

Course Summer Semester 2022, TU Graz:

The dawn of the digital age – Selected topics from the history of computing and communication technologies

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[Course Link](#)

Digital technology has penetrated almost every aspect of our society – but **how did it all start?** How did “automatic” computing and “tele”-communication emerge, and which needs, hopes, and visions were driving their development?

This lecture is a **voyage to the past**. We will visit historic milestones and meet important innovators, but we shall also explore some now forgotten hypes like “cybernetics”. Along the way, we will try to understand how already past societies were affected by the early achievements of computing and communication technologies.

Long before computers have been invented or words such as “electronics” emerged, there were needs for massive calculations, people were dreaming about smart machines, and scholars tried to mechanize human reasoning – some intriguing algorithms are even thousands of years old. Today we benefit from many of these past innovations and visions!



Target audience:

Master level; interested bachelor level students and PhD students are welcome!
No previous knowledge required, but ability to read texts in German or French is beneficial.

Structure and expected workload:

3 hours per week (including breaks) consisting of lectures, discussions, and presentations by participants. Participants will choose a dedicated topic for which they prepare (once during the semester) a 20 to 30 minutes presentation (seminar style). Occasionally, reading assignments for the following week will be given, and the content of the papers will then be discussed.