

Transilvania University of Braşov, Romania

Study program: Industrial Design

Faculty: Product Design and Environment
 Study period: 4 years (bachelor)
 Academic year structure: 2 semesters (14 weeks per semester)
 Examination sessions (two): winter session (January/February)
 summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

1st Year

| No. crt. | Course | Code | 1 st Semester | | | | | 2 nd Semester | | | | |
|----------|--|------------------------|--------------------------|---|---|---|------|--------------------------|---|---|---|------|
| | | | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Mathematical Analysis | DIAM01 | 2 | 2 | | | 5 | | | | | |
| 02 | Chemistry | DICH01 | 2 | | 1 | | 3 | | | | | |
| 03 | Technical Drawing and Computer Graphics I | DIDT01 | 2 | | 3 | | 5 | | | | | |
| 04 | Computer Programming and Programming Languages I | DIPC01 | 1 | | 2 | | 3 | | | | | |
| 05 | Descriptive Geometry | DIGD01 | 2 | | 1 | | 4 | | | | | |
| 06 | Materials Science and Engineering I | DISM01 | 3 | | 2 | | 5 | | | | | |
| 07 | Industrial Design Fundamentals I | DIDI01 | 1 | 1 | | | 3 | | | | | |
| 08 | Linear Algebra, Analytical and Differential Geometry | DIAGAD | | | | | | 2 | 2 | | | 4 |
| 09 | General Economy | DIEG02 | | | | | | 1 | 1 | | | 2 |
| 10 | Technical Drawing and Computer Graphics II | DIDT02 | | | | | | 1 | | 2 | | 4 |
| 11 | Computer Programming and Programming Languages II | DIPC02 | | | | | | 1 | | 2 | | 4 |
| 12 | Physics | DIFZ02 | | | | | | 2 | 1 | 1 | | 4 |
| 13 | Mechanics | DIMC02 | | | | | | 3 | 2 | | | 6 |
| 14 | Industrial Design Fundamentals II | DIDI02 | | | | | | 1 | 1 | | | 2 |
| 15 | Artistic Drawing | DIDA02 | | | | | | | | 2 | | 2 |
| 16 | English or French Language | LE01/LE02 LF01/LF02 | 1 | 1 | | | 2 | 1 | 1 | | | 2 |
| 17 | Sports | EF01/EF02 | | 1 | | | 1 | | 1 | | | 1 |

2nd Year

| No. crt. | Course | Code | 3 rd Semester | | | | | 4 th Semester | | | | |
|----------|----------------------------------|--------|--------------------------|---|---|---|------|--------------------------|---|---|---|------|
| | | | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Special Mathematics | DIMS03 | 2 | 2 | | | 4 | | | | | |
| 02 | Mechanisms I | DIME03 | 3 | | 1 | 1 | 6 | | | | | |
| 03 | Strength of Materials | DIRM03 | 3 | 2 | 2 | | 7 | | | | | |
| 04 | Electrotechnics | DIEA03 | 2 | | 1 | | 3 | | | | | |
| 05 | Numerical Methods in Engineering | DIMN03 | 2 | | 1 | | 5 | | | | | |

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| 06 | Design (semiotics) | DIDS03 | 2 | | 1 | | 3 | | | | | |
| 07 | Conceptual Design I | SPDP04 | | | | | | 2 | | | 1 | 3 |
| 08 | Fluid Mechanics | DIMF04 | | | | | | 2 | | 1 | | 3 |
| 09 | Mechanisms II and Machine Elements I | DIOM04 | | | | | | 3 | | 2 | 1 | 6 |
| 10 | Technical Drawing and Computer Graphics III | DIM3D | | | | | | 1 | | 3 | | 3 |
| 11 | Processing Technologies and Cutting Tools | THPL04 | | | | | | 2 | | 1 | | 3 |
| 12 | Industrial Management | DIMIO4 | | | | | | 2 | 1 | | | 3 |
| 13 | Heat Engineering and Thermal Machines | DITMT | | | | | | 2 | | 1 | | 3 |
| 14 | Practical work 90 hours | DIPr04 | | | | | | | | | | 4 |
| 15 | English or French Language | LE03/LE04 LF03/LF04 | 1 | 1 | | | 2 | 1 | 1 | | | 2 |
| 16 | Sports | EF03/EF04 | | 1 | | | 1 | | 1 | | | 1 |

3rd Year

| No. crt. | Course | Code | 5 th Semester | | | | | 6 th Semester | | | | |
|----------|---|--------------------|--------------------------|---|---|---|------|--------------------------|---|---|---|------|
| | | | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Machine Elements II | DIOM05 | 2 | | | 2 | 4 | | | | | |
| 02 | Measurement Techniques and Systems | INGTCD | 2 | | 2 | | 4 | | | | | |
| 03 | Materials Science and Engineering II (Recyclable Materials) | DIMR05 | 2 | | 1 | | 3 | | | | | |
| 04 | Finite Element Analysis | DIMEF5 | 2 | | 3 | | 5 | | | | | |
| 05 | Computer Aided Modelling of Mechanical Systems | MAS05DI | 3 | | 2 | 1 | 6 | | | | | |
| 06 | Communication | DIDC05 | 1 | 1 | | | 3 | | | | | |
| 07 | Study of Colour for Design | DICDP6 | | | | | | 2 | | 2 | | 4 |
| 08 | Automated System Theory | DIACC6 | | | | | | 3 | | 3 | | 6 |
| 09 | Aesthetics and Ergonomics | DIEE06 | | | | | | 2 | | | 2 | 4 |
| 10 | Form-giving in design I (Mock-up making) | DIMA06 | | | | | | 2 | | 2 | | 4 |
| 11 | Conceptual Design II | DIDC06 | | | | | | 2 | | 1 | | 2 |
| 12 | Conceptual Design II - project | DIDCP | | | | | | | | | 2 | 2 |
| 13 | Practical Work 90 hours | DIPr06 | | | | | | | | | | 4 |
| 14 | Product Design for Sustainable Development <i>or</i> Products Reliability | DIDD04/ DIBCo6 | | | | | | 2 | | 2 | | 4 |
| 15 | Creativity and Innovation in Design <i>or</i> Intelligent products and technologies | CID07DI/ DIPTI6 | 2 | | | 2 | 5 | | | | | |

4th Year

| No. crt. | Course | Code | 7 th Semester | | | | | 8 th Semester | | | | |
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| | | | C | S | L | P | Cred | C | S | L | P | Cred |
| 01 | Computer Aided Shape Modelling in Design | MAF07DI | 2 | | 2 | | 4 | | | | | |
| 02 | Embodiment Design | DC07DI | 2 | | | | 3 | | | | | |
| 03 | Embodiment Design - project | DCP07DI | | | | 2 | 3 | | | | | |
| 04 | Design of Mechatronic Products | DIMDP7 | 2 | | 1 | 1 | 4 | | | | | |
| 05 | Form-giving in Design II | CFD07DI | 2 | | 2 | | 4 | | | | | |
| 06 | Graphic Design | DGDI7 | 2 | | | 1 | 4 | | | | | |
| 07 | Object Design (10 weeks) | DOB08 | | | | | | 2 | | 1 | | 3 |
| 08 | Innovation Management in Product Design (10 weeks) | DPRESDI | | | | | | 2 | | | 2 | 4 |

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| 09 | Virtual Prototyping (10 weeks) | PV08DI | | | | | 2 | | 1 | 2 | 5 |
| 10 | Web-design (10 weeks) | CDP08DI | | | | | 2 | | 1 | | 3 |
| 11 | Project Management (10 weeks) | MP08DI | | | | | 1 | 1 | | | 2 |
| 12 | Detail Design (10 weeks) | PRDET08 | | | | | 1 | | | 3 | 3 |
| 13 | Diploma Project (14 weeks x 4 hours) | DIPrII | | | | | | | | 4 | 4 |
| 14 | Practical work for diploma project (4 weeks x 24 hours) | Pr08 | | | | | | | | | 4 |
| 15 | Product Design for Solar Energy Conversion <i>or</i> Furniture Design | CES07DI / D007 | 2 | | 2 | | 4 | | | | |
| 16 | Eco-design and Products Recycling <i>or</i> Quality in Product Design | RP07DI / WD07 | 2 | | 2 | | 4 | | | | |
| 17 | Package Design <i>or</i> Mechanical Testing and Tribology (10 weeks) | DA08 / IMT08 | | | | | 1 | | 2 | | 2 |