

## Project work description

<b>Title:</b> Development of fluxgate magnetic sensor		<b>Intézeti azonosító:</b> <b>MEI-120/2024</b>
<b>Description and aims:</b> Fluxgate magnetic sensors play a crucial role in identifying weak magnetic fields, relying on Faraday's law of electromagnetic induction. The design of these sensors typically includes excitation windings, a core, and sensing windings, resembling the structure of a transformer. The objective of this project is to characterize the coil of the fluxgate sensor and design a circuit that utilizes the coil as a magnetic sensor.		
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<b>No. of students: (min./max.):</b>	3/5 students	
<b>Prerequisites:</b>	Interest in magnetic sensors and measurements and analog circuit design.	
<b>Recommended schedule:</b>	Week 1	Assignment issuance, clarification
	Week 2	Creating a GANTT chart, forming a concept, presenting it to the consultant
	Week 4-5	Literature review, data collection
	Week 6-10	Magnetic measurements and circuit design
	Week 11-13	Prototype manufacturing, documentation
	Week 14	Presentation