



## Assignment for the master thesis

**Course of studies:** Mechatronics

**Student's name:** Tomas Jakubik

**Subject:**

Asymmetric low-power FHSS algorithm

**Assignment:**

- Explore common FHSS technologies
- Design an FHSS algorithm satisfying following conditions
  - There are grid powered HUBs and battery powered peripherals
  - HUBs do not communicate with each other over the FHSS network
  - Response time from peripheral to the HUB must be less than 400 ms
  - Peripherals are monitored within 20 minutes
  - Basic modulation is GFSK on CC1200 transceiver at an SRD frequency band h1.1
- Compare achieved parameters with a non-hopping solution

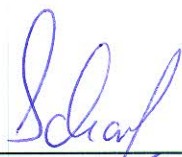
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**Date of issue:** 12.04.2016

**Date of submission:** 12.08.2016

**Registry-Number.:** MA/EMIm14 – 07/ 16

  
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