**Hungarian University of Agriculutre and Life Sciences (MATE)**

**Institute of Technology**

**Engineering Management (MSc)**

Engineering managers design, analyze and manage complex human-integrated systems such as manufacturing systems, supply chain networks and different service systems. These complex systems consist of a combination of people, material, equipment and information. Engineering managers have the necessary skills to optimize the systems for maximum efficiency, effectiveness, throughput or environment and human safety, and to function as a problem-solver, innovator, designer, coordinator and system integrator. Engineering managers apply their skills in an extremely wide range of organizations, including manufacturing industries, rural development, service industries, and governmental agencies.

To achieve these objectives engineering managers gain knowledge in natural sciences, engineering sciences, IT, business and management. The study program will prepare our students to progress to PhD-level program.

***Curriculum***

|  |  |
| --- | --- |
| Semester | Subject |
| 1 | Database Management |
| 1 | Applied Physics |
| 1 | Material Handling |
| 1 | Environmental Protection and Its Biological Basics |
| 1 | Engineering-Economic Mathematics |
| 1 | Managerial economics |
| 1 | Materials and Technologies |
| 1 | Management for Engineers |
| 2 | Innovation and Strategy Management |
| 2 | Engineering Production Management |
| 2 | Operations Research and Applications |
| 2 | Project Management |
| 2 | Optional “C” subject |
| 2 | Optional “C” subject |
| 3 | Master Thesis Project 1 |
| 3 | Enterprise Management Systems |
| 3 | Module project task |
| 3 | Specialization subject |
| 3 | Specialization subject |
| 4 | Vehicle Technology |
| 4 | Master Thesis Project 2 |
| 4 | Mater Thesis Writing Practice |
| 4 | Specialization subject |
| 4 | Specialization subject |
| 4 | Specialization subject |

Available specializations:

* Project management
* Production and quality management

***Subjects of specializations***

*Project management*

| Semester | Subject |
| --- | --- |
| 3 | Computer Aided Project Management |
| 3 | Engineering Project Planning |
| 4 | Advanced engineering project management |
| 4 | Application writing |
| 4 | Methods and Techniques of Quality Management |

*Production and quality management*

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| --- | --- |
| Semester | Subject |
| 3 | Engineering Logistics |
| 3 | Engineering Design and Development |
| 4 | Quality Assurance in Industry |
| 4 | Industrial Marketing |
| 4 | Methods and Techniques of Quality Management |

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