

CURRICULUM B.SC. SOFTWARE DEVELOPMENT

DISTANCE LEARNING

Semester			Module	Course Code	Course	ECTS credits	Type of Exam	
FT	PT I	PT II						
1. Semester	1. Semester	1. Semester	Software Engineering Principles	IGIS01_E	Software Engineering Principles	5	Exam	
			Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Basic Workbook	
			Requirements Engineering	DLBCSRE01	Requirements Engineering	5	Exam	
2. Semester	2. Semester	2. Semester	Specification	DLBCSS01	Specification	5	Exam	
			Object-oriented Programming with Java	DLBCSOOPJ01	Object-oriented Programming with Java	5	Exam	
			Database Modeling and Database Systems	DLBCSDMDS01	Database Modeling and Database Systems	5	Exam	
	3. Semester	3. Semester	3. Semester	Data Structures and Java Class Library	DLBCSDSJCL01	Data Structures and Java Class Library	5	Exam
				Collaborative Work	DLBCSCW01	Collaborative Work	5	Oral Assignment
				Web Application Development	DLBCSWAD01	Web Application Development	5	Exam
3. Semester	3. Semester	3. Semester	Algorithms, Data Structures, and Programming Languages	DLBCSL01-01	Algorithms, Data Structures, and Programming Languages	5	Exam or Advanced Workbook	
			Software Quality Assurance	DLBCSSQA01	Software Quality Assurance	5	Exam	
			IT Architecture Management	DLBCSEITPAM02	IT Architecture Management	5	Exam	
	4. Semester	4. Semester	4. Semester	Programming Information Systems with Java EE	IPWA02_E	Programming Information Systems with Java EE	5	Exam
				Ethics and Sustainability in IT	DLBSEPNIT01_E	Ethics and Sustainability in IT	5	Case Study
				IT Project Management	DLBCSEITPAM01	IT Project Management	5	Exam
4. Semester	4. Semester	4. Semester	Techniques and methods for agile software development	IWNF01_E	Techniques and methods for agile software development	5	Exam	
			Introduction to Mobile Software Engineering	DLBCSEMSE01	Mobile Software Engineering	5	Exam	
			Seminar: Software Engineering	ISSE01_E	Seminar: Software Engineering	5	Research Essay	
			Mobile Software Engineering II	DLBCSEMSE02	Mobile Software Engineering II	5	Project Report	
5. Semester	5. Semester	5. Semester	IT Infrastructure	DLBSEPTI01_E	IT Infrastructure	5	Exam	
			IT-Service Management	DLBCSITSM01-02	IT-Service Management	5	Exam	
			Project: Mobile Software Engineering	IWMB02-01_E	Project: Mobile Software Engineering	5	Portfolio	
	6. Semester	6. Semester	6. Semester	Cloud Programming	DLBSEPCP01_E	Cloud Programming	5	Portfolio
				Introduction to Data Protection and IT Security	DLBCSIDPITS01	Introduction to Data Protection and IT Security	5	Exam
				DevOps and Continuous Delivery	DLBSEPDOCD01_E	DevOps and Continuous Delivery	5	Case Study
5. Semester	5. Semester	5. Semester	User Interface Design and Ergonomics	DLBMIUID01_E	User Interface Design and Ergonomics	5	Exam	
			Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam	
			Project: Software Development	DLBSEPPSD01_E	Project: Software Development	5	Oral Project Report	
			ELECTIVE A*		e.g. Data Science and object oriented programming with Python	10		
6. Semester	6. Semester	6. Semester	ELECTIVE B*		e.g. Internet of Things and Embedded Systems	10		
			ELECTIVE C*		e.g. Augmented, Mixed and Virtual Reality	10		
			Bachelor Thesis		Bachelor Thesis	9	Bachelor Thesis	
Total					Thesis Defense	1	Presentation: Colloquium	
180 ECTS credits								



You've already planned out exactly how your course schedule should look? Wonderful! The IU offers you the flexibility to choose any module you like from any semester. You can work on a number of modules at the same time or one by one.

At the beginning, choose modules that particularly interest you or that you can use directly in your job. This motivates you and gives you success right from the start.

A module with two courses consists of an introduction and a consolidation. In order to successfully complete a module, you must successfully pass both the introduction and the consolidation of the module within the framework of a module examination.

* Electives: Choose three modules, every elective module can only be chosen once.

FT: Full-Time, 36 months
PT I: Part-Time I, 48 months
PT II: Part-Time II, 72 months

Elective A & B:	Elective C:
Mathematics Basics Mathematics: Linear Algebra and Analysis Statistics Basics Data Science and object oriented programming with Python Internet of Things and Embedded Systems Robotics and Production Engineering International Management and Leadership International Marketing and Branding Applied Sales Supply Chain Management	Business Intelligence Smart Devices Smart Factory Smart Mobility Smart Services IT Security Consulting Business Consulting Augmented, Mixed and Virtual Reality Digital Business Infrastructure and Operations Data Engineer User Experience AI Specialist Mastering Prompts Microsoft ERP: Dynamics 365 Business Central - Functional Consultant SAP - SAP S/4HANA Business Process Integration - Application Associate Career Development Studium Generale

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You can find more information about your degree program in the module handbook on our website.