**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Transports Engineering |
| Level | Bachelor |
| Program of study | Transports and Traffic Engineering |

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| --- | --- |
| Course | **Transports Geography** |
| Code | 2TT5OS42 |
| Year of study (semester) | III (V) |
| Number of hours | 42 |
| Number of credits | 3 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| No. | Topic |
|  | Time and space |
|  | Transport and its importance on the economy and society |
|  | Road transport |
|  | Rail transport |
|  | Shipping |
|  | River transport |
|  | Air transport |
|  | Pan-European transport corridors |
|  | Unconventional transport |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Transports Engineering |
| Level | Bachelor |
| Program of study | Transports and Traffic Engineering |

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| Course | **Railway transport systems** |
| Code | 2TT6OS46 |
| Year of study (semester) | III (VI) |
| Number of hours | 56 |
| Number of credits | 5 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| No. | Topic |
|  | Interoperability of the railway transport system |
|  | Railway transport system subsystems |
|  | Network and vehicle registers |
|  | Technical specifications for interoperability and interoperability constituents |
|  | General and specific requirements and interfaces of subsystems |
|  | Railway construction |
|  | Railway stations |
|  | Technology of railway station activities |
|  | Train running technique |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Transports Engineering |
| Level | Bachelor |
| Program of study | Transports and Traffic Engineering |

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| Course | **Special transport systems** |
| Code | 2TT8OS57 |
| Year of study (semester) | IV (VIII) |
| Number of hours | 70 |
| Number of credits | 5 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| No. | Topic |
|  | Regulation of special transport of dangerous goods: presentation of the ADR agreement |
|  | Obligations of legal persons involved in the transport of dangerous goods: consignor, carrier, consignee, shipper, packer, etc. |
|  | Classification of dangerous goods subject to special transport. Identification number of the substances |
|  | Hazard identification numbers in special transports of dangerous goods |
|  | Signs, hazard labels, handling labels in special transports of dangerous goods |
|  | Special requirements for the transport of dangerous substances: classes 2, 3, 4.1, 4.2, 4.3, 5.1, 5.2 |
|  | Special requirements for the transport of dangerous substances: classes 6.1, 6.2, 8, 9 |
|  | Packaging used for special transport: conditions for packing goods for special transport, requirements for packaging |
|  | Packaging used for special transport: tests to which it is subject for type-approval and certification |
|  | Vehicles and equipment intended for special transport: special features (electrical equipment, braking system, fire prevention equipment, speed limitation device) |
|  | Vehicles and equipment intended for special transport: conditions for their approval and approval |
|  | Special oversized transport: imposed conditions, special vehicles |
|  | Special transport of valuables: security crew, characteristics of an armored vehicle |
|  | Special transport of live animals: conditions imposed, special vehicles |
|  | Fire prevention in vehicles. Security of road transport of dangerous goods |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Transports Engineering |
| Level | Bachelor |
| Program of study | Transports and Traffic Engineering |

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| --- | --- |
| Course | **Road Transport Code and legislation** |
| Code | 2TT5OS41 |
| Year of study (semester) | III (V) |
| Number of hours | 42 |
| Number of credits | 3 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| No. | Topic |
|  | Indicators, markings and obligations incumbent on drivers at their meeting |
|  | Traffic rules |
|  | Deviations and sanctions provided by the road traffic law on public roads |
|  | First aid rules in case of road accidents |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Mechanical Engineering |
| Level | Bachelor |
| Program of study | Mining Machines and Equipment |

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| Course | **Mining loading and transport equipments** II |
| Code | 2MM8OS57 |
| Year of study (semester) | IV (VIII) |
| Number of hours | 56 |
| Number of credits | 4 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| No. | Topic |
| 1. | I. Discontinuous transport equipment  1. Rail transport  2. Car transport  3. Cable cars |
| 2. | II. Loading and unloading equipment  1. Loaders  2. Receiving and evacuation equipment  3. Combined loading and transporting machines  4. Scraper installations |
| 3. | III. Mechanization of transport systems in the junction stations  1. Maneuvering equipment  2. Loading equipment used in transport stations  3. Equipment for unloading wagons |
| 4. | IV. Transport of material and personnel |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Mechanical Engineering |
| Level | Bachelor |
| Program of study | Mining Machines and Equipment |

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| Course | Processing equipments |
| Code | 2MM7OS51 |
| Year of study (semester) | IV (VII) |
| Number of hours | 56 |
| Number of credits | 4 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| --- | --- |
| No. | Topic |
| 1. | Crushers |
| 2. | Binders |
| 3. | Mills |
| 4. | Screeners |
| 5. | Separators |
| 6. | Furnaces |
| 7. | Filters |
| 8. | Decanters |

**Course Syllabus**

**Academic year: 2020-2021**

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electrical Engineering |
| Field of study | Transports Engineering |
| Level | Master |
| Program of study | Transport systems for industry, tourism and services |

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| Course | **Underground transport systems** |
| Code | 2STITSXS09 |
| Year of study (semester) | I (II) |
| Number of hours | 70 |
| Number of credits | 6 |
| Professor | Assoc. Prof., Ph.D. MIHĂILESCU Sorin |

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| --- | --- |
| No. | Topic |
| 1. | Network |
| 2. | Rolling stock |
| 3. | Technological rolling stock |
| 4. | Services and facilities for travelers |
| 5. | Integration with surface transport |
| 6. | Accidents and incidents |