

Budapest University of Technology and Economics

Faculty of Transportation Engineering and Vehicle Enginee

1. Subject name	Meteorology				
2. Subject name in Hungarian	Meteorology				
3. Code	BMEKOVRM231	4. Evaluation type	exam grade	5. Credits	3
6. Weekly contact hours	2 (7) Lecture 0 (0) Practice 0 (0) Lab				
7. Curriculum	Transportation Engineering MSc (K)	8. Role	Specialization (sp) at Transportation Engineering MSc (K)		
9. Working hours for fulfilling the requirements of the subject 90					
Contact hours	28	Preparation for seminars	4	Homework	0
Reading written materials	36	Midterm preparation	12	Exam preparation	10
10. Department	Department of Aeronautics and Naval Architectures				
11. Responsible lecturer	Dr. Rohács Dániel				
12. Lecturers	Dr. Rohács Dániel, Jankovics István				
13. Prerequisites					

14. Description of lectures

ATMOSPHERE - Structure of the atmosphere. Properties of atmosphere . The International Standard Atmosphere.

VISIBILITY - Basics, Humidity, Haze, Measurement

CLOUDS, PRECIPITATION - Cloud formation. Convection. Cloud Classification. Precipitation,

WINDS, THUNDERSTORMS, ICING - WINDS. Measurement. Forces. Wind Gradient. Thunderstorms, Supercells, Dangers of thunderstroms.

AIR MASSES AND WEATHER FRONT- Warm front. Cold Front. Occlusion. Stationary front. Convergence and squall lines. GLOBAL CLIMATOLOGY - Climatology. Jetstream. Low and High pressure areas..

WEATHER REPORTS - Weather infromation. Weather Reports and Forecasts (METAR, TAF and others)

15. Description of practices

16. Description of labortory practices

17. Learning outcomes

A. Knowledge

• Familiar with the meteorological processes affecting Air Traffic, know and understand their impact on aviaton safety. Knows the weather reporting and forecasting methods used in aviation.

B. Skills

 Ability to assess the impact of a given weather phenomenon on flight, from the point of view of aviation safety, economy and operation. Can interpret different flight meteorological messages.

C. Attitudes

D. Autonomy and Responsibility

• Interested, responsive, making decisions with care and responsibility.

18. Requirements, way to determine a grade (obtain a signature)

Mid-term requirement: Performing laboratory excercises and 1 mid term exam

Final grade: 1 exam measuring the theoretical knowledge. The final grade is the result of the exam

19. Opportunity for repeat/retake and delayed completion

Retake possibility of a laboratory excercise or the mid-term exam Retake exam possible according to the general rules of BME

20. Learning materials

The presentation about the lectures
Literature

Effective date 10 October 2019 This Subject Datasheet is valid for Inactive courses