CURRICULUM – 1st YEAR 2023-2024

| UNIVERSITY | George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș | PROGRAMME OF STUDY | Computer Aided Design/Computer Aided Manufacturing |
|------------------------|--|---|--|
| FACULTY | Faculty of Engineering and Information Technologies | TITLE AWARDED | Master degree |
| FIELD OF STUDY | Industrial engineering | OFFICIAL LENGHT OF THE PROGRAMME OF STUDY | 2 years |
| LEVEL OF QUALIFICATION | 7 | NUMBER OF ECTS/SECT CREDITS | 120 + 10 Preparation of the Disertation Paper |

| | | | 1st semester | | | | | | | | 2nd semester | | | | | | | | Total academic year | | | |
|-----|--|---------------------------------|--|------|-------|----------------|--------|-------------------------------|------|---|--------------|-----------------|-------|----------------|--------|-----------------|-----------------------|----------------|---------------------|-----|-----------------|------|
| | Educational activities | Code/ Type | 1st module (7 weeks) 2nd module(7 weeks) | | | | | | | 3rd module (7 weeks) 4th module (7 weeks) | | | | | | | _ rotar academic year | | | | | |
| No. | Courses | Of courses | Cours | SLP | ECTS | Verif. form | Cours | SLP | ECTS | Verif. form | Cours | SLP | ECTS | Verif. form | Cours | SLP | ECTS | Verif. form | Cours | SLP | Indiv. stud. | ECTS |
| 1. | Engineering and Quality Management Systems | PFC101/DA | 2 | 2L | 4 | Е | | | | | | | | | | | | | 14 | 14 | 72 | 4 |
| 2. | Performance materials | PFC102/DA | 4 | 4L | 5 | Е | | | | | | | | | | | | | 28 | 28 | 69 | 5 |
| 3. | Professional practice I | PFC103/DS | | 14 | | | | 10 | 10 | С | | | | | | | | | 0 | 168 | 82 | 10 |
| 4. | Parametric 3D modeling | PFC104/DS | | | | | 4 | 4 _S 2 _P | 6 | Е | | | | | | | | | 28 | 42 | 80 | 6 |
| 5. | Linear and nonlinear finite elements analysis | PFC105/DA | | | | | 4 | 2 s | 5 | С | | | | | | | | | 28 | 14 | 83 | 5 |
| 6. | Advanced Modeling | PFC106/DS | | | | | | | | | 4 | 4 _{SP} | 5 | E | | | | | 28 | 28 | 69 | 5 |
| 7. | Computer aided design/generator of components | PFC107/DS | | | | | | | | | | 4 _{SP} | 4 | E | | | | | 0 | 28 | 72 | 4 |
| 8. | Ethics and academic integrity | PFC108/DS | | | | | | | | | 2 | | 3 | E | | | | | 14 | 0 | 61 | 3 |
| 9. | Professional practice II | PFC109/DS | | | | | | | | | | 12 | | | | 12 | 7 | С | 0 | 168 | 7 | 7 |
| 10. | Curves and surfaces - computation and representation | PFC110/DA | | | | | | | | | | | | | 4 | 4 _{SP} | 6 | E | 28 | 28 | 94 | 6 |
| 11. | Adaptive and smart control of industrial processes | PFC111/DS | | | | | | | | | | | | | 4 | 2L | 5 | E | 28 | 14 | 83 | 5 |
| | GENERAL TOTAL | 10 Compulsory; 1 optional | 6 | 6+14 | 9 | 2E | 8 | 8+10 | 21 | 1E,2C | 6 | 8+12 | 12 | 3E | 8 | 6+12 | 18 | 2E,1C | 196 | 532 | 772 | 60 |
| | TOTAL HOURS/ECTS | - 1 | | 14A | I+12A | P hou | rs/wee | ek ; 30 E | CTS | | | 14A | I+12A | P hou | rs/wee | k ; 30 E | CTS | 1 | 728 | | | |

| native categories | Activities | |
|--------------------|--|------------------------------|
| Foundamental Cours | c Courses | |
| Technical Course | s Seminars | |
| Specialized Course | Ip Practical ex | ercises |
| Complementary Cour | p Project | |
| | Foundamental Cours Technical Course Specialized Course | Foundamental Cours c Courses |

CURRICULUM - 2nd YEAR 2023-2024

| UNIVERSITY | George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș | PROGRAMME OF STUDY | Computer Aided Design/Computer Aided Manufacturing |
|------------------------|--|---|--|
| FACULTY | Faculty of Engineering and Information Technologies | TITLE AWARDED | Master degree |
| FIELD OF STUDY | Industrial engineering | OFFICIAL LENGHT OF THE PROGRAMME OF STUDY | 2 years |
| LEVEL OF QUALIFICATION | 7 | NUMBER OF ECTS/SECT CREDITS | 120 + 10 Preparation of the Disertation Paper |

| | | | 1st semester | | | | | | 2nd semester | | | | | | | | Total academic year | | | | | |
|------|--|------------------------------|----------------------|--------------------------------|---------|----------------|---------------------|-----------------------|--------------|----------------|-------|----------------|----------------|----------------|-------------------|-----------|---------------------|----------------|-----------|-----|-----------------|------|
| No. | Educational activities | Code/ Type | 1st module (7 weeks) | | | eeks) | 2nd module(7 weeks) | | | | 3rd | modu | le (7 w | eeks) | Modul IV(7 weeks) | | | | , , , , , | | | |
| 140. | Courses | Of courses | Cours | SLP | ECTS | Verif. form | Cou rs | SLP | ECTS | Verif. form | Cours | SLP | ECTS | Verif. form | Cours | SLP | ECTS | Verif. form | Cours | SLP | Indiv. stud. | ECTS |
| 1. | Stamps and Moulds Design | PFC201/DA | 4 | 2 _L ,4 _P | 6 | E | | | | | | | | | | | | | 28 | 42 | 80 | 6 |
| 2. | Hybrid Design | PFC202/DS | 4 | 2 _P | 5 | E | | | | | | | | | | | | | 28 | 14 | 83 | 5 |
| 3. | Professional training III | PFC203/DS | | 10 | | | | 14 | 10 | С | | | | | | | | | 0 | 168 | 82 | 10 |
| 4. | Computer Aided Manufacturing | PFC204/DS | | | | | 4 | 4 _{LP} | 5 | E | | | | | | | | | 28 | 28 | 69 | 5 |
| 5. | Advanced Scientific Research leading to the Dissertation | PFC205/DS | | | | | | | | | 4 | 2 _s | 5 | С | | | | | 28 | 14 | 83 | 5 |
| 6. | Practice for the Dissertation Paper | PFC206/DS | | | | | | | | | | 10 | 5 | | | 13 | 7 | С | 0 | 161 | 139 | 12 |
| 7. | Preparation of the Disertation Paper | PFC207/DS | | | | | | | | | | 10 | 5 | | | 13 | 8 | C (A/R) | 0 | 161 | 164 | 13 |
| 8. | Ergonomic organization of work | PFC208/DS | | | | | 2 | 2 _S | 4 | Е | | | | | | | | | 14 | 14 | 72 | 4 |
| | GENERAL TOTAL | 7 Compulsory; 1 optional. | 8 | 8+10 | 11 | 2E | 6 | 6+14 | 19 | 2E, 1C | 4 | 12+ 10 | 15 | 1C | | 13+ 13 | 15 | 2C | 126 | 602 | 772 | 60 |
| | TOTAL HOURS/ECTS | | | 14 | 1AI+12/ | AP hour | s/wee | k ; 30 EC | ΓS | | | : | 3AI+23A | P hours | /week; | 30 ECT: | S | | 7 | | | |

| Form | native categories | Activities |
|------|--------------------|-------------------------------|
| DF | Foundamental Cours | c Courses |
| DD | Technical Course | s Seminars |
| DS | Specialized Course | Ip Practical exercises |
| DC | Complementary Cour | p Project |