**Course Syllabus**

Academic year: 2020-2021

|  |  |
| --- | --- |
| Institution | University of Petroşani |
| Faculty | Mechanical and Electric Engineering |
| Field of study | Electrical Engineering |
| Level | Master |
| Program of study | Operation of Industrial Electrical Installations |

|  |  |
| --- | --- |
| Course | **Modeling of Electric Machines** |
| Code | 2MEIEIOD03 |
| Year of study (semester) | I (I) |
| Number of hours | 84 |
| Number of credits | 7 |
| Professor | Lecturer Ph.D. Popescu Florin Gabriel |

|  |  |
| --- | --- |
| **No.** | **Topic** |
|  | Advanced mathematical models for electrical machines. |
|  | Saturation phenomenon. |
|  | Methods of modeling AC machines. |
|  | Electromagnetic torque of the induction machine. |
|  | Analogue startup model for DC motor with separate excitation. |
|  | The analog model of the direct start of the asynchronous machine. |