# t.FLPE1 - Flight Operation and Performance 1

Person responsible for Roland Steiner, stnr

the course:

Credits: 4

**Valid for:** 2009/2010

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### Learning objectives:

The students

- are familiar with all factors that influence aircraft performance
- can undertake performance calculations and give due consideration to all relevant aspects,
- understand optimisation potential in aircraft performance,
- understand the operational limitations which are caused by the aircraft's performance,
- can make the transfer from the performance characteristics of an individual aircraft to the entire aviation system.

### **Course content:**

- Flight mechanics (Take-Off, climb, cruise, turn, descent)
- Example for preliminary design of aircraft
- Euler angles, coordinate system transformation
- CS-23, CS-25 aspects of performance
- CLASS B SINGLE-ENGINE AEROPLANES performance
- CLASS B MULTI-ENGINE AEROPLANES performance
- CLASS A MULTI-ENGINE AEROPLANES performance

#### Previous knowledge:

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### **Teaching method:**

Type of lesson:	Number of lessons per week:	
Lecture	14*(2+2)L	
Tutorial/Practicum		
Group teaching		
Block instruction		
Seminar		

#### **Assessment:**

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Туре	Weighting
1	End of term exam	80%
1	Exam during the semester	20%
	Further assessments	

#### Language of instruction:

## Deutsch

## Instruction material:

- Script
- EU-OPS
- Angewandte Flugleistung, Joachim Scheiderer, Verlag Springer
- Getting to grips with aircraft performance, Airbus Industries
- Handouts

# Comments:

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