HAN University of Applied Sciences – Academie Engineering en Automotive

Embedded Systems Engineering – Full-time – academic year 2021-2022 (English-taught)

ISBN	Title	Author	Edition	S1	S2	S3	S4	S5	S6*	S7	S8
9781292014388 or e-book 9781292014395	Data and Computer Communications, International Edition	Stallings, W.	10			C					
9780262014335	Circuit Design and Simulation with VHDL	Pedroni, V.A.	2	C		C					
9781292223124 or e-book 9781292223209	Electrical Engineering: Principles & Applications, Global Edition	Hambley, A.	7	C	C						
9783642034459	Feedback and Control for Everyone	Albertos, P.	1			C					
9780471976318	Introductory Digital Signal Processing with Computer Applications	Lynn, P.A., Fuerst, W., Thomas, B.	2						C		
9990002072178	Card set «Engineering Methods Pack» (via Studystore)	–	1	C	C	C	C				
9789001575625	Project Management, a practical approach	Grit, R.	5	C	C	C	C	C			
9789001748944	Report writing for readers with little time	Elling, R., Andeweg, B., Swankhuizen, C.	2	C							

C = compulsory / R = recommended / O = optional. * S6: within the PLC the students decide, together with their lecturers and company supervisors, which literature and learning materials they need for the project or research; the lecturer monitors the level.

Minor Embedded Vision and Machine Learning (EVML)

ISBN	Title	Author	Edition
9788776815417	Digital Image Processing, Part I (e-book)	Huiyu Zhou, Jiahua Wu, Jianguo Zhang (2010)	–
9788776815424	Digital Image Processing, Part II (e-book)	Huiyu Zhou, Jiahua Wu, Jianguo Zhang (2010)	–
9781492032632	Hands-On Machine Learning with Scikit-Learn (e-book)	O'Reilly Media Inc.	–
9781491937990	Learning OpenCV 3: Computer Vision in C++ with the OpenCV Library	Bradski, G.R.	1

Software and general

Via lecturer / school: IDE for rapid prototyping, IDE to program and debug the microcontroller, Qt Creator, Linux Ubuntu (VirtualBox), Matlab including licence, Python 3, STM32CubeIDE, Scikit-learn, Keras and TensorFlow; microcontroller development board; Terasic DE10-Lite board; RaspberryPi 4 with SenseHAT, SD cards, adapter and network cables; DMM multimeter. Own laptop and Microsoft Office (via Surfspot) throughout the programme; calculator Casio FX-991EX or fx-82MS; SOWISO licence (mathematics) in the first week of lessons.

Price changes and typing errors reserved.