

Modules:

physics700 **Elective Advanced Lectures**
 physics710 **Experimental Physics**
 physics720 **Applied Physics**

Course:

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

Course No.: physics740

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

Requirements:**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