HAN_UNIVERSITY OF APPLIED SCIENCES

Degree Statute and Education and Examination Regulations Bachelor Embedded Systems Engineering – Part 2, Chapter 9: Description of the education

Appendix to the Degree Statute and EER of the bachelor's programme Embedded Systems Engineering (CROHO 34131), English-taught full-time variant, 2021-2022.

9. DESCRIPTION OF THE EDUCATION (THE UNITS OF STUDY)

This chapter describes the education of your programme as a curriculum overview and a description of the units of study, beginning with the propaedeutic phase, then the post-propaedeutic phase and the minors. Embedded Systems Engineering is offered full-time in Dutch and English and part-time in Dutch; a shortened route from associate degree to bachelor's degree is available.

CURRICULUM OVERVIEW

Semester	Units of study
1	Embedded Hardware: mathematics basics, direct voltage and current, numbering systems and digital logic · Embedded Software: introduction to C and rapid prototyping · Embedded Systems Project: getting to know embedded systems
2	Embedded Hardware: complex numbers and vectors, alternating voltage and current, VHDL foundation · Embedded Software: software design · Embedded Systems Project
3	Embedded Hardware: data communication, sequential VHDL and control engineering (10) · Embedded Software: object-oriented programming (5) · Embedded Systems Project: object-oriented analysis and design (15)
4	Embedded Systems: digital signal processing, Linux and security (15) · Embedded Systems Project (15)
5	Internship (30)
6	Smart Embedded Systems: courses (10) and professional learning project (20)
7	Minor (30), for example Embedded Vision Design and Machine Learning
8	Graduation (30)

UNITS OF STUDY

For each unit the regulations state the code, the period, the credits (1 credit = 28 hours of study), the contact hours, the entry requirements, the content and organisation, the learning outcomes and assessment criteria – linked to the programme's final qualifications, such as analysing, designing, realising and researching –, the activities (lectures, labs and projects), the required literature, software and materials, and the examinations. Knowledge and skills from the hardware and software units are applied in the project of the same semester.

The chapter further covers the minors of the programme, honours, talent and bridging programmes, the part-time variant and tracks with a special character.