type of assessment:	Written exam (90 minutes) (over the entire course, including laboratory material) – 3 Credits
Hours per week:	3 SWS
Estimated student workload:	150 hours

Learning outcomes:

Students will learn about the holistic concepts of intelligent decision support. They will be able to implement theoretical approaches of economic and technical decision support in real systems. They will know the composition and design of data compression and report creation systems. They will master data analysis instruments, information compression, and data representation. Students will also learn about various application examples for business intelligence systems in different operational, economic, and technical function domains.

Type of instruction/learning:	Project
Type of assessment:	Project and presentation (20 minutes)
Hours per week:	1 SWS
Estimated student workload:	30 hours

Learning outcomes:

Students will learn about the architecture and components of BI systems and will be able to install them. They will also apply various data categorisations to data analysis. They will able to implement OLAP methods for the decision support systems and their practical executions, with respect to economic and technical aspects.

Overall Assessment:

Written exam, ungraded project and presentation (20 minutes)