								CHANICAL ENGINEERING, 100% ENGLISH PROGRAM				
	DAYTİME (I.) EDUCATION (CODE: 0212	2) AND E	VEN	ING				218) COURSE CURRICULUM (2020-2021 ACADEMIC Y	EAR)			
	Provinciana dat Compostor				F	PREP	CLASS	Draw Class 2nd Competer				
Code	Prep Class 1st Semester  Course Name	lт	LB	CR	ECTS		Code	Prep Class 2nd Semester  Course Name	LT	LB	CR	ECTS
MMT000	Prep Class	0	0	0	0		MMT00B	Prep Class	0	0	0	0
	1 1 1					I C	LASS	1 1 2				
	1st Semester Courses					1. 0	LAGG	2nd Semester Courses				
Code	Course Name	LT	LB	CR	ECTS		Code	Course Name	LT	LB	CR	ECTS
PHY195	General Physics I	3	2	4	5		PHY196	General Physics II	3	2	4	5
FOL183	Foreign Language I	2	0	2	2		FOL184	Foreign Language II	2	0	2	2
CHE189	General Chemistry	3	2	4	4		CAL182	Mathematics II	4	0	4	5
CAL181	Mathematics I	4	0	4	5		CAL194	Linear Algebra	3	0	3	4
MEE101	Introduction to Mechanical Engineering	2	0	2	4		MEE114	Computer Aided Technical Drawing	2	2	3	5
CEC103	Computer Programming I	1	2	2	3		MEE102	Statics	4	0	4	4
CEC105	Technical Drawing  Turkish Language I	2	0	3	5		CEC104 TRK182	Computer Programming II	2	0	2	3
TRK181	Total	19	8	23	30	-	1KK 162	Turkish Language II  Total	21	6	24	30
	1000	1.0						1000	1			- 00
	3rd Semester Courses					II. C	LASS	4th Semester Courses				
Code	Course Name	LT	LB	CR	ECTS	1	Code	Course Name	LT	LB	CR	ECTS
HST181	Atatürk's Principles and History of Revolutions I	2	0	2	2	1	HST182	Atatürk's Principles and History of Revolutions II	2	0	2	2
MEE215	Differential Equations	4	0	4	4	1	FOL282	Technical Foreign Language II	2	0	2	2
FOL281	Technical Foreign Language I	2	0	2	2	]	MEE208	Manufacturing Processes II	3	1	3	4
CEC205	Probability and Statistics	2	0	2	3	1	MEE212	Measurement Technique	2	1	2	4
MEE203	Strength of Materials I	3	0	3	4	4	MEE214	Strength of Materials II	3	0	3	4
MEE205	Materials Science	3	1	3	4	4	MEE216	Basic Electric and Electronics	2	0	2	3
MEE207	Manufacturing Processes I	3	0	3	4	-	MEE218	Engineering Materials	3	0	3	4
MEE211 MEE213	Thermodynamics I  Dynamics	3	0	3	3	1	MEE220 MEE222	Thermodynamics II  Numerical Analysis	2	0	2	3
	Total	25	2	25	30	1		Total	21	3	21	30
			<u> </u>			шс	LASS		<b>.</b>			
	5th Semester Courses					III. 0	LAGO	6th Semester Courses				
Code	Course Name	LT	LB	CR	ECTS	1	Code	Course Name	LT	LB	CR	ECTS
CEC303	Engineering Economics	2	0	2	3	1	CEC306	Occupational Health and Safety II	2	0	2	2
CEC305	Occupational Health and Safety I	2	0	2	2		MEE302	Fluid Mechanics II	3	0	3	3
MEE301	Fluid Mechanics I	3	0	3	3	1	MEE308	Dynamics of Machinary	3	0	3	3
MEE305	Heat Transfer	4	0	4	4	4	MEE350	Engineering Ethics	2	0	2	2
MEE307 MEE343	Mechanisms Project Design Principles	0	2	3	2	-	MEE348 MEE356	Machine Elements II System Dynamics and Control	3	0	3	3
MEE303	Machine Elements I	3	0	3	3	1	IVIEE330	Technical Elective Course	3	0	3	4
MEE399	Industrial Practice I	0	0	0	4	1		Technical Elective Course	3	0	3	4
	Technical Elective Course	3	0	3	4	1		Technical Elective Course	3	0	3	4
	Social Elective Course	2	0	2	2	1		Social Elective Course	2	0	2	2
	Total	22	2	23	30			Total	27	0	27	30
	Technical Elective Course							Technical Elective Courses				
MEE321	Refrigeration Technology	3	0	3	4	]	MEE328	CNC Programming	3	0	3	4
MEE327	Computer Aided Design	3	0	3	4	]	MEE330	Introduction to Finite Element Analysis	3	0	3	4
MEE329	Machine Tools	3	0	3	4	4	MEE336	Renewable Energy Resources	3	0	3	4
MEE339	Energy Management	3	0	3	4	-	MEE340	Basics of HVAC	3	0	3	4
			$\vdash$	$\dashv$		-	MEE342	Hydraulics and Pneumatics	3	0	3	4
		_	H			1	MEE344 MEE346	Industrial and Residential Energy Efficiency Robotics	3	0	3	4
E00001	Social Elective Courses	Ι.		_		-	E00000	Social Elective Courses				
ESC301 ESC303	Labour Law Patent and Industrial Design	2	0	2	2	1	ESC302 ESC306	Research and Presentation Skills  Management Systems	2	0	2	2
ESC303 ESC307	Communication Skills	2	0	2	2	1	ESC306 ESC310	Corporate Behavior	2	0	2	2
ESC309	International Communication	2	0	2	2	1	ESC312	Standardization	2	0	2	2
ESC311	Critical and Analytical Thinking	2	0	2	2	1	ESC316	Social Media	2	0	2	2
						1	ESC318	Contemporary Topics	2	0	2	2
						IV. C	LASS					
	7th Semester Courses							8th Semester Courses*				
Code	Course Name	LT	LB	CR	ECTS		Code	Course Name	LT	LB	CR	ECTS
MEE459	Industrial Practice II	0	0	0	5	]	MEE406	Graduation Project	0	2	1	5
						1						
MEE409	Workplace Training and Practice <sup>(1)</sup>	5	15	12	25	-	MEE409	Workplace Training and Practice <sup>(1)</sup>	5	15	12	25

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MEE407	Mechanical Engineering Laboratory <sup>(2)</sup>	3	1	3	4		MEE407	Mechanical Engineering Laboratory <sup>(2)</sup>	3	1	3	4
MEE427	Mechanical Systems Design <sup>(2)</sup>	2	1	2	3		MEE427	Mechanical Systems Design <sup>(2)</sup>	2	1	2	3
MEE429	Thermal Systems Design <sup>(2)</sup>	2	1	2	3		MEE429	Thermal Systems Design <sup>(2)</sup>	2	1	2	3
	Technical Elective Course <sup>(3)</sup>	3	0	3	5			Technical Elective Course (3)	3	0	3	5
	Technical Elective Course <sup>(3)</sup>	3	0	3	5			Technical Elective Course (3)	3	0	3	5
	Technical Elective Course <sup>(3)</sup>	3	0	3	5			Technical Elective Course (3)	3	0	3	5
								Technical Elective Course (4)	3	0	3	5
								Technical Elective Course (4)	3	0	3	5
								Total (if the course affixed with <sup>(1)</sup> is taken)	5	17	13	30
	Total (if the course affixed with (1) is taken)	5	15	12	30			Total (if the courses affixed with <sup>(2)</sup> and <sup>(3)</sup> are taken)	16	5	17	30
	Total (if the courses affixed with (2) and (3) are taken)	16	3	16	30			Total (if the courses affixed with <sup>(3)</sup> and <sup>(4)</sup> are taken)	15	2	16	30
					Technic	al El	ective Cours	es				
MEE4001	Solar Energy Technologies	3	0	3	5	Π	MEE4031	Air Conditioning and Ventilation Systems Design	3	0	3	5
MEE4002	Electric and Hybrid Vehicles	3	0	3	5	1	MEE4032	Thermic Turbo Machines	3	0	3	5
MEE4003	Plumbing Systems Design	3	0	3	5	1	MEE4033	Steam Boilers	3	0	3	5
MEE4004	Heat Exchangers	3	0	3	5	1	MEE4034	Computational Fluid Dynamics	3	0	3	5
MEE4005	Fuel Cell Fundamentals	3	0	3	5	1	MEE4035	Introduction to Bioengineering	3	0	3	5
MEE4006	Heating Technology	3	0	3	5	1	MEE4036	Thermo-Chemical Processes	3	0	3	5
MEE4007	Thermal Insulation	3	0	3	5	1	MEE4037	Principles of Energy Conversion	3	0	3	5
MEE4008	Gas Dynamics	3	0	3	5	1	MEE4038	Heating Systems Design	3	0	3	5
MEE4009	Hydraulic Machinery	3	0	3	5	1	MEE4039	Surface Treatments	3	0	3	5
MEE4010	Modern Manufacturing Methods	3	0	3	5	1	MEE4040	Welding Technologies	3	0	3	5
MEE4011	Computer Aided Manufacturing	3	0	3	5	1	MEE4041	Mechanical Vibrations	3	0	3	5
MEE4012	Materials Selection in Design and Manufacturing	3	0	3	5	1	MEE4042	Heat Treatments	3	0	3	5
MEE4013	Materials Inspection Methods	3	0	3	5	1	MEE4043	Introduction to Biomechanics	3	0	3	5
MEE4014	Die/Mold Design Techniques	3	0	3	5	1	MEE4044	Agricultural Machinery	3	0	3	5
MEE4015	Powder Metallurgy	3	0	3	5	1	MEE4045	Metal Forming Technologies	3	0	3	5
MEE4016	Internal Combustion Engines	3	0	3	5	1	MEE4046	Construction Techniques	3	0	3	5
MEE4017	Maintenance in Manufacturing	3	0	3	5	1	MEE4047	Tribology	3	0	3	5
MEE4018	Mechatronic Systems Design	3	0	3	5	1	MEE4048	Manufacturing Planning	3	0	3	5
MEE4019	Composite Materials and Manufacturing Methods	3	0	3	5	1	MEE4049	Pumps	3	0	3	5
MEE4020	Applications of Finite Element Analysis	3	0	3	5	1	MEE4050	Mechanical Measurements and Metrology	3	0	3	5
MEE4021	Advanced Strength	3	0	3	5	1	MEE4051	Pipeline Engineering	3	0	3	5
MEE4022	Quality Control in Manufacturing	3	0	3	5	1	MEE4052	Digital Control System Design	3	0	3	5
MEE4023	Biofluid Dynamics	3	0	3	5	1	MEE4053	Failure Analysis	3	0	3	5
MEE4024	Vehicle Dynamics and Control	3	0	3	5	1	MEE4054	Microprocessors in Engineering	3	0	3	5
MEE4025	Inventive Problem Solving in Engineering Design	3	0	3	5	1	MEE4055	Transport Techniques	3	0	3	5
MEE4026	Microsystem – MEMS Design	3	0	3	5	1	MEE4056	Railway Vehicle Engineering	3	0	3	5
MEE4027	Introduction to Exergy	3	0	3	5	1	MEE4057	Precision Machine Design	3	0	3	5
MEE4028	Machine Technology	3	0	3	5	1	MEE4058	Additive Manufacturing	3	0	3	5
MEE4029	Nanomaterials	3	0	3	5	1	MEE4059	Elevators and Escalators	3	0	3	5
MEE4030	Vehicle Technologies	3	0	3	5	1	MEE4060	Medical Device Design	3	0	3	5
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- Students who take the courses with (1) in 7<sup>th</sup> semester will not take the courses with (2) and (3) in the same semester. And the students who take the courses with (2) and (3) will not take the courses with (1) in 7<sup>th</sup> semester have to take only the courses with (2) ve (3) in the 8<sup>th</sup> semester.
- Students who take the courses with (2) and (3) in 7<sup>th</sup> semester have two choices for the 8<sup>th</sup> semester. They can take either the courses with (1) or with (3) and (4) in 8<sup>th</sup> semester.
- Students who fail the courses with (1) in 8th semester can take the 7th semester courses with (1) or the courses with (2) and (3) in following years.
- Students who fail the courses with <sup>(1)</sup> in 7th semester can take the 7th semester courses with <sup>(1)</sup> or the courses with <sup>(2)</sup> and <sup>(3)</sup> in following years.

Note-1: Courses with (3) and (4) refer to the "Technical Elective Courses" that the students have to take in 4<sup>th</sup> grade.

Note-2: All students have to take "MEE459-Industrial Practice II" in 7th semester and "MEE406-Graduation Project" in 8th semester.

Note-3: Students must be successful in "CEC305-Occupational Health and Safety I" and "CEC306-Occupational Health and Safety II" in order to take "MEE409-Workplace Training", "MEE423-Workplace Application" and "MEE407-Mechanical Engineering Laboratory".

İŞYERİ UYGULAMASI VE EĞİTİMİ DERSLERİNİN 7. YARIYILDA ALINMASI HALİNDEKİ DERS İSTATİSTİKLERİ									
1	Toplam Ulusal Kredi	172		8	Toplam Ulusal Kredi / 128 Kredi Sınırı			134,4%	
2	Toplam AKTS Kredi	240		9	Toplam AKTS Kredi / Tplm Ulusal Kredi			139,5%	
3	Seçmeli Derslerin Toplam Kredisi	37		10	Seçmeli Derslerin Tplm Kr / Tpl Ulusal Kr			21,5%	
4	Teorik Derslerin Toplam Saati	156		11	Teorik Derslerin Tplm Saati / Tplm Ders Saati			79,2%	
5	Uygulama Derslerin Toplam Saati	41		12	Uyg. Derslerin Tplm Saati / Tplm Ders Saati			20,8%	
6	İngilizce Derslerin Toplam Kredisi	172		13	Toplam İngilizce Kredisi/Toplam Ulusal Kredi			100,0%	
7	Seçmeli Ders AKTS	60		14	Seçmeli ders AKTS/Toplam AKTS			25,0%	
				15	Temel Bilim Dersleri Toplam Kredisi		4	2	

	İŞYERİ UYGULAMASI VE EĞİTİMİ DERSLERİI	NIN 7. VE 8	. YA	RIYILLARDA	ALINMAMASI HALİNDEKİ DERS İSTATİSTİKLERİ		
1	Toplam Ulusal Kredi	175		8	Toplam Ulusal Kredi / 128 Kredi Sınırı		136,7%
2	Toplam AKTS Kredi	240		9	Toplam AKTS Kredi / Tplm Ulusal Kredi		137,1%
3	Seçmeli Derslerin Toplam Kredisi	40		10	Seçmeli Derslerin Tplm Kr / Tpl Ulusal Kr		22,9%
4	Teorik Derslerin Toplam Saati	166		11	Teorik Derslerin Tplm Saati / Tplm Ders Saati		86,5%
5	Uygulama Derslerin Toplam Saati	26		12	Uyg. Derslerin Tplm Saati / Tplm Ders Saati		13,5%
6	İngilizce Derslerin Toplam Kredisi	175		13	Toplam İngilizce Kredisi/Toplam Ulusal Kredi		100,0%
7	Seçmeli Ders AKTS	60		14	Seçmeli ders AKTS/Toplam AKTS		25,0%
				15	Temel Bilim Dersleri Toplam Kredisi	42	

1	Toplam Ulusal Kredi	172	8	Toplam Ulusal Kredi / 128 Kredi Sınırı		134,4%
2	Toplam AKTS Kredi	240	9	Toplam AKTS Kredi / Tplm Ulusal Kredi		139,5%
3	Seçmeli Derslerin Toplam Kredisi	37	10	Seçmeli Derslerin Tplm Kr / Tpl Ulusal Kr		21,5%
4	Teorik Derslerin Toplam Saati	156	11	Teorik Derslerin Tplm Saati / Tplm Ders Saati		79,2%
5	Uygulama Derslerin Toplam Saati	41	12	Uyg. Derslerin Tplm Saati / Tplm Ders Saati		20,8%
6	İngilizce Derslerin Toplam Kredisi	172	13	Toplam İngilizce Kredisi/Toplam Ulusal Kredi		100,0%
7	Seçmeli Ders AKTS	60	14	Seçmeli ders AKTS/Toplam AKTS		25,0%
		•	15	Temel Bilim Dersleri Toplam Kredisi	42	