



Tabel 12 Matrik CPL dan Mata kuliah

Manufacturing Systems Engineering and Management (MESM) Consentration			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Advanced Manufacturing System	3				✓	✓	
Semester 2	Quality Engineering	3				✓	✓	
	Reliability Engineering	3				✓	✓	
	Research Methodology	2				✓		✓
	Elective Course 1	3						
Semester 3	Green Manufacturing	3				✓	✓	
	Elective Course 2	3						
	Proposal Seminar	3	✓	✓	✓	✓		
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓

Decision Systems (DS) Consentration			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Advanced Production Planning and Inventory Control	3			✓	✓	✓	✓
Semester 2	Data Analytics	3		✓		✓	✓	
	Industrial System Policy Design & Analysis	3	✓	✓	✓	✓	✓	
	Research Methodology	2				✓		✓
	Elective Course 1	3						
Semester 3	Metaheuristik	3		✓	✓	✓	✓	
	Discrete Event Simulation	3			✓	✓	✓	
	Proposal Seminar	3	✓	✓	✓	✓		
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓



Logistics and Supply Chain Management (LSCM) Concentration			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Advanced Production Planning and Inventory Control	3			✓	✓	✓	✓
Semester 2	Contemporary Logistics	3		✓	✓	✓	✓	
	Transportation and Distribution System Modelling	3		✓	✓	✓	✓	✓
	Research Methodology	2				✓		✓
	Elective Course 1	3						
Semester 3	Material Management and Procurement	3		✓	✓	✓	✓	✓
	Supply Chain Engineering	3					✓	✓
	Proposal Seminar	3	✓	✓	✓	✓		
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓

Human Factors and Occupational Safety & Health Engineering (HuFOSH) Concentration			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Human Factors in Industrial System	3			✓	✓	✓	
Semester 2	Human Factors in Product Design and Development	3		✓	✓	✓	✓	✓
	Occupational Safety and Health System Engineering	3		✓	✓	✓	✓	
	Research Methodology	2				✓		✓
	Elective Course 1	3						
Semester 3	Work Method Design	3		✓	✓	✓	✓	✓
	Human-Organizational Performance	3		✓	✓	✓	✓	
	Proposal Seminar	3	✓	✓	✓	✓		
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓



Engineering Management (EM) Consentration			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Advanced Manufacturing System	3				✓	✓	
Semester 2	Engineering Project Management	3				✓	✓	
	Product Development & Commercialization	3			✓	✓	✓	
	Research Methodology	2				✓		✓
	Elective Course I	3						
Semester 3	Knowledge and Innovation Management	3		✓	✓	✓		
	Strategic Management	3				✓	✓	
	Proposal Seminar	3	✓	✓	✓	✓		
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓

Industrial and Systems Engineering (ISE) - International Program			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Compulsory Elective Course	3						
Semester 2	Research Methodology	2				✓		✓
	Elective Course I	3						
	Elective Course II	2						
	Elective Course III	3						
Semester 3	Proposal Seminar	3	✓	✓	✓	✓		
	Elective Course IV	3						
	Elective Course V	3						
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓



Industrial and Systems Engineering – Professional Professional Program			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Advanced Industrial Statistics	2		✓		✓	✓	
	Advanced Operational Research	3			✓	✓	✓	
	Cost And Investment Management	2				✓	✓	
	Compulsory Elective Course	3						
Semester 2	Research Methodology	2				✓		✓
	Elective Course I	3						
	Elective Course II	2						
	Elective Course III	3						
Semester 3	Proposal Seminar	3	✓	✓	✓	✓		
	Elective Course IV	3						
	Elective Course V	3						
Semester 4	Thesis	6	✓	✓	✓	✓	✓	✓

Program Pascasarjana Jalur Riset			Capaian Pembelajaran Lulusan					
Semester	Nama Mata Kuliah	SKS	1	2	3	4	5	6
Semester 1	Matakuliah RPL (untuk pengakuan)	3						
	Elective Course I	3						
	Elective Course II	2						
	Elective Course III	2						
	Research Methodology	2				✓		✓
Semester 2	Tesis I	4						
Semester 3	Publikasi I	6						
	Tesis II	6						
Semester 4	Publikasi II / Paten Terdaftar	8						



Berikut ini merupakan matakuliah pilihan yang ditawarkan oleh program magister. Matakuliah pilihan dapat dipilih sesuai konsentrasi atau lintas konsentrasi

Tabel 13 Matakuliah Pilihan Program Magister

No.	Nomor MK	Nama Mata Kuliah (MK)
Manufacturing Systems Engineering and Management Concentration		
1	2323242511	Manufacturing Productivity
2	2323242512	Circular Economy
3	2323242513	Data Analytics for Lean Six Sigma
4	2323242514	Innovation Management and Technology
5	2323242515	Concurrent Engineering
6	2323242516	Manufacturing Excellence
7	2323242517	Data Analysis for Manufacturing
8	2323242518	Industrial Data Driven Analysis
9	2323242519	Life Cycle Analysis
Decision System Concentration		
1	2323242521	Contemporary Game Theory
2	2323242522	Data Mining with Application
Supply Chain Management Concentration		
1	2323242531	Airline Logistic
2	2323242532	Transportation and Distribution System Modelling
3	2323242533	Agent-based Modeling and Simulation
4	2323242534	Demand and Revenue Management
Human Factors and Occupational Safety and Health Engineering Concentration		
1	2323242541	Human Physiology and Biomechanics
2	2323242542	Interaction and Experience Design
Engineering Management Concentration		
1	2323242551	Corporate Risk Management
2	2323242552	Organizational Behavior and Human Resource Management
3	2323242553	Advanced Performance Management
4	2323242554	Finance for Engineer
5	2323242555	Industrial Cluster Management
Others		
1	2323242861	Internship