## Transilvania University of Braşov, Romania

## Study program: Practical Integrated Methods for Propulsion Systems Engineering (in English)

Faculty:
Study period:
Academic year structure:
Examination sessions (two):

## Mechanical Engineering 2 years (master) <br> 2 semesters (14 weeks per semester) winter session (January/February) summer session (June/July)

Courses per years ( $C=$ course; $S=$ seminar; $L=$ laboratory; $P=$ project)
$1^{\text {st }}$ Year

| No. crt. | Course | Code | $1^{\text {st }}$ Semester |  |  |  |  | $2^{\text {nd }}$ Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Industrial economics for engineers | MPIISP. 01 | 1 | 1 | - | - | 3 |  |  |  |  |  |
| 02 | Measuring techniques used in manufacturing and Quality Assurance | MPIISP. 02 | 2 | - | 1 | - | 5 |  |  |  |  |  |
| 03 | Mechanics of materials | MPIISP. 03 | 2 |  | 1 |  | 5 |  |  |  |  |  |
| 04 | Reformulated fuels | MPIISP. 04 | 2 |  | 1 |  | 5 |  |  |  |  |  |
| 05 | Noise and vibrations in manufacturing (01) | MPIISP.05a | 2 |  | 2 |  | 5 |  |  |  |  |  |
|  | Predictive maintenance for industrial equipment (01) | MPIISP.05b |  |  |  |  |  |  |  |  |  |  |
| 06 | Etics in research | MPIISP. 06 | 1 |  |  |  | 2 |  |  |  |  |  |
| 07 | Professional internship (optional projects) | MPIISP. 07 |  |  |  | 12 | 5 |  |  |  |  |  |
| 08 | Shopfloor management | MPIISP. 08 |  |  |  |  |  | 2 |  |  | 1 | 5 |
| 09 | ERP Systems (SAP) | MPIISP. 09 |  |  |  |  |  | 2 |  | 1 |  | 5 |
| 10 | Design for manufacturing (02) | MPIISP.10a |  |  |  |  |  | 1 |  |  | 1 | 4 |
|  | CNC Machining (02) | MPIISP.10b |  |  |  |  |  |  |  |  |  |  |
| 11 | Advanced design for engines systems | MPIISP. 11 |  |  |  |  |  | 2 |  |  | 2 | 5 |
| 12 | Technical analysis in mechanical engineering | MPIISP. 12 |  |  |  |  |  | 2 |  | 1 | 1 | 5 |
| 13 | Professional internship (optional projects) | MPIISP. 13 |  |  |  |  |  |  |  |  | 12 | 6 |

$2^{\text {nd }}$ Year

| No. | Course | Code | $3{ }^{\text {rd }}$ Semester |  |  |  |  | $4^{\text {th }}$ Semester |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| crt. |  |  | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Advanced manufacturing technology | MPIISP. 14 | 2 |  |  | 2 | 5 |  |  |  |  |  |
| 02 | Automation in manufacturing | MPIISP. 15 | 2 |  | 1 |  | 5 |  |  |  |  |  |
| 03 | Product development process | MPIISP. 16 | 2 | 1 |  |  | 5 |  |  |  |  |  |
| 04 | Project management in the field of propulsion systems | MPIISP. 17 | 1 |  |  | 1 | 4 |  |  |  |  |  |
| 05 | FEM simulation | MPIISP. 18 | 2 |  |  | 2 | 5 |  |  |  |  |  |
| 06 | Professional internship | MPIISP. 19 |  |  |  | 12 | 6 |  |  |  |  |  |
| 07 | Professional internship (optional projects) | MPIISP. 20 |  |  |  |  |  |  |  |  | 22 | 20 |
| 08 | Dissertation project activity | MPIISP. 21 |  |  |  |  |  |  |  |  | 6 | 10 |

