**Course Syllabus**

Academic year: **2020-2021**

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| Institution | University of Petroşani |
| Faculty | **Mechanical and Electrical Engineering** |
| Field of study | [Mining Machines and Equipment](https://www.upet.ro/en/resource/doc/plans/mee/2019/Mining%20Machines%20and%20Equipment.pdf) |
| Level | License |
| Program of study | Equipment for industrial processes |

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| Course | Design of process equipment II |
| Code | 2MU8OS59 |
| Year of study (semester) | IV (VIII) |
| Number of hours | 56 |
| Number of credits | 4 |
| Professor | Assoc. Prof., Ph.D. TOMUȘ Ovidiu-Bogdan |

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| **No.** | **Topic** |
|  | Air flow for air conditioning systems |
|  | Air treatment in ventilation and air conditioning installations |
|  | Air conditioning: "Air only" air conditioning systems, primary air systems; air-water systems, air conditioners |
|  | Equipment of ventilation and air conditioning units: dust filters, heating / cooling coils, water treatment rooms with water, fans, heat recuperators; Air dryers or humidifiers |
|  | Air ducts: materials, composition, pressure losses, calculation of air ducts, insulation |
|  | Discharge and suction ports: composition, sizing, air distribution, jets and their characteristics |
|  | Noise and vibration attenuation in ventilation and air conditioning installations |
|  | Adjustment of ventilation and air conditioning installations |