



TANTÁRGYI ADATLAP SUBJECT DATASHEET

Legal Framework of Autonomous Vehicles

BMEGT55M420

I. COURSE DESCRIPTION

1. SUBJECT DATA

Course name

Legal Framework of Autonomous Vehicles

Course code

BMEGT55M420

Course type Contact lessons

Kurzustípusok és óraszámok

| <i>Type</i> | <i>Lessons</i> | <u>Type of assessment</u> | <u>Number of credits</u> |
|-------------|----------------|---------------------------|--------------------------|
| Lecture | 2 | mid-term | |
| Practice | 0 | grade | |
| Laboratory | 0 | | |

Course leader

| <i>Name</i> | <i>Position</i> | <i>Email adress</i> |
|-----------------------|---------------------|------------------------------|
| Dr. Grad-Gyenge Anikó | associate professor | grad-gyenge.aniko@gtk.bme.hu |

Organizational unit for the subject

Department of Business Law

Subject website

<https://edu.gtk.bme.hu>

Language of teaching

angol – EN

Curriculum role of the subject, recommended semester

Pre-requisites

strong Nincs/None

weak Nincs/None

paralell Nincs/None

exclusive Nincs/None

1.13 A tantárgyleírás érvényessége / Validity of the Subject Description

2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The objective of the course is to introduce the students into the legal environment of the autonomous vehicles, including especially the basic principles and guidelines and the present and possible future framework of these laws. - Autonomous vehicles in the recent legal environment, esp. a) public law and private law questions. Autonomous vehicles in the private and public laws, legal frameworks of administrative laws, registrations, torts and product liability, warranty, software-law issues, risk-management, contract-management, insurance issues, b) Data protection (privacy) and data safety issues c) relevant criminal law issues. Autonomous vehicles in the recent legal environment. Criminal issues, and criminal liability - Autonomous vehicles in the Future. a) Types and definitions of autonomous and automated cars. Min-imum requirements, technical compliance standards. b) Future use of autonomous cars and its possible effects on law - use in controlled environments, ride services, etc. c) Human - machine interface and its legal problems; new requirements - e.g. driving licence standards for the human "element" of the system.

Learning outcomes

Knowledge

1. the social and economic functions of legislation
2. the basic functions of the main areas of law affecting traffic, responsibility, safety
3. the main features of the legal, economic and business mechanisms that can influence traffic, responsibility, safety
4. relevant approaches to illustrate the impact of regulators on certain questions of autonomous vehicle
5. methods and aspects of analysis of legislation affecting autonomous vehicles

Ability

1. The students are able to
2. properly interpret and place rules in practice
3. analyze the role, motivations and activities of individual economic actors from a legal and economic point of view
4. grasp a multi-faceted context system for modeling public policy strategy planning in relation to the topic
5. critical thinking

Attitude

1. are well aware in the assessment of the legal regulation of the autonomous vehicles, is informed by various sources, consciously seeking alternative solutions
2. are open to self-reflection, critical reception, and critical thinking when thinking about regulation of autonomous vehicles
3. are open to critical self-assessment, based on activities, active, learning methods, experimental style

Autonomy and responsibility

1. are open to accept reliable critical remarks,
2. are able to solve practical professional problems independently.

Methodology of teaching

Lectures and written communication, use of ICT tools and techniques.

Materials supporting learning

- Presentations of the lectures.
- Hand-outs dedicated to the actual lecture of the course

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

Assessment of the learning outcomes described under 2.2. is based on two written tests. To complete the course is needed to pass at least 50% each of the midterm exams, to solve the revision questions available on Moodle and attend 70% of the lectures.

Performance evaluation methods

Detailed description of assessments during the term: 1. Complex, written assessment of competence-type competence elements in written

form. The thesis may consist of test questions, which are the interpretation of certain concepts and the recognition of their interrelations;

essay questions examining lexical knowledge and synthesizing ability. The available working time of 30-90 minutes. 2. In addition, students will have the opportunity to hold a presentation during the semester by applying for the topics provided by the professors. The result of the performance is included in the evaluation.

Proportion of performance evaluations performed during the diligence period in the rating

- Midterm exams: 100

Proportion of examination elements in the rating

- :

The condition for obtaining the signature, validity of the signature

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Grading

| | |
|--------------|-------|
| Excellent | 91 |
| Very good | 85-90 |
| Good | 76–84 |
| Satisfactory | 63-75 |
| Pass | 50-62 |
| Fail | < 50 |

Correction and retake

1) The exams (midterms) will be corrected within the deadline set by the study and examination rules and will be officially published via Neptune. The Department publishes the date of the inspection on a case-by-case basis. 2) It is possible to improve the mark acquired during the year according to the study and examination rules

Study work required to complete the course

| | |
|----------------------------------|----|
| Participation in contact lessons | 28 |
| Participation of homework | 10 |
| Preparing for the mind-term exam | 52 |
| total | 90 |

Approval and validity of subject requirements

III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics discussed during the semester

Subject includes the topics detailed in the course syllabus to ensure learning outcomes listed under 2.2. can be achieved. Timing of the topics may be affected by calendar or other circumstances in each semester.

- 1 General questions of regulation of autonomous traffic – a social transition by the autonomous vehicles
Regulatory approach to technological development - international and EU regulatory trends
Tort law
Criminal liability of Avs
Autonomous vehicles – data protection and data safety
Mid-term exam
Vehicle and transport legislation in Hungary
New issues of public law regulation, licensing issues, a possible new "KRESZ" .
Legal context and possible solutions for the validation of AI
International best practice
Intellectual property issues relating to autonomous vehicles services
Mobility service
Summary – analysis of the previous topics, reflections
Mid-term exam

Lecturers participating in teaching

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|----------------------|--|
| Dr. Dávid Alíz | vendégelőadó |
| Dr. Mezei Kitti | egyetemi adjunktus mezei.kitti@gtk.bme.hu |
| Dr. Nagy Krisztina | egyetemi adjunktus nagy.krisztina@gtk.bme.hu |
| Dr. Schubauer Petra | egyetemi adjunktus schubauer.petra@gtk.bme.hu |
| Dr. Timár Adrienn | egyetemi tanársegéd timar.adrienn@gtk.bme.hu |
| Dr. Tomasovszky Edit | egyetemi adjunktus tomasovszky.edit@gtk.bme.hu |

Approval and validity of subject requirements