Courses 2020-2021 master MW track MSE-W

Core courses 10 ECTS obligatory

Code	Vak naam/Course name	Timeslot	SP	Quartile
1CM160	Manufacturing Technology	B/E	5	Q1-Q3
4CM70	Integrated Systems Design	E	5	Q2

One course from 4 of the following 5 pillars, 20 ECTS, where selecting a course from the pillar Machine design and control is obligatory:

Machine design and control				
4CM00	Control Engineering	C/E	5	Q1-Q3
4UM00	Microfabrication methods	B/B	5	Q1-Q4

Factory design and control				
1CM10	Modeling & analysis of manufacturing systems	D	5	Q2
4DM40	Modelling and control of manufacturing networks	A	5	Q4

Maintenance design and control				
1CM120	Advanced Maintenance and Service	D	5	Q1
4MM50	Fracture mechanics – theory and application	C	5	Q4

Supply network design and control				
1CM100	Multi Echelon inventory management	C	5	Q4
1CM140	Design of Operations Planning and control systems	B2	5	Q4

AI design and control				
2IMM20	Foundations of data mining	B	5	Q1
1BM120	Computational intelligence	E	5	Q4

Specialization courses, 15 ECTS from assigned section

Section MSE-CST

Code	Vak naam/Course name	Timeslot	SP
Kwart 1/Quartile 1			
4CM00	Control Engineering	C	5
4CM10	System theory for control	B	5
Kwart 2/Quartile 2			
4CM60	Advanced motion control	B	5
Kwart 3/Quartile 3			
4CM00	Control Engineering	E	5
4CM30	Supervisory control	C	5
4DM20	Engineering optimization	B	5
Kwart4/Quartile 4			
4CM20	Hybrid systems and control	B	5
4CM50	Application of design principles	D	5

SP = Studiepunten op basis van / Credit points based on ➔ European Credit Transfer System (ECTS)

Courses 2020-2021 master MW track MSE-W

Section MSE-DC

Code	Vak naam/Course name	Timeslot	SP
Kwart 1/Quartile 1			
4CM00	Control Engineering	C	5
4DM00	Structural Dynamics and vibro-acoustics	A	5
Kwart 2/Quartile 2			
4DM10	Multibody and Non-linear Dynamics	A	5
Kwart 3/Quartile 3			
4CM00	Control Engineering	E	5
4DM30	Non-linear control	A	5
4DM60	Control of distributed parameter systems	E	2,5
Kwart4/Quartile 4			
4DM40	Modelling and control of manufacturing systems	A	5
4DM50	Dynamics and control of cooperation	B	2,5

Section MSE-MS/PT

Code	Vak naam/Course name	Timeslot	SP
Kwart 1/Quartile 1			
4BM00	Advanced Engineering Mathematics for MW	E	5
4CM00	Control Engineering	C/E	5
4UM00	Microfabrication methods	B/B	5
Kwart 2/Quartile 2			
4BM20	Experimentation for MW	E	5
4EM40	Heat and Flow in microsystems	C	5
4LM20	Polymer processing	C	5
Kwart 3/Quartile 3			
4CM00	Control Engineering	C/E	5
4UM10	Microfluidics-put-to-work	A	5
Kwart4/Quartile 4			
4DM40	Modelling and control of manufacturing systems	A	5
4MM50	Fracture mechanics – theory and appl	C	5
4UM00	Microfabrication methods	B/B	5

Recommended homologation

Code	Vak naam/Course name	SP
Online lectures		
???	Stochastic modeling in inventory and production control	2,5

SP = Studiepunten op basis van / Credit points based on ➔ European Credit Transfer System (ECTS)

vrijdag 29 mei 2020

Courses 2020-2021 master MW track MSE-W

Recommended free electives

Code	Vak naam/Course name	Timeslot	SP
Kwart 1/Quartile 1			
2IMM20	Foundations of data mining	B	5
Kwart 2/Quartile 2			
1BM05	Business process management	B1	5
1CM180	Configuration management	C	2,5
1CM200	Warehouse Operations Management	B2	2,5
Kwart 3/Quartile 3			
1BM110	Data analytics for business intelligence	C	5
2DI66	Advanced simulation	B	5
2DMN00	Design and analysis of experiments	D	5
Kwart4/Quartile 4			
1BM120	Computational Intelligence	E	5

SP = Studiepunten op basis van / Credit points based on ➜ European Credit Transfer System (ECTS)

vrijdag 29 mei 2020