

MSc Industrial Engineering and Management Electives 2023-2024

In principle all courses from other **engineering** MSc programmes can be taken as electives, provided there is no overlap with other courses (always check OSIRIS for possible prerequisites and the correct quartile); Check the overview of Additional Specialisations for more example courses to fill your elective space.

Not Allowed as elective:

- 191531830 Stochastic Models in Production Logistics
- 191124720 Design of Production and Inventory Systems

Not allowed for students with a BSc IEM background:

- 191530881 Stochastic Models for Operations Management

At most one Business Administration or Health Science course is allowed, with a motivation provided to the specialisation coordinator. Exceptions to this rule, and therefore courses that are allowed (also together):

- ✓ 201600025 Finance and Healthcare purchasing (HS)
- ✓ 201600032 Quality Management in Healthcare (HS)
- ✓ 194105070 Inform.Syst f/t Fin. Services Industry (BA)
- ✓ 201600015 Strategic Technology Mgmt. & Inn (BA)

Always check the timetables! Overlap between courses cannot always be avoided.

Financial Engineering and Management (FEM)

Recommended Electives for FEM			IEM courses as elective			Other example electives		
201400244	Cost management and engineering	2	201800005	Applied statistical learning	1	201400277	Enterprise Architecture (BIT)	1
201200138	Special topics in financial engineering	2	201700089	Circular sustainable business development	1	191521800	Game Theory (AM)	1
201100162	Applied Financial Engineering	4	201800003	Operations Research Techniques 1	1,3	201600070	Machine Learning 1 (IT)	1
201000202	Management control for financial institutions	4	202300064	Simulation	1	202300201	Data Science Additional Topics (CS)	2,3
202100233	Reinforcement learning with applications	4	191820160	Purchasing Management	1	202000027	Enterprise Security (BIT)	2
			201800008	After-sales service logistics	2	201600071	Machine Learning 2 (IT)	2
			201800009	Advanced inventory management	2	192360021	ICT Management (BIT)	3
			202001552	Human factors and organization design	2	192340101	Implementation of IT in Organizations (BIT)	3
			202200263	Optimisation of sustainable energy systems	2	194105070	Inform.Syst f/t Fin. Services Industry (BA)	3
			201700196	Advanced Discrete Event Simulation	3	201600015	Strategic Technology Mgmt. & Inn (BA)	3
			194121020	Optimization of Health care processes	3	202200345	Applications of AI in Business (BIT)	4
			191852630	Reliability engineering and maintenance mgmt	3	191127520	Lean Six Sigma Green Belt (ME)	4
			201800010	Transportation and logistics management	3			
			201700197	Decision making in HC	4			
			192360501	E-health strategies	4			
			202300223	New production concepts	4			
			202300332	Stochastic Optimization and Learning	4			
			201800007	Planning & scheduling	4			
			191820120	Warehousing	4			