

Study Plan Guide - BSc. in Computer Engineering – Dual Study Track 2021/2022

First Year		
First semester Courses (20 CH)	Second Semester Courses (18 CH)	Summer Semester Courses (6 CH)
English III - ENGL101 (1CH) German I – GERL101 (3CH) Computing Fundamentals – CS116 (3CH) Comp. Fund. Lab – CS1160 (1 CH) Arabic – ARB100 (3CH) Calculus I – MATH101 (3CH) Physics I - PHYS 103 (3 CH) General Chemistry - CHEM 103 (3 CH)	German II – GERL102 (3CH) Data Structures – CS223 (3CH) Physics II - PHYS 104 (3 CH) Physics Lab - PHYS 106 (1 CH) Object-Oriented Programming – CS214 (3CH) Object-Oriented Programming Lab – CS2140 (1CH) Calculus II – MATH102 (3CH) English IV - ENGL102 (1CH)	Database Management Systems - CS363 (3CH) Dual Studies Practical course I – DS101 (3CH) Practical training in company

Second Year		
First Semester Courses (18 CH)	Second Semester Courses (20CH)	Summer Semester Courses (6 CH)
English V – ENGL201 (2CH) German III – GERL201 (3CH) Differential Equations – MATH 205 (3CH) Discrete Structures – CS 201(3CH) Digital Systems – CE212 (3CH) Digital Systems Lab – CE2120 (1CH) Applied Mathematics for Engineers - MATH 203 (3 CH)	German IV – GERL202 (3 CH) Computer Architecture and Organization – CE201(3 CH) Theory of Algorithms - CS 222 (3 CH) English VI - ENGL 202 (2 CH) Electrical Circuits I - ENE 211 (3 CH) Linear Algebra - ECE 317 (3 CH) Random variables and stochastic processes - ECE 315 (3 CH)	Computer Networks - CE 352 (3CH) Dual Studies Practical course II – DS201 (3CH) Practical training in company

Third Year		
First Semester Courses (17 CH)	Second Semester Courses (12 CH)	Summer Semester Courses (3 CH)
German V – GERL301 (3CH) Signals and Systems - CE 331(3 CH) Electronics 1 - ECE 241 (3 CH) Electronics 1 Lab - ECE 2410 (1 CH) Operating Systems - CE 357 (3 CH) Operating Systems Lab - CE 3570 (1 CH) Numerical Methods for Engineers - BM 371 (3 CH)	German VI – GERL302 (3CH) Electrical Circuits Lab - ENE 213 (1 CH) Computer Networks Lab - CE 3561 (1 CH) Microprocessor and Microcomputer Systems- CE 342 (3 CH) Electrical Circuits II - ENE 212 (3 CH) Microprocessor and Microcomputer Systems Lab - CE 3420 (1 CH)	Computer Security – CE 354 (3 CH) Field Training – CS391 (0 CH) Practical training in company

Fourth Year (in Germany)	
First Semester Courses (12 CH)	Second Semester Courses (12 CH)
4 Elective Courses at German Partner University (12CH)	International Industry Internship – 20 weeks in German Company- CS491(12 CH)

First Semester Courses (16 CH)	Second Semester Courses (16 CH)
Network Protocols - CE 452 (3 CH) Senior Project I - CE 592 (1 CH) Machine learning - CE 477 (3 CH) Military Science - MILS 100 (3 CH) Data Communication - CE 355(3 CH) National Education - NE 101 (3 CH)	Parallel Architectures and Parallel Algorithms - CE 502 (3 CH) Systems Programming - CS 416 (3 CH) Software Engineering - CS 342 (3 CH) Senior Project II - CE 594 (3 CH) Embedded System Design - CE 441 (3 CH) Engineering Workshop - IE 121 (1 CH)