

CURRICULUM B.Sc. COMPUTER SCIENCE

myStudies, 180 ECTS

Month	Model 1: Programme Start October			Model 2: Programme Start April			
	Courses			Courses			
Oct	Introduction to Computer Science	Object-oriented Programming with Java	Intercultural and Ethical Decision Making				
Nov							
Dec							
Jan	Mathematics I	Statistics: Probability and Descriptive Statistics	Collaborative Work				
Feb							
Mar							
Apr	Data structures and Java class library	Mathematics II	Web Application Development	Introduction to Computer Science	Object-oriented Programming with Java	Intercultural and Ethical Decision Making	
May							
Jun	Semester Break						
Jul	Project: Java and Web Development	Computer Architecture and Operating Systems	Introduction to Academic Work	Mathematics I	Statistics: Probability and Descriptive Statistics	Collaborative Work	
Aug							
Sep	Semester Break						
Oct	Database Modeling and Database Systems	Project: Build a Data Mart in SQL	Requirements Engineering	Data structures and Java class library	Mathematics II	Web Application Development	
Nov							
Dec							
Jan	Algorithms, Data Structures and Programming Languages	Computer Networks and Distributed Systems	Introduction to Programming with Python	Project: Java and Web Development	Computer Architecture and Operating Systems	Introduction to Academic Work	
Feb							
Mar							
Apr	IT Service Management	Project: IT Service Management	Theoretical Comp. Science & mathematical logic	IT Service Management	Project: IT Service Management	Theoretical Comp. Science & mathematical logic	
May							
Jun	Semester Break						
Jul	Software Quality Assurance	Introduction to Data Protection and IT Security	Cryptography	Software Quality Assurance	Introduction to Data Protection and IT Security	Cryptography	
Aug							
Sep	Semester Break						
Oct	Specification	Agile Project Management	Elective (online)	Elective (online)	Database Modeling and Database Systems	Project: Build a Data Mart in SQL	
Nov							
Dec							
Jan	IT Law	Project Software Engineering	Elective (online)	Elective (online)	Algorithms, Data Structures and Programming Languages	Computer Networks and Distributed Systems	
Feb							
Mar							
Apr	Computer Science and Society	Seminar: Current Topics in Computer Science		Computer Science and Society	Seminar: Current Topics in Computer Science		
May							
Jun	Semester Break						
Jul	Bachelor Thesis			Bachelor Thesis			
Aug							
Sep	Semester Break						
Oct				Specification	Agile Project Management	Elective (online)	Elective (online)
Nov							
Dec							
Jan				IT Law	Project Software Engineering	Elective (online)	Elective (online)
Feb							
Mar							



INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES



Here you see the order in which you can study your courses in presence depending on your personal study start in October or April. IU International University of Applied Sciences offers you the flexibility to switch from campus to online studies or the other way around. You decide which semester you want to spend on campus or online. The above is only valid for DACH students. For INT Students: attending the courses on Campus in presence is mandatory and will be verified due to VISA regulations.



Each semester consists of two blocks that conclude with a two-week exam preparation phase. You can also defer those exams to a later date that you do not want to take during this period. This way, your exam phases are always spread evenly over the year.

In each block, you attend classes on campus for usually three courses to deepen the content in direct exchange with your fellow students and lecturers. You have semester breaks in June and September.



Attention: Attendance times may vary slightly depending on public holidays and the federal state holidays the campus is located in.



If you are studying Model 2 you will have to start your Bachelor Thesis before completing your final courses.



* Electives: Choose one module with two courses from the Elective A and one module from the Elective B. Every elective module can only be chosen once.

Note: The Electives are only offered in distance learning (online).



By choosing the elective "Internship", "Studium Generale" and/or "Salesforce Platform Management" you cannot qualify for the dual degree with LSBU.

The elective "Internship" is offered for the first time in October 2022.

Elective A*

Big Data and Cloud Technologies
Big Data Technologies
Cloud Computing
Business Intelligence
Business Intelligence
Project: Business Intelligence
IT Project and Architecture Management
IT Project Management
IT Architecture Management
Mobile Software Engineering
Mobile Software Engineering I
Mobile Software Engineering II
Salesforce Platform Development
Salesforce Platform App Builder
Salesforce Platform Developer
Salesforce Platform Management
Salesforce Fundamentals
CRM with Salesforce Service Cloud
Software Engineering with Python
Object oriented and functional programming in Python
Data Science Software Engineering

Elective B*

Big Data and Cloud Technologies
Big Data Technologies
Cloud Computing
Business Intelligence
Business Intelligence
Project: Business Intelligence
IT Project and Architecture Management
IT Project Management
IT Architecture Management
Mobile Software Engineering
Mobile Software Engineering I
Mobile Software Engineering II
Salesforce Platform Development
Salesforce Platform App Builder
Salesforce Platform Developer
Salesforce Platform Management
Salesforce Fundamentals
CRM with Salesforce Service Cloud
Software Engineering with Python
Object oriented and functional programming in Python
Data Science Software Engineering
Studium Generale
Internship

Course Information

Module	Course Code	Course	ECTS	Type of Exam
Introduction to Computer Science	DLBCSICS01	Introduction to Computer Science	5	Exam
Object-oriented Programming with Java	DLBCSOOPJ01	Object-oriented Programming with Java	5	Exam
Intercultural and Ethical Decision Making	DLBCSIDM01	Intercultural and Ethical Decision Making	5	Written Assessment: Case Study
Mathematics I	DLBCSM101	Mathematics I	5	Exam
Statistics - Probability and Descriptive Statistics	DLBDSPPDS01	Statistics - Probability and Descriptive Statistics	5	Exam
Collaborative Work	DLBCSCW01	Collaborative Work	5	Oral Assignment
Data structures and Java class library	DLBCSDSJCL01	Data structures and Java class library	5	Exam
Mathematics II	DLBCSM201	Mathematics II	5	Exam
Web Application Development	DLBCSWAD01	Web Application Development	5	Advanced Workbook
Project: Java and Web Development	DLBCSPJWD01	Project: Java and Web Development	5	Portfolio
Computer Architecture and Operating Systems	DLBCSCAOS01	Computer Architecture and Operating Systems	5	Exam
Introduction to Academic Work	DLBCSIAW01	Introduction to Academic Work	5	Basic Workbook
Database Modeling and Database Systems	DLBCSDMDS01	Database Modeling and Database Systems	5	Exam
Project: Build a Data Mart in SQL	DLBDSBDM01	Project: Build a Data Mart in SQL	5	Portfolio
Requirements Engineering	DLBCSRE01	Requirements Engineering	5	Exam
Algorithms, Data Structures and Programming Languages	DLBCSL01	Algorithms, Data Structures and Programming Languages	5	Exam
IT Service Management	DLBCSITSM01-01	IT Service Management	5	Exam
Project: IT Service Management	DLBCSPITSM01	Project: IT Service Management	5	Written Assessment: Project Report
Computer Networks and Distributed Systems	DLBCSCNDS01	Computer Networks and Distributed Systems	5	Exam
Theoretical Computer Science and Mathematical Logic	DLBCSTCSML01	Theoretical Computer Science and Mathematical Logic	5	Exam
Introduction to Programming with Python	DLBDSIPWP01	Introduction to Programming with Python	5	Exam
Software Quality Assurance	DLBCSSQA01	Software Quality Assurance	5	Exam
Specification	DLBCSS01	Specification	5	Exam
Computer Science and Society	DLBCSCSAS01	Computer Science and Society	5	Written Assessment: Written Assignment
Cryptography	DLBCSCT01	Cryptography	5	Exam
Introduction to Data Protection and IT Security	DLBCSIDPITS01	Introduction to Data Protection and IT Security	5	Exam
Agile Project Management	DLBCSAPM01	Agile Project Management	5	Written Assessment: Project Report
Seminar: Current Topics in Computer Science	DLBCSCTCS01	Seminar: Current Topics in Computer Science	5	Written Assessment: Research Essay
IT Law	DLBCSIITL01	IT Law	5	Written Assessment: Case Study
Project Software Engineering	DLBCSPSE01	Project Software Engineering	5	Written Assessment: Project Report
ELECTIVE A*		e.g. Big Data and Cloud Technologies	10	
ELECTIVE B*		e.g. Business Intelligence	10	
Bachelor Thesis		Bachelor Thesis	9	Bachelor Thesis
		Thesis Defense	1	Presentation: Colloquium