

Module Handbook (<https://modhb.uni-kl.de/>)

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## Course EIT-LRS-513-K-7

RCS Project Lab (5L, 5.0 LP)

### Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time / Self-Study
5	L	Laboratory course	5.0 CP	60 h / 90 h
(5L)			5.0 CP	60 h / 90 h

### Basedata

SWS	5L
CP, Effort	5.0 CP = 150 h
Position of the semester	1 Sem. in WiSe/SuSe
Level	[7] Master (Advanced)
Language	[EN] English
Lecturers	Görges, Daniel, apl. Prof. Dr.-Ing. (EXT   DEPT: EIT) (/staff/618/) Liu, Steven, Prof. Dr.-Ing. (PROF   DEPT: EIT) (/staff/345/) Zhang, Ping, Prof. Dr.-Ing. (PROF   DEPT: EIT) (/staff/351/)
Area of study	[EIT-LRS] Control Systems
Lifecycle-State	[NORM] Active

### Contents

- Design, simulation, implementation of an advanced control for a power electronic system/Liu
- Design, simulation, implementation of an advanced control for a mechatronic system/Liu
- Design, simulation, implementation of a vehicular control system/Görges
- Design, simulation, implementation of an advanced control for the inverted pendulum /Zhang

### Literature

will be announced in the lab

### Materials

Project instruction book

## Registration

See homepage Control Systems Group

### Requirements for attendance (informal)

#### Modules:

- [EIT-AUT-453-M-7] Methods of Soft Control (M, 3.0 LP) (/mhb/modules/EIT-AUT-453-M-7/)
- [EIT-LRS-432-M-4] CAE in Control Engineering (M, 4.0 LP) (/mhb/modules/EIT-LRS-432-M-4/)
- [EIT-LRS-505-M-7] Nonlinear and Adaptive Control (M, 5.0 LP) (/mhb/modules/EIT-LRS-505-M-7/)
- [EIT-LRS-509-M-7] Control in Power Electronics (M, 3.0 LP, ANL) (/mhb/modules/EIT-LRS-509-M-7/)

### Requirements for attendance (formal)

None

## References to Course [EIT-LRS-513-K-7]

Module	Name	Context
[EIT-LRS-513-M-7 (/mhb/modules/EIT-LRS-513-M-7/)]	RCS Project Lab	P: Obligatory 5L, 5.0 LP