

Module Handbook

TUK MODHB Homepage

Module WIW-LOG-SP-M-7

Facility Location and Network Design (M, 4.5 LP)

Module Identification

| Module Number | Module Name | CP (Effort) |
|----------------|---|----------------|
| WIW-LOG-SP-M-7 | <i>Facility Location and Network Design</i> | 4.5 CP (135 h) |

Basedata

| | |
|---------------------------|--|
| CP, Effort | 4.5 CP = 135 h |
| Position of the semester | 1 Sem. in SuSe |
| Level | [7] Master (Advanced) |
| Language | [EN] English |
| Module Manager | Gschwind, Timo, Prof. Dr. (PROF DEPT: WIW) |
| Lecturers | Gschwind, Timo, Prof. Dr. (PROF DEPT: WIW) Machate, Sarah, M. Sc. (WMA DEPT: WIW) |
| Area of study | [WIW-LOG] Logistics |
| Reference course of study | [WIW-88.21-SG#2009] M.Sc. Business Studies (2009) [2009] |
| Lifecycle-State | [NORM] Active |

Courses

| Type/SWS | Course Number | Choice in Module-Part | SL | PL | CP | Sem. |
|----------|----------------|-----------------------|----|-----|-----|------|
| 2V+1U | WIW-LOG-SP-K-7 | P | - | PL1 | 4.5 | SuSe |

- About [WIW-LOG-SP-K-7]: Title: "Facility Location and Network Design"; Presence-Time: 45 h; Self-Study: 90 h

Examination achievement PL1

- Form of examination: **written exam (Klausur) (60 Min.)**
- Examination Frequency: Examination only within the course

Evaluation of grades

The grade of the module examination is also the module grade.

Contents

From [WIW-LOG-SP-K-7] Facility Location and Network Design:

- Median Problems
- Covering Problems
- Warehouse-Location-Problems
- Center Problems
- Dispersion Problems
- Hub-Location-Problems

Competencies / intended learning achievements

Upon successful completion of the module, students will be able to

- to analyze, structure, formalize and solve complex problems of site planning and network design,
- to independently select the right planning methods and tools and apply them in concrete decision-making situations,
- to transfer the learned methods to tasks that are new to them.

Literature

From [WIW-LOG-SP-K-7] Facility Location and Network Design:

- Daskin, M. S. (1995). Network and discrete location: Models, algorithms, and applications. Wiley.
- Domschke, W. & Drexl, A. (1996). Logistik: Standorte. De Gruyter Oldenbourg.
- Additional literature will be announced during the lecture.

Materials

Lecture slides, exercise sheets and other materials on the Olat course website.

Requirements for attendance of the module (informal)

None

- Notice: Some Courses have informal requirements for attendance:
 - #A: [WIW-LOG-SP-K-7] Facility Location and Network Design (2V+1U, 4.5 LP) (P: Obligatory)

Requirements for attendance of the module (formal)

None

References to Module / Module Number [WIW-LOG-SP-M-7]

Module-Pool

Name

[GS-CVT-BS-2022-E-MPOOL-6]

Catalog Electives Business Studies and Economics 2022

[WIW-LOG-MPOOL-7]

Field of Specialization: Logistics