

Course title	<i>Enterprise Resource Planning (for Computer Scientists and Computer Engineers)</i>
Course code	<i>WINB 641</i>
Module coordinator	<i>Cordelia Makartsev</i>
Lecturer	<i>Prof. Dr. Bernd Scheuermann</i>
Level of course	<i>Bachelor</i>
Recommended prerequisites	<i>Fundamentals of Computer Science, Business Administration and Accounting</i>
Type of course	<i>Lectures and lab studies</i>
Weekly lecture hours (SWS)	<i>4</i>
ECTS credits	<i>5</i>
Workload	<i>120h, 60h course attendance, 60h self-study</i>
Assessment (grading; pass/fail)	<i>graded</i>
Regular cycle	<i>Each semester</i>
Language of instruction	<i>English</i>
Contents:	<i>Introduction to enterprise systems and software integration. Market survey and history of enterprise software products and their suppliers. Introduction to Enterprise Resource Planning (ERP) and related enterprise systems in on-premise and ondemand scenarios. Introduction to SAP: Company and products. Enterprise resource planning: definition and system architecture. Introduction to a virtual enterprise modelled in ERP. Navigation with the ERP software (e.g. SAP S/4HANA). Representation of company organizational structures and business processes in ERP. Exercises/case studies: Planning and controlling business activities in a selection of application domains supported by ERP. This may include: accounting (e.g. financials or controlling), logistics (e.g. materials management, production planning and control, or sales and distribution), or human resource management (e.g. personnel management or payroll). Introduction to ERP cloud systems and In-Memory Computing in Enterprise Systems.</i>
Learning outcome (competencies):	<i>The students are able to apply Enterprise-Resource-Planningsystems (ERP systems) to automatically execute crossdivisional business processes. For this they should be able to explain the architectures and the processing principles of ERP systems, to work and calculate with their methods of quantityoriented disposition and value-oriented booking, to implement usage scenarios in a graphical process notation and to autonomously execute integrated business procedures on a running ERP system, so as to later assess the technical and economic potential of ERP systems and sensibly automate business procedures of companies driven by an IT-based integration thereby improving the achievement of company goals.</i>
Teaching methods	<i><input checked="" type="checkbox"/>Lecture <input checked="" type="checkbox"/>Group work <input checked="" type="checkbox"/>Exercises <input type="checkbox"/>Simulation <input type="checkbox"/>Video feedback <input checked="" type="checkbox"/>Others: SAP computer lab</i>
Assessment methods	<i>Written exam: Questions will be phrased in English. Students may bring their English dictionary. Provide answers either in</i>

	<i>English or in German, or both, English and German. Voluntary computer-based tests may be offered to gain bonus points.</i>
Recommended reading	<i>Literature list will be provided during lectures</i>
Additional information	
Recognition of credits	