

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 (but mandatory for premaster students):

- 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.

Production and Logistics Management (PLM)									
Recommended Electives for PLM				IEM courses as elective			Other example electives		
Service Logistics and Maintenance Management	201200146	Maintenance Engineering & Management (ME)	1	201800005	Applied statistical learning	1	191506103	Statistics & Probability (AM)	1
	191506103	Statistics & Probability (AM)	1	201700089	Circular sustainable business development	1	201600070	Machine Learning 1 (IT)	1
	201800007	Planning and Scheduling	4	191860651	Micro economics	1	202000027	Enterprise Security (BIT)	2
	202100233	Reinforcement Learning with Applications	4	191820160	Purchasing Management	1	202300201	Data Science Additional Topics (CS)	2,3
	191820120	Warehousing	4	201800009	Advanced inventory management	2	191102041	Manufacturing Facility Design (ME)	2
Supply Chain and Transportation Management	201800064	Traffic Operations (CEM)	1	201800008	After-sales service logistics	2	201600032	Quality Management in Healthcare (HS)	2
	202300181	Rail Transport (CEM)	2	201400244	Cost management and engineering	2	192340101	Implementation of IT in Organizations (BIT)	3
	201800065	Traffic Management (CEM)	3	202001552	Human factors and organization design	2	201600015	Strategic Technology Mgmt. & Inn (BA)	3
	201800007	Planning and Scheduling	4	191515101	Introduction to Risk Theory	2	202200345	Applications of AI in Business (BIT)	4
	202100233	Reinforcement Learning with Applications	4	201300060	Mathematical finance	2	201700294	Engineering Project Management (IDE)	4
	191820120	Warehousing	4	202200263	Optimisation of sustainable energy systems	2	202001549	Low Code Application Development (BIT)	4
Manufacturing Logistics	191820160	Purchasing Management	1	201200138	Special topics in financial engineering	2			
	194121020	Optimization of Healthcare Processes	3	201700196	Advanced Discrete Event Simulation	3			
	201800010	Transportation and Logistics Management	3	194121020	Optimization of Health care processes	3			
	202300223	New production Concepts	4	191852630	Reliability engineering and maintenance mgmt	3			
	202100233	Reinforcement Learning with Applications	4	191860181	Risk management	3			
Operations Management in Healthcare	201800005	Applied Statistical Learning	1	201300062	Structured products	3			
	201600025	Finance and Healthcare purchasing (HS)	2	201800010	Transportation and logistics management	3			
	201700196	Adv. Sim. for Health Economic Analysis	3	201100162	Applied Financial Engineering	4			
	202300223	New production Concepts	4	201700197	Decision making in HC	4			
	202100233	Reinforcement Learning with Applications	4	192360501	E-health strategies	4			
	191820120	Warehousing	4	201000202	Management control for financial institutions	4			
				202300223	New production concepts	4			
				201800007	Planning & scheduling	4			
				202100233	Reinforcement learning with applications	4			
			191820120	Warehousing	4				