

Module Handbook

TUK MODHB Homepage

Course WIW-LOG-OL-K-7

Optimization Tools in Logistics Planning (1V+2U, 4.5 LP)

Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time / Self-Study
-	K		4.5 CP	
1	V	Lecture		15 h 30 h
2	U	Lecture hall exercise class		30 h 60 h
(1V+2U)			4.5 CP	45 h 90 h

Basedata

SWS	1V+2U
CP, Effort	4.5 CP = 135 h
Position of the semester	1 Sem. in WiSe
Level	[7] Master (Advanced)
Language	[DE] German
Lecturers	Gschwind, Timo, Prof. Dr. (PROF DEPT: WIW)
Area of study	[WIW-LOG] Logistics
Additional informations	Informations about the course
Lifecycle-State	[NORM] Active

Contents

- Modeling

- Optimization with Excel solver
- Optimization with modeling languages and MIP solvers

Literature

- Grünert, T. & Irnich, S. (2005). Optimierung im Transport Band I: Grundlagen. Shaker Verlag.
- Williams, H.P. (2013). Model Building in Mathematical Programming. Wiley.
- Weitere Literatur wird in der Veranstaltung bekanntgegeben.
- Additional literature will be announced during the lecture.

Materials

Basic knowledge of linear and mixed-integer optimization, basic knowledge of spreadsheets

Requirements for attendance (informal)

None

Requirements for attendance (formal)

None

References to Course [WIW-LOG-OL-K-7]

Module	Name	Context	
[WIW-LOG-LM-M-7]	Logistics Management	WP: Obligation to choose	1V+2U, 4.5 LP
[WIW-LOG-OT-M-7]	Optimization Tools in Logistics Planning	P: Obligatory	1V+2U, 4.5 LP