

# **Mechanical Engineering with Industrial Design**

**Study Year 1 (Mandatory Courses)**

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
<a href="#">MMKA15</a>	7	G1	-	S	Manual and Computer Aided Drafting		<a href="#">KS KE U W T</a>	1			
<a href="#">MMTA02</a>	6	G1	-	S	Introduction to Mechanical Engineering		<a href="#">KS KE U W T</a>	1	2		
<a href="#">EMAA01</a>	15	G1	-	S	Calculus in One Variable		<a href="#">KS KE U W T</a>	1	2	3	
<a href="#">EMA420</a>	6	G1	-	S	Linear Algebra		<a href="#">KS KE U W T</a>		2		
<a href="#">MIOA01</a>	9	G1	-	S	Managerial Economics, Basic Course		<a href="#">KS KE U W T</a>			3	
<a href="#">IDEA30</a>	5	G1	-	S	Introduction to Workshop Training		<a href="#">KS KE U T</a>			3	4
<a href="#">AFOA01</a>	6	G1	-	S	Aesthetics I		<a href="#">KS KE U W T</a>				4

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links					
							14/15 sp1	14/15 sp2	14/15 sp3	14/15 sp4		
<a href="#">EMA430</a>	6	G1	-	S	Calculus in Several Variables		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	4

### Study Year 2 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
<a href="#">IDEA35</a>	6	G1	-	S	Designer Tools		<a href="#">KS KE U W T</a>	1	2		
<a href="#">FMEA30</a>	15	G1	-	S	Engineering Mechanics		<a href="#">KS KE U W T</a>	1	2		
<a href="#">MMVF01</a>	11	G2	-	S	Thermodynamics and Fluid Mechanics		<a href="#">KS KE U W T</a>	1	2		
<a href="#">FKM015</a>	7.5	G1	-	S	Materials Engineering, Basic Course		<a href="#">KS KE U W T</a>			3	
<a href="#">FHL013</a>	15	G2	-	E1	Solid Mechanics, Basic Course		<a href="#">KS KE U W T</a>			3	4
<a href="#">MMT012</a>	7.5	G2	-	S	Production and Manufacturing Methods		<a href="#">KS KE U W T</a>				4

### Study Year 3 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
<a href="#">MMEF05</a>	7.5	G2	-	S	Transmissions		<a href="#">KS KE U W T</a>	1			
<a href="#">MIE012</a>	9	G2	-	S	Electrical Engineering, Basic Course		<a href="#">KS KE U W T</a>	1	2		
<a href="#">MVKF01</a>	6	G2	X	S	Energy and the Environment in Sustainable Development		<a href="#">KS KE U W T</a>	1	2		
<a href="#">FRT010</a>	7.5	G2	-	S	Automatic Control, Basic Course		<a href="#">KS KE U W T</a>		2		
<a href="#">IDEA75</a>	5	G1	-	S	Design Methodology		<a href="#">KS KE U W T</a>			3	
<a href="#">MMKF01</a>	5	G2	-	S	Product Development and Design Methodology	X	<a href="#">KS KE U W T</a>			3	
<a href="#">MMEF01</a>	5	G2	-	S	Tribology		<a href="#">KS KE U W T</a>			3	

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links				
							14/15 sp1	14/15 sp2	14/15 sp3	14/15 sp4	
<a href="#">MAME30</a>	6	G2	-	S	Ergonomics		<a href="#">K</a> <a href="#">S</a> <a href="#">K</a> <a href="#">E</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4
<a href="#">IDEF20</a>	10	G2	-	S	Project in Technical Design		<a href="#">K</a> <a href="#">S</a> <a href="#">K</a> <a href="#">E</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				4

[MMKF01](#) Product Development and Design Methodology: *The date and time of the exam is announced by the course lecturer.*

### Study Year 4 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
<a href="#">AFO065</a>	9	A	-	S	Aesthetics II		<a href="#">KS KE U T</a>	1			
<a href="#">MMKN55</a>	7.5	A	-	S	Engineering Design Techniques		<a href="#">KS KE U W T</a>		2		
<a href="#">AFO165</a>	6	G1	-	S	Product Semiotics		<a href="#">KS KE U W T</a>		2		
<a href="#">MMKF10</a>	5	G2	-	S	Digital Prototyping		<a href="#">KS KE U W T</a>			3	
<a href="#">IDE051</a>	15	A	-	S	Project in Technical Design		<a href="#">KS KE U W T</a>			3	4
<a href="#">IDEA10</a>	5	G1	-	E	3D modelling and Rendering		<a href="#">KS KE U W T</a>				4

### Study Year 5 (Mandatory Courses)

Course Code	Credits	Cycle	S.Ex. stud.	Language	Course Name	Footnote	Links	14/15	14/15	14/15	14/15
								sp1	sp2	sp3	sp4
<a href="#">MAMN25</a>	7.5	A	-	S	Interaction Design		<a href="#">KS KE U W T</a>	1			
<a href="#">IDEN50</a>	7.5	A	X	E	Entrepreneurship and Project Management		<a href="#">KS KE U W T</a>		2		

### Elective Courses - MD



Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">MMT125</a>	7.5	A	4	3	-	S	Applied FEM – project		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MMKF15</a>	7.5	G2	4	3	X	E1	Applied Robotics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">FHLE05</a>	7.5	G2	4	3	X	E	Biomechanics	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MMKN45</a>	5	A	4	3	X	E1	Computer Based Engineering, Design Analysis 1		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MMKN11</a>	7.5	A	4	3	X	S	Design for X		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MIE100</a>	7.5	A	4	3	X	E1	Hybrid Vehicle Drive Systems		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			
<a href="#">MMT015</a>	7.5	A	4	4	-	S	Material and Process Selection		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1			

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links	sp1 sp2 sp3 sp4			
										1	2	3	4
<a href="#">MTTN40</a>	7.5	A	4	3	X	E	Packaging Technology and Development		<a href="#">KS KE U W T</a>	1			
<a href="#">MMT031</a>	7.5	A	4	3	-	S	Production Technology		<a href="#">KS KE U W T</a>	1			
<a href="#">MAM120</a>	7.5	G2	4	3	-	S	Usability Evaluation		<a href="#">KS KE U W T</a>	1			
<a href="#">MTTN55</a>	7.5	A	4	3	X	E	Applied Logistics Simulation		<a href="#">KS KE U W T</a>	1	2		
<a href="#">EIEF01</a>	10	G2	4	4	X	E1	Applied Mechatronics		<a href="#">KS KE U W T</a>	1	2		
<a href="#">GEMA20</a>	7.5	G1	4	1	-	E	English for Engineers	X	<a href="#">KS KE U W T</a>	1	2		
<a href="#">EMIE20</a>	7.5	G2	4	3	X	E	Environmental Issues		<a href="#">KS KE U W T</a>	1	2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">EMIF15</a>	7.5	G2	4	2	-	S	Environmental Science		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">MMKA10</a>	5	G1	4	3	X	E	Form, Colour and Product Expression		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA25</a>	7.5	G1	4	1	-	S	German for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">EITA05</a>	4.5	G1	4	1	-	S	History of Technology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">GEMA60</a>	7.5	G1	4	1	-	S	Law for Engineers, Introductory Course in Business Law	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">TNX097</a>	7.5	G2	4	2	-	S	Rehabilitation Engineering		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		
<a href="#">MAM032</a>	7.5	A	4	4	-	S	Working Environment, Project		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2		

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
										sp1	sp2	sp3	sp4
<a href="#">GEMA70</a>	15	G1	4	1	-	S	Japanese for Engineers	X	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>	1	2	3	
<a href="#">FKM070</a>	7.5	A	4	3	X	E1	Advanced Materials Technology		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">EHLN15</a>	7.5	A	4	4	X	E	Biomechanics, Advanced Course		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">T</a>		2		
<a href="#">MION05</a>	7.5	A	4	3	-	S	Business Marketing		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">MMKN50</a>	5	A	4	3	X	E1	Computer Based Engineering, Design Analysis 2		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">MTTF01</a>	5	G2	4	3	-	S	Logistics		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		
<a href="#">IDEN35</a>	5	A	4	4	X	E	Research Methods in Industrial Design		<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>		2		

Course Code	Credits	Cycle	Language				Course Name	Footnote	Links						
			Year	From year	S.Ex. stud.				sp1	sp2	sp3	sp4			
<a href="#">MIOF01</a>	9	G2	4	3	-	S	Marketing and Globalization		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	2	3
<a href="#">MMKN20</a>	5	A	4	3	-	S	Design in Thermoplastic Materials		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3
<a href="#">FKMN15</a>	7.5	A	4	3	-	E1	Light Materials	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3
<a href="#">MIO040</a>	6	G2	4	3	-	S	Managerial Economics, Advanced Course		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3
<a href="#">MMKN30</a>	7.5	A	4	3	X	E1	Service Robotics		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3
<a href="#">FHLN01</a>	7.5	A	4	3	X	E	Structural Optimization		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3
<a href="#">MAME15</a>	6	G2	4	3	-	S	Work Organization and Management		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>		3

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links						
									sp1	sp2	sp3	sp4			
<a href="#">GEMA65</a>	7.5	G1	4	1	-	S	Chinese for Engineers	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">T</a>	3	4	
<a href="#">FMI040</a>	7.5	A	4	3	-	S	Energy Systems Analysis: Renewable Sources of Energy		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">GEMA20</a>	7.5	G1	4	1	-	E	English for Engineers	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">GEMA40</a>	7.5	G1	4	1	-	S	Entrepreneurship and Business Development	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">GEMA01</a>	7.5	G1	4	1	-	S	French for Engineers: Language, Culture and Society, First Course	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">GEMA60</a>	7.5	G1	4	1	-	S	Law for Engineers, Introductory Course in Business Law	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4
<a href="#">EIEN01</a>	10	A	4	3	X	E1	Mechatronics, Industrial Product Design		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	3	4

Course Code	Credits	Cycle	Year	From year	S.Ex. stud.	Language	Course Name	Footnote	Links				
									sp1	sp2	sp3	sp4	
<a href="#">TNX153</a>	7.5	G2	4	2	-	S	Rehabilitation Engineering and Design	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				3	4
<a href="#">MAM032</a>	7.5	A	4	4	-	S	Working Environment, Project	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>				3	4
<a href="#">MMT160</a>	7.5	G2	4	3	-	S	Computer Aided Design/Computer Aided Manufacturing	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">MMKN40</a>	5	A	4	3	-	S	Design in Polymer Composite Materials	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">FHL064</a>	7.5	G2	4	4	X	S	Finite Element Method	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">MIO040</a>	6	G2	4	3	-	S	Managerial Economics, Advanced Course	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4
<a href="#">MTTN30</a>	7.5	A	4	3	X	E	Process-based Business Development	<a href="#">KS</a> <a href="#">KE</a> <a href="#">U</a> <a href="#">W</a> <a href="#">T</a>					4

Course Code	Credits	Cycle		Language			Course Name	Footnote	Links									
		Year	From year	S.Ex. stud.		sp1			sp2	sp3	sp4							
<a href="#">MMKN35</a>	7.5	A	5	4	X	E1	Product Innovation		<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>	1				
<a href="#">GEMA55</a>	6	G1	4	1	-	S	Medicine for Engineers	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>					Course on hold
<a href="#">GEMA45</a>	3	G1	4	1	-	S	Teaching and Learning	X	<a href="#">KS</a>	<a href="#">KE</a>	<a href="#">U</a>	<a href="#">W</a>	<a href="#">T</a>					Course on hold

[FHLF05](#) Biomechanics: *Replaces the course [FHL110](#).*

[GEMA20](#) English for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA25](#) German for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA60](#) Law for Engineers, Introductory Course in Business Law: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA70](#) Japanese for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[FKMN15](#) Light Materials: *The course is offered every other academic year and will be given in 2014/15, 2016/17.*

[GEMA65](#) Chinese for Engineers: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA40](#) Entrepreneurship and Business Development: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA01](#) French for Engineers: Language, Culture and Society, First Course: *LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA55](#) Medicine for Engineers: *The course is offered every other academic year and will next be offered in 2015/16. LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*

[GEMA45](#) Teaching and Learning: *The course is offered every other academic year and will next be offered in 2015/16. LTH common courses (courses where the course code begins with GEM) counts as external elective courses in the degree requirements for students admitted autumn 2011 and later.*



## Degree Projects - MD

The list contains the degree project courses that are included in the MD programme.

### Links

Course Code Credits

Course Name

MMK920 30 Degree Project in Technical Design [KS](#) [KE](#) [U](#) [W](#)