# BACHELOR'S THESIS ASSIGNMENT

## I. Personal and study details

Student's name: **Kučera Petr**          Personal ID number: **499325**

Faculty / Institute: **Faculty of Electrical Engineering**

Department / Institute: **Department of Measurement**

Study program: **Open Informatics**

Specialisation: **Internet of Things**

## II. Bachelor's thesis details

Bachelor's thesis title in English:

**A distributed system of IoT devices solving the consensus problem**

Bachelor's thesis title in Czech:

**Distribuovaný systém IoT zařízení řešící problém konsenzu**

Guidelines:

Bibliography / sources:

[1] ONGARO, Diego a John OUSTERHOUT. In Search of an Understandable Consensus Algorithm: Extended Version, [online]. May 20, 2014 [cit. 2023-02-14]. Dostupné z: https://raft.github.io/raft.pdf
[2] D. Yang, I. Doh and K. Chae, 'Cell Based Raft Algorithm for Optimized Consensus Process on Blockchain in Smart Data Market,' in IEEE Access, vol. 10, pp. 85199-85212, 2022, doi: 10.1109/ACCESS.2022.3197758.
[3] 'IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems,' in IEEE Std 1588-2019 (Revision ofIEEE Std 1588-2008) , vol., no., pp.1-499, 16 June 2020, doi: 10.1109/IEEESTD.2020.9120376.

Name and workplace of bachelor's thesis supervisor:

**doc. Ing. Jiří Novák, Ph.D.    Department of Measurement  FEE**

Name and workplace of second bachelor's thesis supervisor or consultant:

Date of bachelor's thesis assignment: **16.02.2023**     Deadline for bachelor thesis submission: **26.05.2023**

Assignment valid until:
**by the end of summer semester 2023/2024**

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doc. Ing. Jiří Novák, Ph.D.                 Head of department's signature                 prof. Mgr. Petr Páta, Ph.D.
Supervisor's signature                                                                                          Dean's signature

## III. Assignment receipt

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Date of assignment receipt                          Student's signature