

## Hands-on Seminar: Experimental Optics and Atomic Physics (E/A) - physics740

<i>Course</i>	Hands-on Seminar: Experimental Optics and Atomic Physics (E/A)
<i>Course No.</i>	physics740

Category	Type	Teaching			Semester
		Language	hours	CP	
Elective	Laboratory	English	2	3	WT/ST

### Requirements for Participation:

**Preparation:** Fundamentals of optics and quantum mechanics

**Form of Testing and Examination:** Credit points can be obtained after successful carrying out the experiments and preparing a written report on selected experiments

**Length of Course:** 1 semester

**Aims of the Course:** The students learn to handle optical setups and carry out optical experiments. This will prepare participants both for the successful completion of research projects in experimental quantum optics/photonics and tasks in the optics industry.

### Contents of the Course:

Practical training in the field of optics, where the students start their experiment basically from scratch (i.e. an empty optical table). The training involves the following topics:

- diode lasers
- optical resonators
- acousto-optic modulators
- spectroscopy
- radiofrequency techniques

**Recommended Literature:** Will be given by the supervisor

PDF version of this page.