HNU HOCHSCHULE NEU-ULM UNIVERSITY OF APPLIED SCIENCES

FIBAA

Department of Information Management
Information Management Automotive (IMA) degree programme

Business Information Systems & Information Management (IMA4)
Module description

Module no./code	IMA_4.5
Module title	Business Information Systems & Information Management
Courses in the module, if applicable	
Content	**Information Management:** • Role and benefits of IT in the automotive industry • Building blocks of IT management • IT processes and process frameworks (ITIL, COBIT) • Planning tasks in IT management: - Business + IT alignment and IT strategy - Enterprise architecture management **Business Information Systems:** • IT applications in enterprises - Overview of IT applications in enterprises (ERP, CRM, SCM, etc.) - Overview of special IT applications in the automotive industry (DMS, warranty systems, workshop systems, PEP-PDM, etc.) - Place in the process map (master map) - OLTP vs. OLAP and introduction to systems optimised for planning (BI/DW) • Platforms for enterprise applications - Overview of important technologies / programming languages - Introduction to Java EE - Introduction to SAP NetWeaver - Web services • Application integration and BPM - Processes and interfaces - EAI and SOA - If necessary, repetition of process modelling with BPMN
Learning outcomes	By the end of this module, students should be able to: • Explain the role and benefits of IT systems in the automotive industry • Structure and explain the tasks and processes of IT management using the ITIL and COBIT process frameworks • Explain the ways in which IT can be used to develop strategies, taking alignment between IT and the specialist side into account

	• Explain, evaluate and visualise an enterprise architecture using appropriate building blocks • Describe the functions of important IT systems and link them to the core processes of an enterprise • Explain special systems for processes in the automotive industry • Explain and evaluate the ways in which IT systems are integrated and connected through interfaces • Independently create a web service
Semester (or trimester)	4th subject semester
Duration	One full semester with one session per week (4 credit hours)
Frequency	Each semester
ECTS credits	5 ECTS credits
Workload	• Total: 150 hrs • Attendance time: 45 hrs • Independent study: 105 hrs
Type of module (compulsory, optional, etc.)	Compulsory module for IMA degree programme
Applicability of the module	Business Studies, Business Information Systems and similar subjects
Prerequisites for participation	Recommended prior knowledge: • Introduction to Programming • Business Management Basics in the Automotive Sector • Introduction to the Automotive Industry
Person responsible for module	Prof. Dr. Brune
Name of teacher	Prof. Dr. Brune Prof. Dr. Dehnert
Language of instruction	English
Type of examination / requirement for receiving credits	Project assignment / practical tutorial: Implementation of a business process with web services and a BPM tool (divided into several parts for parallel completion) Written examination: 90 min.
Weighting in overall examination grade	2.4%
Teaching and learning methods	Tuition in seminars, tutorial, project assignment Media used: • Projector, blackboard, flipchart, panels • Journal articles, also online

	Instruction materials: • Lecture transcript
Special features (online component, visits to companies, guest lectures, etc.)	
Reading list (required reading / additional recommended reading)	Recommended reading: • Inge Hanschke, Strategic IT Management: A Toolkit for Enterprise Architecture Management (English) Springer Verlag, 2010. • Efraim Turban, Linda Volonino, Information Technology for Management – Transforming Organizations in the Digital Economy (International Student Version), Wiley (2011). • Paul Schönsleben, Integrales Informationsmanagement: Informationssysteme für Geschäftsprozesse, Springer Verlag (2008). • Volker Stiehl, Prozessgesteuerte Anwendungen entwickeln und ausführen mit BPMN: Wie flexible Anwendungsarchitekturen wirklich erreicht werden können, dpunkt (2012). • R. Shapiro et al., BPMN 2.0 Handbook Second Edition: Methods, Concepts, Case Studies and Standards in Business Process Modeling Notation (BPMN), Future Strategies (2011). • Antonio Goncalves, Beginning Java EE 7, Apress (2013).