

CURRICULUM B.SC. COMPUTER SCIENCE

DISTANCE LEARNING

| Semester | | Module | Course Code | Course | ECTS credits | Type of Exam |
|-------------|--------------|---|--------------------|---|------------------|---------------------------------|
| FT | PT I / PT II | | | | | |
| 1. Semester | 1. Semester | Introduction to Computer Science | DLBCSICS01 | Introduction to Computer Science | 5 | Exam |
| | | Introduction to Academic Work | DLBCSIAW01 | Introduction to Academic Work | 5 | Basic Workbook |
| | | Mathematics I | DLBCSM101 | Mathematics I | 5 | Exam |
| | 2. Semester | Object-oriented Programming with Java | DLBCSOOPJ01 | Object-oriented Programming with Java | 5 | Exam |
| | | Data Structures and Java Class Library | DLBCSDSJCL01 | Data Structures and Java Class Library | 5 | Exam |
| | | Intercultural and Ethical Decision-Making | DLBCSIDM01 | Intercultural and Ethical Decision-Making | 5 | Case Study |
| 2. Semester | 2. Semester | Mathematics II | DLBCSM201 | Mathematics II | 5 | Exam |
| | | Web Application Development | DLBCSWAD01 | Web Application Development | 5 | Advanced Workbook |
| | | Collaborative Work | DLBCSCW01 | Collaborative Work | 5 | Oral Assignment |
| | 3. Semester | Statistics: Probability and Descriptive Statistics | DLBDSSPDS01-01 | Statistics: Probability and Descriptive Statistics | 5 | Exam |
| | | Computer Architecture and Operating Systems | DLBCSCAOS01 | Computer Architecture and Operating Systems | 5 | Exam |
| | | Project: Java and Web Development | DLBCSPJWD01 | Project: Java and Web Development | 5 | Portfolio |
| 3. Semester | 3. Semester | Database Modeling and Database Systems | DLBCSDMDS01 | Database Modeling and Database Systems | 5 | Exam |
| | | Project: Build a Data Mart in SQL | DLBDSPBDM01 | Project: Build a Data Mart in SQL | 5 | Portfolio |
| | | Requirements Engineering | DLBCGRE01 | Requirements Engineering | 5 | Exam |
| | 4. Semester | Operating Systems, Computer Networks, and Distributed Systems | DLBIBRV01_E | Operating Systems, Computer Networks, and Distributed Systems | 5 | Exam |
| | | Algorithms, Data Structures, and Programming Languages | DLBCSL01-01 | Algorithms, Data Structures, and Programming Languages | 5 | Exam or Advanced Workbook |
| | | IT Service Management | DLBCSITSM01-02 | IT Service Management | 5 | Exam |
| 4. Semester | 4. Semester | Project: IT Service Management | DLBCSITSM01 | Project: IT Service Management | 5 | Project Report |
| | | Theoretical Computer Science and Mathematical Logic | DLBCSTCSML01 | Theoretical Computer Science and Mathematical Logic | 5 | Exam |
| | | Introduction to Programming with Python | DLBDSPWP01 | Introduction to Programming with Python | 5 | Exam |
| | 5. Semester | Software Quality Assurance | DLBCSSQA01 | Software Quality Assurance | 5 | Exam |
| | | Specification | DLBCSS01 | Specification | 5 | Exam |
| | | Project: Software Engineering | DLBCSPSE01 | Project: Software Engineering | 5 | Project Report |
| 5. Semester | 5. Semester | Seminar: Current Topics in Computer Science | DLBCSCTCS01 | Seminar: Current Topics in Computer Science | 5 | Research Essay |
| | | Introduction to Data Protection and Cyber Security | DLBCSIDPITS01 | Introduction to Data Protection and Cyber Security | 5 | Exam |
| | | Cryptography | DLBCSCT01-01 | Cryptography | 5 | Case Study |
| 6. Semester | 7. Semester | ELECTIVE A* | | z.B. Mobile Software Engineering | 10 | |
| | | ELECTIVE B* | | z.B. Big Data and Cloud Technologies | 10 | |
| | 8. Semester | Agile Project Management | DLBCSAPM01 | Agile Project Management | 5 | Project Report |
| | | IT Law | DLBCSIITL01 | IT Law | 5 | Case Study |
| | | Computer Science and Society | DLBCSCSAS01 | Computer Science and Society | 5 | Written Assignment |
| | | Bachelor Thesis | DLBBT01 DLBBT02 | Bachelorarbeit Kolloquium | 9 1 | Bachelor Thesis Presentation |
| Total | | | | | 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

Electives A & B:

Mobile Software Engineering
Big Data and Cloud Technologies
Business Intelligence
Software Engineering with Python
IT Project and Architecture Management
Salesforce Platform Management*
Salesforce Platform Development
Studium Generale*
Internship*



Electives "Studium Generale", "Internship" or "Salesforce Platform Management", is available in mystudies only
"Internship" is available in **mystudies** only



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