**Course Syllabus**

Academic year: 2020-2021

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| Institution | University of Petroşani |
| Faculty | Mechanical And Electrical Engineering Faculty |
| Field of study | Systems Engineering |
| Level | Bachelor's level |
| Program of study | Applied Automation and Information |

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| Course |  **Optimizations** |
| Code | 2SA6OD41 |
| Year of study (semester) | III (II) |
| Number of hours | 70 |
| Number of credits | 5 |
| Professor | Assoc. prof. dr. eng. Stoicuta Olimpiu-Costinel |

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| **No.** | **Topic** |
|  | General notions. |
|  | Analytical optimization procedures. |
|  | Numerical optimization procedures. Testing single-variable performance functions. |
|  | Numerical optimization procedures. Testing the performance functions multivariable. |
|  | The problem of linear programming. Simplex method. |
|  | Nonlinear programming problems. |
|  | Calculus of variations. |
|  | The problem of optimal control. |