Further information

- Chapter 4 of [HH13] on HDLs can be used for projects, but not for standalone study

- Chapter 7 of [HH13] on micro-architecture depends on everything before and is thus not suitable for self-study

- Sec. 2.7 of [KR17] on Socket programming can be used for project, also in OS part; same for Wireshark labs

- Interviews in the corresponding chapters of [AA18] are always worth a read

- Chapters 8 and 9 of [AA18] are left out for the most part because they require understanding a lot of the previous material

- [1] This can be for example ML in security: Chowdhury, M. N., K. Ferens and M. Ferens. "Network Intrusion Detection Using Machine Learning." (2016).

- [2] [Sag14] Giovanni Saggio, *Principles of Analog Electronics*, 2014.

- [3] [Bal03] Mark Balch, *Complete Digital Design*, 2003.

- [4] [Ste15] Karl David Stephan, *Analog and mixed-signal electronic*, 2015.

- [5] Information on bluetooth: [KR20, section 7.3.6]; Chatschik Bisdikian: *An overview of the Bluetooth wireless technology*, IEEE Commun. Mag. 39(12): 86-94 (2001), `https://sci-hub.se/10.1109/35.968817`; and Vijay K. Garg, *Wireless Communications and Networking*, 2007.

- [6] Abraham Silberschatz, Peter Baer Galvin and Greg Gagne. *Operating system concepts*, 2018.

- [7] Pick from `https://www.markus-gattol.name/ws/dm-cryptluks.html` or `https://doi.org/10.1145/1368506.1368519`

- [8] [Tan11] Andrew S. Tanenbaum. Computer Networks, 5th ed. Pearson, 2011.

- [9] [Mai07] Anil K. Maini, *Digital electronics : principles, devices, and applications*, 2007.

- [10] [Det01] Richard C. Detmer, *Introduction to 80x86 Assembly Language and Computer Architecture*, 2001.

- [11] [Cle06] Alan Clements, *Principles of Computer Hardware*, 2006. Oxford University Press.

Legend

- The big coloured bubbles at the root of the other bubbles are the main fields of this course: operating systems, computer architecture and computer networks

- The bubbles next (grey-blue) are the areas of the corresponding field. For instance, Persistence is part of operating systems. You will choose as team one field.

- The last (green) bubbles make up the three study topics (e.g., Data Integrity) of your team.

- To study a topic, you will have to study all indicated chapters/sections from the root to the topic. Unless otherwise specified, all chapter and section numbers refer to the main book of the corresponding field: [AA18] for OS, [KR20] for CN and [HH12] for CA. You may find data integrity under in operating systems → persistence → data integrity, and thus you have to study chapter 1–4, 35–36, 46 and 45 for this topic. Don't worry, many of these are very short!

- A grey link labelled "or" means that your team pick one of the two topics.