

ME-MME curriculum 2021/2022

Master: Mechanical Engineering - Track: Multi-Machine Engineering

Obligatory courses

| | code | ECTS | 1A | 1B | 2A | 2B | |
|--|---------|------|----|----|----|----|--|
| Drive & Energy Systems | me44210 | 3 | 3 | | | | |
| Physics for Mechanical Engineers | me46006 | 4 | 4 | | | | |
| Nonlinear Mechanics | me46000 | 4 | | 4 | | | |
| Measurement Technology | me46007 | 3 | | | 3 | | |
| 14 | | | | | | | |
| Dynamics and Interaction of Material and Equipment | me44101 | 4 | 4 | | | | |
| Operations & Maintenance | me44200 | 3 | | | 3 | | |
| Multi-Machine Coordination for Logistics | me44300 | 3 | | | | 3 | |
| 10 | | | | | | | |
| Structural Design with FEM | me44106 | 4 | | 4 | | | |
| Integration Project Multi-Machine Systems | me44110 | 5 | | | 2 | 3 | |
| Quantitative Methods for Logistics | me44206 | 5 | 2 | 3 | | | |
| System Analysis and Simulation | me44305 | 5 | | | 2 | 3 | |
| 19 | | | | | | | |

obligatory courses **43** **13** **11** **10** **9**

ME common course electives (select one)

| | | | | | | |
|-------------------------|---------|---|---|---|--|--|
| Control Systems Design | sc42001 | 5 | 5 | | | |
| Advanced Heat Transfer | me45001 | 4 | 4 | | | |
| Advanced Fluid Dynamics | me45042 | 5 | 2 | 3 | | |
| Intelligent Vehicles | me41106 | 5 | | 5 | | |

Social course electives (select one)

| | | | | | | |
|--|----------|---|---|---|---|---|
| Strategic & Sustainable Design | id4185 | 3 | | | | 3 |
| Reflection on Designing | id4235 | 3 | | | | 3 |
| Robot & Society | ro47009 | 4 | | 4 | | |
| Environmental Ethics | tpm013A | 5 | | | | 5 |
| Methods for Risk Analysis and Management | tpm024A | 5 | | | | 5 |
| Technology Entrepreneurship and Global Development | tpm404A | 4 | 4 | | | |
| Turning Technology into Business | tpm416A | 6 | | 6 | | |
| Ready to Start-up | tpm420A | 6 | | | | |
| Ethics and Engineering | wm0320TU | 3 | | | | |
| Ethics and Engineering | wm0329TU | 6 | | | | |
| Philosophy of Engineering Science and Design | wm0349WB | 3 | | | | 3 |
| Climate Ethics | wm0353TU | 3 | | 3 | | |
| Introduction to Safety Science | wm0801TU | 3 | | 3 | | |
| Ethics of Transportation | wm1301TU | 3 | | | 3 | |
| Ethics of Transportation | wm1302TU | 5 | | | 5 | |
| Ethics of Healthcare Technologies | wm1401TU | 3 | 3 | | | |
| Ethics of Healthcare Technologies | wm1402TU | 5 | 5 | | | |

Track electives

| | | | | | | |
|--|---------|---|--|--|---|---|
| Discrete Element Method (DEM) Simulation | me44115 | 4 | | | 4 | |
| Reliability and Maintenance of Transport Equipment | me44125 | 3 | | | 3 | |
| Advanced Operations and Production Management | me44311 | 5 | | | 2 | 3 |
| Machine Learning for Transport and Multi-Machine Systems | me44312 | 3 | | | | 3 |
| Mechatronics in MT | mt44000 | 5 | | | 5 | |

Free electives

| | | | |
|------------------------|--|--|--|
| select from studyguide | | | |
| | | | |
| | | | |

elective courses **17**

1st year MSc **60**

lectures + final exam
(group) assignment + final report