

„Friedrich List“ Faculty of Transport and Traffic Science

Dipl.-Ing. Kati Ahnert

# Welcome to Air Transport and Logistics

## Freshmen welcome and notes

Dresden, 05.10.2023

# Number of the Day

# 80 Freshmen in Air Transport and Logistics

# Structure of the Study Program

# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	<b>VW-ATL-01 (Prof. Schönberger)</b> Operations Research and Logistics			
10	<b>VW-ATL-02 (Dr. Preis)</b> Material Flow Analysis and Optimization			
15	<b>VW-ATL-03 (Dr. Treiber)</b> Methods in Transport Economics and Statistics			
20	<b>VW-ATL-05 (Prof. Fricke)</b> Flight Performance and Aerodynamics			
25				
30				

# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	<b>VW-ATL-01 (Prof. Schönberger)</b> Operations Research and Logistics	<b>VW-ATL-04 (Dr. Preis)</b> Decision Making in Enterprise Logistics		
10	<b>VW-ATL-02 (Dr. Preis)</b> Material Flow Analysis and Optimization	<b>VW-ATL-07 (Prof. Fricke)</b> Air Traffic and Airport Operations		
15	<b>VW-ATL-03 (Dr. Treiber)</b> Methods in Transport Economics and Statistics			
20	<b>VW-ATL-05 (Prof. Fricke)</b> Flight Performance and Aerodynamics			
25				
30				

# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	<b>VW-ATL-01 (Prof. Schönberger)</b> Operations Research and Logistics	<b>VW-ATL-04 (Dr. Preis)</b> Decision Making in Enterprise Logistics	<b>VW-ATL-06 (Prof. Fricke)</b> Flight Planning and Aircraft Operations	
10	<b>VW-ATL-02 (Dr. Preis)</b> Material Flow Analysis and Optimization	<b>VW-ATL-07 (Prof. Fricke)</b> Air Traffic and Airport Operations	<b>VW-ATL-08 (Prof. Fricke)</b> CNS and tactical ATM	
15	<b>VW-ATL-03 (Dr. Treiber)</b> Methods in Transport Economics and Statistics			
20	<b>VW-ATL-05 (Prof. Fricke)</b> Flight Performance and Aerodynamics			
25				
30				

# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	<b>VW-ATL-01 (Prof. Schönberger)</b> Operations Research and Logistics	<b>VW-ATL-04 (Dr. Preis)</b> Decision Making in Enterprise Logistics	<b>VW-ATL-06 (Prof. Fricke)</b> Flight Planning and Aircraft Operations	
10	<b>VW-ATL-02 (Dr. Preis)</b> Material Flow Analysis and Optimization	<b>VW-ATL-07 (Prof. Fricke)</b> Air Traffic and Airport Operations	<b>VW-ATL-08 (Prof. Fricke)</b> CNS and tactical ATM	
15	<b>VW-ATL-03 (Dr. Treiber)</b> Methods in Transport Economics and Statistics			
20	<b>VW-ATL-05 (Prof. Fricke)</b> Flight Performance and Aerodynamics	<b>VW-ATL-20 to VW-ATL-32</b> <b>Advanced elective modules:</b> <ul style="list-style-type: none"> <li>• each equals 5 CP</li> <li>• required amount of 15 CP: choose at least 3 modules</li> </ul>		
25				
30				

# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	<b>VW-ATL-01 (Prof. Schönberger)</b> Operations Research and Logistics	<b>VW-ATL-04 (Dr. Preis)</b> Decision Making in Enterprise Logistics	<b>VW-ATL-06 (Prof. Fricke)</b> Flight Planning and Aircraft Operations	
10	<b>VW-ATL-02 (Dr. Preis)</b> Material Flow Analysis and Optimization	<b>VW-ATL-07 (Prof. Fricke)</b> Air Traffic and Airport Operations	<b>VW-ATL-08 (Prof. Fricke)</b> CNS and tactical ATM	
15	<b>VW-ATL-03 (Dr. Treiber)</b> Methods in Transport Economics and Statistics			
20	<b>VW-ATL-05 (Prof. Fricke)</b> Flight Performance and Aerodynamics	<b>VW-ATL-20 to VW-ATL-32</b> <b>Advanced elective modules:</b> <ul style="list-style-type: none"> <li>• each equals 5 CP</li> <li>• required amount of 15 CP: choose at least 3 modules</li> </ul>		
25			<b>VW-ATL-51 to VW-ATL81</b> <b>Free elective modules:</b> <ul style="list-style-type: none"> <li>• each equals 5 CP</li> <li>• choose modules up to 20</li> </ul>	
30				



# Structure of the Study Program

CP	1st semester	2nd semester	3rd semester	4th semester
5	VW-ATL-01 (Prof. Schönberger) Operations Research and Logistics	VW-ATL-04 (Dr. Preis) Decision Making in Enterprise Logistics	VW-ATL-06 (Prof. Fricke) Flight Planning and Aircraft Operations	Master's thesis  <b>*4th Semester</b> Mobility window for studying abroad
10	VW-ATL-02 (Dr. Preis) Material Flow Analysis and Optimization	VW-ATL-07 (Prof. Fricke) Air Traffic and Airport Operations	VW-ATL-08 (Prof. Fricke) CNS and tactical ATM	
15	VW-ATL-03 (Dr. Treiber) Methods in Transport Economics and Statistics			
20	VW-ATL-05 (Prof. Fricke) Flight Performance and Aerodynamics	VW-ATL-20 to VW-ATL-32 <b>Advanced elective modules:</b> <ul style="list-style-type: none"> <li>• each equals 5 CP</li> <li>• required amount of 15 CP: choose at least 3 modules</li> </ul>	VW-ATL-51 to VW-ATL81 <b>Free elective modules:</b> <ul style="list-style-type: none"> <li>• each equals 5 CP</li> <li>• choose modules up to 20</li> </ul>	
25				
30				

# Structure of the Study Program

## Content of a module

### Module

Lecture

Exercise / Tutorial

Practical course

Lecture on a specific topic

- Active participation due to the family size of the lectures.
- Ask questions! Questions are welcome!
- Please prepare well before and after the lecture!

Learning material is practiced, consolidated and deepened.

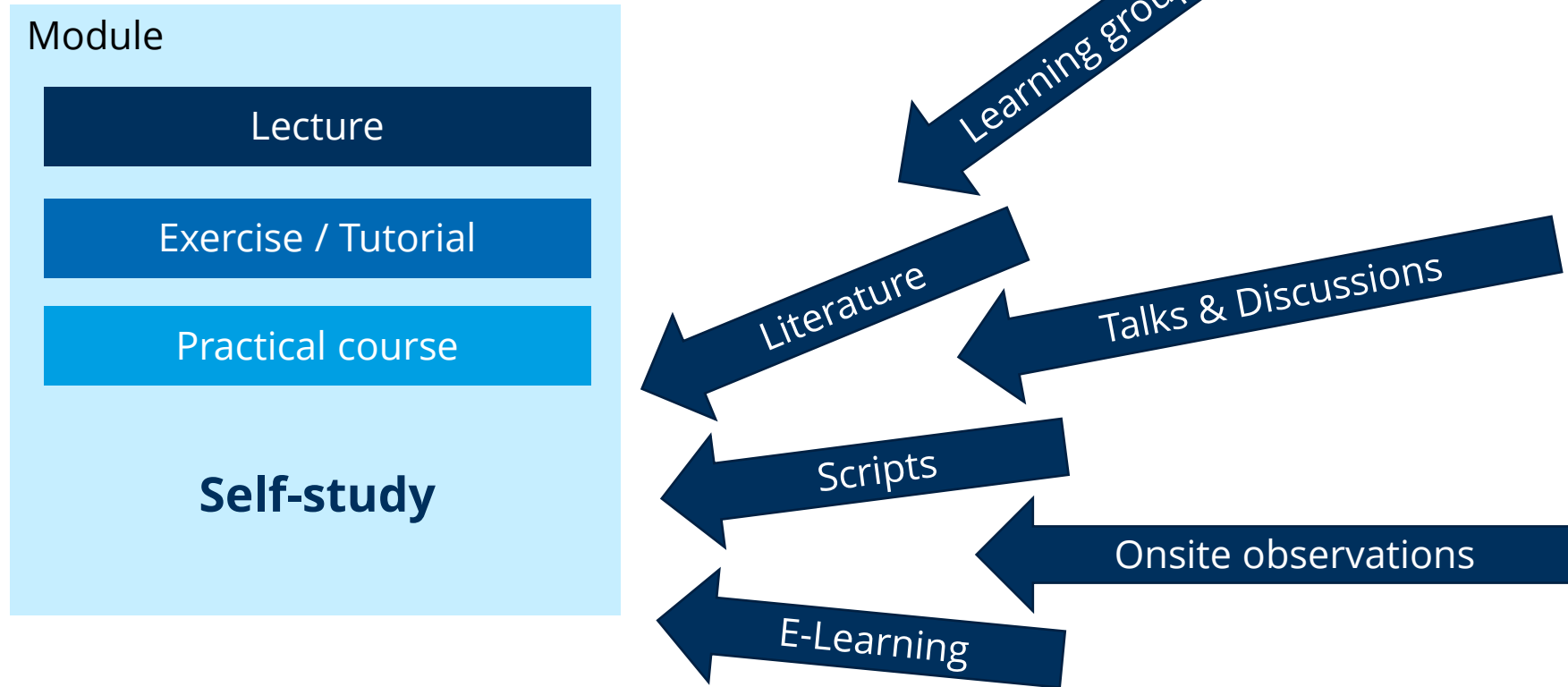
- Prepare and use!
- Ask questions and work together!

Practical application of knowledge.

- Prepare internships!
- Ask questions and work together!

# Structure of the Study Program

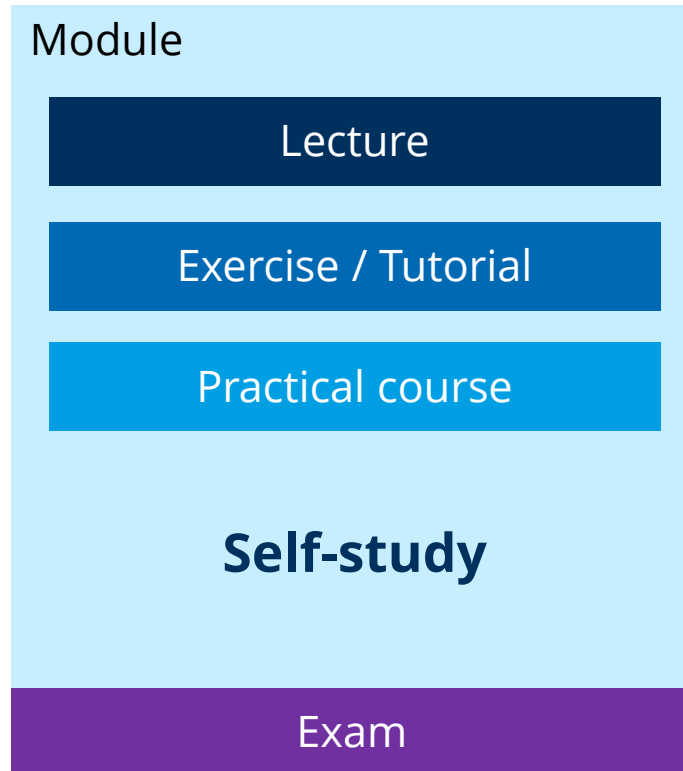
## Content of a module



**Learning continuously!**

# Structure of the Study Program

## Content of a module



**Registration necessary! Observe deadlines.**

<https://tu-dresden.de/bu/verkehr/studium/pruefungsamt/pruefungstermine-einschreibung>

**Compensation for disadvantages possible.**

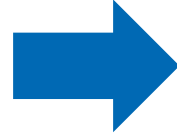
<https://tu-dresden.de/tu-dresden/organisation/gremien-und-beauftragte/beauftragte/bfsb/nachteilsausgleich>

**All information at the examination office:**

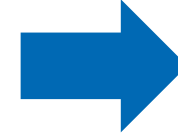
<https://tu-dresden.de/bu/verkehr/studium/pruefungsamt>

# Structure of the Study Program

Which modules in the semester?  
Study schedule



When are the courses?  
Timetable



When which topic?  
OPAL courses of the teachers

Modulnummer	Modulname	1. Semester V/U/S/P	2. Semester V/U/S/P	3. Semester V/U/S/P	4. Semester (M)	LP
<b>Pflichtbereich</b>						
VW-ATL-01	Operations Research and Logistics	2/2/0/0 PL				5
VW-ATL-02	Material Flow Analysis and Optimization	2/2/0/0 PL				5
VW-ATL-03	Methods in Transportation Econometrics and Statistics	2/2/0/0 PL				5
VW-ATL-04	Decision Making in Enterprise Logistics		2/2/0/0 PL			5
VW-ATL-05	Flight Performance and Aerodynamics	7/1/0/0,5 PVL, PL				10
VW-ATL-06	Flight Planning and Aircraft Operations			4/0,5/0/0,5 PL		5
VW-ATL-07	Air Traffic and Airport Operations		6/2/0/0 PL			10
VW-ATL-08	CNS and tactical ATM			6/1/0/1 PL		10
<b>Wahlpflichtbereich</b>						
Es sind insgesamt Module im Umfang von 35 Leistungspunkten zu wählen. Es sind Module im Umfang von mindestens 15 Leistungspunkten zu wählen.						
VW-ATL-20	Safety and Airline Management		3/1/0/0 PL			5
VW-ATL-21	Terminal Operations		3/1/0/0 PVL, PL			5
VW-ATL-22	Aircraft Engines		2/1/0/0 PL			5
VW-ATL-23	Helicopter Technology		2/0/0/0	2/0/0/0 di		5

WiSe 2023/24 (09.10.23 - 04.02.24) Stand: 28.08.2023

VwMLL-1-ATL  
WW 1/19/50

ZEIT	MONTAG	DIENSTAG	MITTWOCH	DONNERSTAG	FREITAG
1.05 1. WO 07:30 - 09:20 Uhr			Schönberger DD Operations Research and Logistics* POT/13/U	Fricke VO Fundamentals of Aircraft Engines POT/151/H	
1.05 2. WO 07:30 - 09:20 Uhr		Nachtgall VO Advanced Theory of Transportation Systems POT/13/U	Schönberger DD Operations Research and Logistics* POT/13/U	Fricke VO Fundamentals of Aircraft Engines POT/151/H	
2.05 1. + 2. WO 09:20 - 10:50 Uhr	Othrin VW Theoretical Multivariate Statistics POT/106/U	Kerschke OW Methods in Data Analytics POT/361/H	Preis VO Material Flow Analysis and Optimization POT/13/U	Nachtgall u.a. OW Advanced Theory of Transportation Systems* POT/13/U	
3.05 1. + 2. WO 11:10 - 12:40 Uhr	Nachtgall VW Advanced Theory of Transportation Systems POT/151/H	Michler VW Transportation Telematics POT/112/H	Schönberger VO Operations Research and Logistics POT/13/H	Fricke VO Flight performance POT/06/H	Treiber VO Methods in Transp. Econometrics and Statistics POT/13/U
4.05 1. + 2. WO 13:00 - 14:30 Uhr	Fricke VO Aerodynamics and Flight Characteristics POT/151/H	Schönberger DD Operations Research and Logistics* POT/13/U	Schulze VW Visual Perception and Lighting Engineering POT/06/H	Michler VW Transp. Telem. Networks POT/151/H	Fricke VO Aerodynamics and Flight Characteristics POT/151/H
5.05 1. + 2. WO 14:50 - 16:20 Uhr		Treiber VO Methods in Transportation Econometrics and Statistics POT/151/H	Preis DD Material Flow Analysis and Optimization POT/13/U	Nachtgall u.a. OW Advanced Theory of Transportation Systems* POT/06/H	
8.05 1. + 2. WO 16:40 - 18:10 Uhr	Kerschke VW Methods in Data Analytics POT/361/H			Nachtgall u.a. OW Advanced Theory of Transportation Systems* POT/06/H	
7.05 1. + 2. WO 18:30 - 20:00 Uhr			*) mehrfaches Übungsangebot / multiple exercise offer		

## Vorlesungen

Als vorlesungsbegleitendes Manuskript wird die Lektüre des folgenden Buches empfohlen:

- Eckehard Schnieder u. Lars Schnieder (2013) „Verkehrssicherheit – Maße und Modelle, Methoden und“

Das Buch ist für Studierende der TU Dresden über die SLUB kostenlos via Springerlink aus dem Netz der T  
Aber: Vorlesungsfolien (online im OPAL) und persönliche Teilnahme sind zum erfolgreichen bestehen der K

Datum	Uhrzeit	Thema
11.04.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 01:</b> Einführung und Einleitung
25.04.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 02:</b> Wahrnehmung der Verkehrssicherheit
02.05.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 03:</b> Begriffsbildung und Modellierung
09.05.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 04:</b> Grundlegende Modellkonzepte
16.05.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 05:</b> Statistiken der Verkehrssicherheit
23.05.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 06:</b> Risikometrie
30.05.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 07:</b> Modelle und Modellierung
13.06.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 08:</b> Methoden und Techniken
20.06.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 09:</b> Implementierungskonzepte
27.06.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 10:</b> Implementierungskonzepte
04.07.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 11:</b> Implementierungskonzepte
11.07.2022	16:40 Uhr - 18:10 Uhr	<b>Vorlesung 12:</b> Implementierungskonzepte

CP	1st semester	2nd semester	3rd semester	4th semester
5	VW-ATL-01 (Prof. Schönberger) Operations Research and Logistics	VW-ATL-04 (Dr. Preis) Decision Making in Enterprise Logistics	VW-ATL-06 (Prof. Fricke) Flight Planning and Aircraft Operations	Master's thesis *4th semester *multiple exercise offer
10	VW-ATL-02 (Dr. Preis) Material Flow Analysis and Optimization	VW-ATL-07 (Prof. Fricke) Air Traffic and Airport Operations	VW-ATL-08 (Prof. Fricke) CNS and tactical ATM	
15	VW-ATL-03 (Dr. Treiber) Methods in Transport Economics and Statistics			
20	VW-ATL-05 (Prof. Fricke) Flight Performance and Aerodynamics	VW-ATL-20 to VW-ATL-32 Advanced elective modules: • each equals 5 CP • required amount of 15 CP: choose at least 3 modules	VW-ATL-S1 to VW-ATL-S1 Free elective modules: • each equals 5 CP • choose modules up to 20	
25				
30				

Bild anpa

# Structure of the Study Program

## Module Guide Transportation Economics

[Full screen](#) | [Back to OPAL](#)

### 1st semester

Language = language of instruction (EN = English, DE = German), Description = description of the module

Number	Name	ETCS	Module responsible	Language	Description	Link (OPAL)
VW-TEc-MA-PFL 10	Operations Research and Logistics	5	Schönberger	EN	<a href="#">EN</a> <a href="#">DE</a>	<a href="#">Link</a>
VW-TEc-MA-PFL 20	Methods in Transport Policy	5	Tscharaktschiew	EN	<a href="#">EN</a> <a href="#">DE</a>	<a href="#">Link</a>
VW-TEc-MA-PFL 30	Spatial Economics and the Environment	5	Hirte	EN	<a href="#">EN</a> <a href="#">DE</a>	<a href="#">Link</a>
VW-TEc-MA-PFL 40	Theoretical Multivariate Statistics	5	Okhrin	EN	<a href="#">EN</a> <a href="#">DE</a>	<a href="#">Link</a>
VW-TEc-MA-PFL 50	Methods in Data Analytics	5	Kerschke	EN	<a href="#">EN</a> <a href="#">DE</a>	<a href="#">Link</a>
<a href="#">Modules of the elective compulsory area of the module group Supplements</a>		5	*			

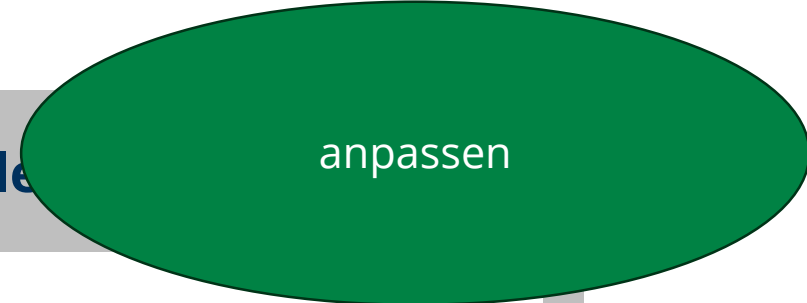
### 2nd semester

Language = language of instruction (EN = English, DE = German), Description = description of the module

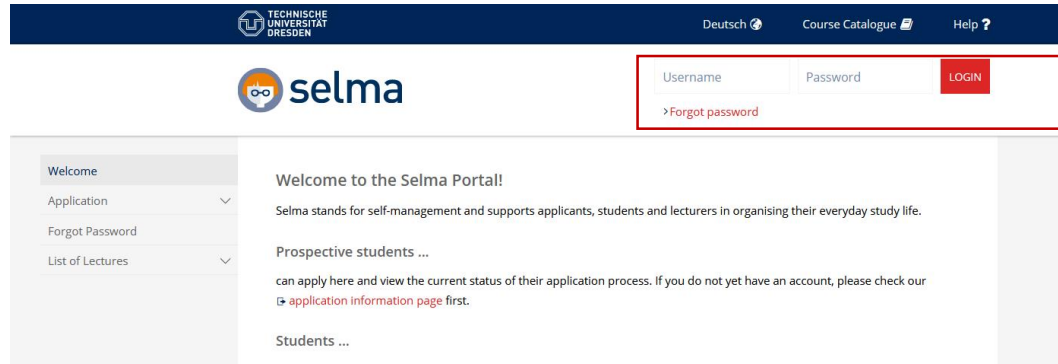
Number	Name	ETCS	Module responsible	Language	Description	Link
<a href="#">First module of the first chosen specialization</a>		5		EN		
<a href="#">Second module of the first chosen specialization</a>		5		EN		
<a href="#">First module of the second chosen specialization</a>		5		EN		



<https://tud.link/qwyl>



# Structure of the Study Program



Instructions for using the student portal "SELMA" for module and exam registration and deregistration:

- Link to the portal: <https://selma.tu-dresden.de>
- Login: ZIH-Login with corresponding password
- Contact address: [pruefungsmanagement.bu@tu-dresden.de](mailto:pruefungsmanagement.bu@tu-dresden.de) or supervising examination office



Module registration:

1. select the tab "Modules | Courses" and
2. then select the tab "Register | Deregister".
  - ATTENTION - if you do NOT select the second tab, you will not have the possibility to register modules and courses
3. In the middle part of the web window, select the area where your desired module is located.

# Structure of the Study Program



## Registration for exam (pre)services:

1. select the tab "Exams" and
2. then select the tab "Register | Deregister".
  - ATTENTION - if you do NOT select the second tab, you will not be able to register for exams.
  - You can only register for exams if you have previously registered for the corresponding module!
3. In the middle area of the web window, select the exam you want to take
  - ACHUTNG: the registration button appears only if registration is possible. Outside the registration periods this button is NOT available



## Exam results:

1. Under the "Exams" tab and the following
2. "Results" tab, you can view all your exam and module results
3. Under "Exam results", you can view the exam (pre-) performance results you have achieved in the respective semester.
4. Under "Semester Results", you can view the module exam results sorted by semester.
5. Under "Study results" you can view the total results of your enrolled study program.
  - Each module that has been started at least gets a hyperlink, which then leads you to the individual exam (pre)results



# How do we get started?

# How do we get started?

## 1. Get an Overview – This week if possible

- Participate in the **ESE** (Freshmen orientation week)
- Put together your **timetable**
- Enroll in **OPAL courses**
- Look through **information material** and (some) **websites**

## 2. Courses

- Information about the procedure and examination in the first courses
- Actively attend lectures and exercises, prepare and follow up on them
- Form study groups, discuss together

## 3. Contacts

- **Making contacts:** finding friends, forming study groups, taking part in FSR (Student Council) events

# Internet sources

## Faculty

[www.tu-dresden.de/bu/verkehr](http://www.tu-dresden.de/bu/verkehr)



## Student Council

[www.fsr-verkehr.de](http://www.fsr-verkehr.de)



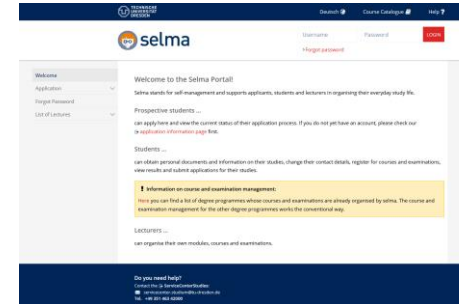
## University Library

[www.slub-dresden.de](http://www.slub-dresden.de)



## Learning Platform OPAL

<https://bildungsportal.sachsen.de/opal/login>



## Selma-Portal

[selma.tu-dresden.de](http://selma.tu-dresden.de)

# If there are Questions or Problems: No one is alone!



## Kommilitonen und Freunde

*Fellow students  
and friends*



## Studierende des FSR

*Students of the  
student council*



## Fr. Lindner im Prüfungsamt

*Mrs. Lindner in the  
Examination Office*

**Special Offer:**  
*English office  
hours in the  
examination office  
with Mrs.  
Hildebrandt  
Thursday  
9:00 – 10:00 a.m.  
in HÜL/N109*



## Beratung im Studierendenrat

*Advice in the  
TUD-Students Council*



## Beratung des Studentenwerks

*Advice from the  
Student Union*



## Studienberatung des SCS

*Study Advice in the  
Service Center Studium*



## International Office

*Advice for the  
international students*

Foto: REDEREI / Benjamin Jenak

# Does it fit?! Program (PASST?!-Programm)



## Participation

Give your **consent**  
for >>PASST?!<<  
in selma



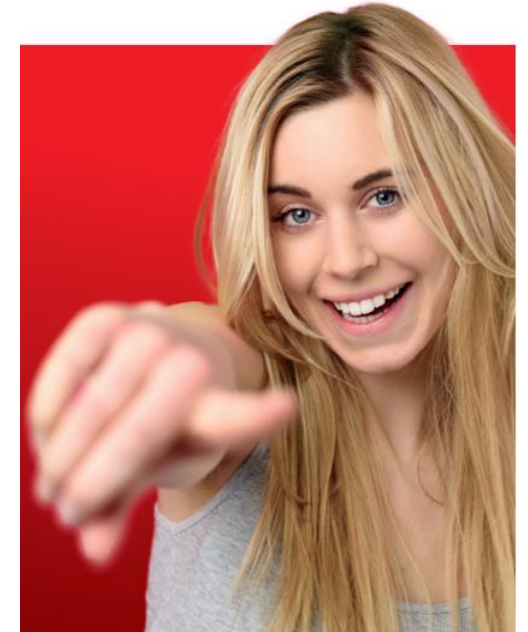
## Check

An **anonymous check**  
of your study progress  
data will be made  
regularly



## Support

You will receive  
**individual advice**  
and **support offers**



- "Early warning system" for difficult study paths with individual tips & tricks.
- Good service, highly recommended! Registration in Selma Portal required.
- **Information:** <https://tu-dresden.de/studium/im-studium/beratung-und-service/zentrale-studienberatung/passt>

# Good to know!

## Hints & Tips

# Learning languages at the TU Dresden

## Languages on offer

Ancient Greek	Arabic	Chinese	German
English	Finnish	French	Italian
Japanese	Latin	Polish	Portuguese
Russian	Swedish	Spanish	Czech

Foreign language courses can be included  
as elective modules  
(also German and English)

**Registration / Enrollment at the start of the semester**

**Attention: Places are limited!**

Enrollment always  
from April or  
October via **OPAL**



Im WiSe 23/24 from  
01.10.2023

Start of classes from  
16.10.2023



# German Courses for international Students

## Basic and advanced Courses

- Understanding lectures better
- Give lectures in German
- Prepare exams

## "German as a foreign language"

- for different language levels
- General German
- Subject-specific German

[https://www.sprachausbildung.tu-dresden.de/sprachen/deutsch\\_als\\_fremdsprache/](https://www.sprachausbildung.tu-dresden.de/sprachen/deutsch_als_fremdsprache/)





# Scientific Writing Workshop

## THE WRITING CENTER OF TU DRESDEN

### current offers

The **writing peer tutors** and **lecturers of the Writing Center** support students and lecturers in scientific writing and in the teaching of scientific work, among other things with **writing consultation**, **workshops** in courses and various further **education formats** - also during the lecture-free period.

### more information and registration

- > for students
- > for lecturers
- > workshops for students
- > Continuing Education for lecturers

At the Writing Center of TU Dresden (SZD) you can find information and help concerning academic reading and writing. The SZD supports students and lecturers with offers such as

- planning and writing various study texts, such as protocols, seminar papers or theses
- and teaching academic writing in seminars/ lectures and supervision.

## FOR STUDENTS



© Michaela Wolochinger

From your first transcript or term paper to your final thesis: the Writing Center team is happy to provide advice and assistance throughout your studies

An overview of all offers for students as well as further information is listed below:

Writing Consultation



Corrections/Lecturing



workshops: online & offline



offers for studium generale



Infothek & Newsletter: Material and Tips



Room for Writing at the TextLab



Learning and Writing Groups



Long Night Against Procrastination



Writing Marathon



Qualification & Peer Learning



<https://tu-dresden.de/karriere/weiterbildung/zentrum-fuer-weiterbildung/schreibzentrum/fuer-studierende/index>

# Some things you don't learn in college, but only in life

- **Acquire own working methods**
  - How do I **manage my time**?
  - How do I **structure my semester** so that I can still “breathe” during the exam period?
  - How do I acquire the necessary **MS Office skills** so that I can write good term papers and theses?
  - How do I **file documents** and find them again later?
  - How do I use and link my **email accounts**? How do I use a digital calendar?
  - What do I need to keep in mind when **writing letters/emails** to internship companies, supervisors or professors?
  - ...

# Some things you don't learn in college, but only in life



- **Social commitment**

in committees, associations or interest groups  
(FSR, "Listige Vereinigungen", traffic club, politics, ...)

- **Get to know the professional world**

Internship, student assistant, interest group

# Summary

- Study requires a lot of independence, but is fun!
- If you have problems, get help in time!
- Network with each other!  

**Have fun & good luck in your studies!**