	Çankaya	University M			•	: Bachelor's Science Curriculum			
	Semester 1		F	RESHMAN YEA	AR (FIRST YEA	Semester 2			
Code	Course Title	(T R) C	ECTS	Preq	Code	Course Title	(T R) C	ECTS	Preq
ME113	Computer Aided Engineering Drawing I	(2 2) 3	6	-	ME102	Mechanical Engineering Orientation	(2 0) 2	3	-
ME198	Computational Tools for Mechanical Engineers	(2 2) 3	5	-	ME114	Computer Aided Engineering Drawing II	(2 2) 3	4	ME113
MATH 155	Calculus for Engineering I	(3 2) 4	5	-	MATH 156	Calculus for Engineering II	(3 2) 4	5	MATH 155
PHYS131	Physics I	(3 2) 4	6	-	CHEM103	Chemistry for Engineering	(3 2) 4	5	-
ENG121	Academic English I	(2 2) 3	4	-	ENG122	Academic English II	(2 2) 3	4	-
ESR101	Ethics and Social Responsibility	(10)1	1	-	PHYS132	Physics II	(3 2) 4	6	-
TURK101	Turkish I	(2 0 2)	3	-	TURK102	Turkish I	(2 0 2)	3	-
Total	7 course	(15 10) 20	30		Total	7 course	(17 10) 22	30	
SOPHOMORE YEA Semester 3									
Code	Course Title	(T R) C	ECTS	Preq	Code	Course Title	(T R) C	ECTS	Preq
			6					5	ME203
ME 203 ME 211	Statics Thermodynamics I	(30)3	5	PHYS131 PHYS131	ME 202 ME 206	Strength of Materials  Dynamics	(3 0) 3	4	ME203
		. ,		MATH155			. , ,		
MSE 225	Introduction to Materials Science	(3 2) 4	6	PHYS131	ME 210	Manufacturing Processes	(3 2) 4	5	ME114
MATH 258	Introduction to Differential Equations	(2 2) 3	4	MATH 155	ME 212	Thermodynamics II	(3 0) 3	7	ME211
ECE 281	Electrical Circuits and Instrumentation + Laboratory	(2 2) 3	6	PHYS132	MSE 226	Engineering Materials	(3 0) 3	5	MSE 225
ENG 221	Advanced Writing Skills	(2 0) 2	3	-	MATH 255	Vector Calculus and Linear Algebra	(2 2) 3	4	MATH156
Total	6 course	(15 6) 18	30		Total	6 course	(17 4) 19	30	
JUNIOR YEAR Semester 5					(THIRD YEAR) Semester 6				
	•••••••								
Code	Course Title	(T R) C	ECTS	Prea	Code	Course Title	(T R) C	ECTS	Prea
Code ME 301		(T R) C (3 0) 3	ECTS 4	Preq ME206			(T R) C	<b>ECTS</b> 5	Preq ME301
	Course Title Theory of Machines I Fluid Mechanics I	(T R) C (3 0) 3 (3 0 ) 3	_	-	Code ME 302 ME 304	Course Title Theory of Machines II Fluid Mechanics II	(T R) C (3 0) 3 (3 0) 3		_
ME 301	Theory of Machines I	(3 0) 3	4	-	ME 302	Theory of Machines II	(3 0) 3	5	ME301
ME 301 ME 303	Theory of Machines I Fluid Mechanics I	(3 0) 3	4	ME206	ME 302 ME 304	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic	(3 0) 3	5	ME301 ME303
ME 301 ME 303 ME 307 ME 313	Theory of Machines I Fluid Mechanics I Machine Elements I	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4	4 4 5	ME206 - ME202 ME211	ME 302 ME 304 ME 308 ECE 386	Theory of Machines II Fluid Mechanics II Machine Elements II	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3	5 5 5	ME301 ME303 ME307 MATH258
ME 301 ME 303 ME 307	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3	4 4 5 4 5	ME206 - ME202	ME 302 ME 304 ME 308	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control	(3 0) 3 (3 0) 3 (3 0) 3	5 5 5	ME301 ME303 ME307
ME 301 ME 303 ME 307 ME 313 ME 331	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup>	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2	4 4 5 4 5 3	ME206 - ME202 ME211 MATH258	ME 302 ME 304 ME 308 ECE 386	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3	5 5 5	ME301 ME303 ME307 MATH258 ECE281 ME331 +
ME 301 ME 303 ME 307 ME 313	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3	4 4 5 4 5	ME206 - ME202 ME211 MATH258 - ME210	ME 302 ME 304 ME 308 ECE 386 ME312	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3	5 5 5 5	ME301 ME303 ME307 MATH258
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0	4 4 5 4 5 3 5	ME206 - ME202 ME211 MATH258	ME 302 ME 304 ME 308 ECE 386 ME312	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3	5 5 5 5 5	ME301 ME303 ME307 MATH258 ECE281 ME331 +
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19	4 4 5 4 5 3 5 30	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR	ME 302 ME 304 ME 308 ECE 386 ME312 Total (FORTH YEAR	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course  Semester 8	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3 (18 2) 19	5 5 5 5 5 5	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective¹ Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0	4 4 5 4 5 3 5	ME206 - ME202 ME211 MATH258 - ME210	ME 302 ME 304 ME 308 ECE 386 ME312	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3	5 5 5 5 5	ME301 ME303 ME307 MATH258 ECE281 ME331 +
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective¹ Summer Training I 6 course  Semester 7 Course Title	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19	4 4 5 4 5 3 5 30	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAR	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course  Semester 8 Course Title	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3 (18 2) 19	5 5 5 5 5 5 5	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3	4 4 5 4 5 3 5 30 ECTS	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR Preq ME202	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAR  Code ME 408	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course  Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3 (18 2) 19	5 5 5 5 5 5 30	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407	Theory of Machines I Fluid Mechanics I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective  Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering Laboratory I	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3	4 4 5 4 5 3 5 30 ECTS 4	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR Preq ME202	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAF  Code ME 408	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering Laboratory II	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3 (18 2) 19 (T R) C (2 4) 4	5 5 5 5 5 30 ECTS 8	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering Laboratory I Technical Elective I <sup>3</sup>	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3 (1 4) 3	4 4 5 4 5 3 5 30 ECTS 4 5	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR Preq ME202	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAF  Code ME 408	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering Laboratory II Engineering Economy	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 2) 4 (3 0) 3 (18 2) 19 (T R) C (2 4) 4 (1 4) 3	5 5 5 5 5 30 ECTS 8	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407 ME 413	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering Laboratory I Technical Elective I <sup>3</sup> Technical Elective I <sup>3</sup>	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3 (1 4) 3 (3 0) 3 (3 0) 3	4 4 5 4 5 3 5 30 <b>ECTS</b> 4 5 5	ME206 - ME202 ME211 MATH258 - ME210 SENIOR YEAR Preq ME202 ME312 MATH258	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAF  Code ME 408	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course 8) Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering Laboratory II Engineering Economy Technical Elective III <sup>3</sup>	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (18 2) 19 (T R) C (2 4) 4 (1 4) 3 (3 0) 3 (3 0) 3	5 5 5 5 5 30 ECTS 8 4 5	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407 ME 413 ME 413	Theory of Machines I Fluid Mechanics I Machine Elements I Heat Transfer Numerical Methods for Mechanical Engineers Social Elective <sup>1</sup> Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering Laboratory I Technical Elective I <sup>3</sup> Technical Elective II <sup>3</sup> System Dynamics	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3 (1 4) 3 (3 0) 3 (3 0) 3 (3 0) 3	4 4 5 4 5 3 5 30 ECTS 4 5 5 3	ME206 - ME202 ME211 MATH258 - ME210  SENIOR YEAR  Preq ME202 ME312  MATH258 ME206	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAR  Code ME 408  ME 414  IE345	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course  Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering Laboratory II Engineering Economy Technical Elective III <sup>3</sup> Technical Elective IV <sup>3</sup> Principles of Atatürk and Hist of	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (18 2) 19 (T R) C (2 4) 4 (1 4) 3 (3 0) 3 (3 0) 3 (3 0) 3	5 5 5 5 5 30 ECTS 8 4 5	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312
ME 301 ME 303 ME 307 ME 313 ME 331 ME 200 Total  Code ME 407 ME 413 ME 413 ME 413	Theory of Machines I Fluid Mechanics I Fluid Mechanics I Machine Elements I Heat Transfer  Numerical Methods for Mechanical Engineers Social Elective 1 Summer Training I 6 course  Semester 7 Course Title Innovative Engineering Analysis and Design Mechanical Engineering Laboratory I Technical Elective II 3 Technical Elective II 3 System Dynamics  Summer Training II Principles of Atatürk and Hist of	(3 0) 3 (3 0) 3 (3 0) 3 (4 0) 4 (3 0) 3 (3 0) 2 (0 0) 0 (19 0) 19 (T R) C (1 4) 3 (1 4) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3	4 4 5 4 5 3 5 30 ECTS 4 5 5 5 3 5 5 5	ME206 - ME202 ME211 MATH258 - ME210  SENIOR YEAR  Preq ME202 ME312  MATH258 ME206	ME 302 ME 304 ME 308 ECE 386 ME312  Total (FORTH YEAR  Code ME 408 ME 414 IE345  HIST 202 Total	Theory of Machines II Fluid Mechanics II Machine Elements II Introduction to Automatic Control Experimentation and Measurement Restricted Elective <sup>2</sup> 6 course  Semester 8 Course Title Innovative Eng Design and Imp Mechanical Engineering Laboratory II Engineering Economy Technical Elective III <sup>3</sup> Technical Elective IV <sup>3</sup> Principles of Atatürk and Hist of Turk Rev II 6 course ber of Courses: 50 Total Cred	(3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3 (18 2) 19 (T R) C (2 4) 4 (1 4) 3 (3 0) 3 (3 0) 3 (3 0) 3 (3 0) 3	5 5 5 5 5 30 ECTS 8 5 4 5 3	ME301 ME303 ME307 MATH258 ECE281 ME331 + other prq  Preq ME407 ME303 ME312 ME313

 $<sup>^{1}\!\!:</sup>$  One course should be taken from ME department Social Elective Couses.

Students should take at least one course among ME 402 "Introduction to Finite Element Analysis" and ME 463 "Computational Fluid Dynamics".

Note: Construction Machinery Option students must take ME402 "Introduction to Finite Element Analysis", ME423 "Industrial Fluid Power" and ME424"Introduction to Construction Machinery" courses as Technical Electives.

<sup>3.</sup> Students must take at least one course from Thermal System Design Group Courses and at least one course from Mechanical System Design Group Courses to fulfill the thermal and mechanical systems design criteria. (Student who started to take the First Year courses before 2017-2018 Academic Year should take one course from Thermal System Design Courses if his/her ME407 design project is about a mechanical system; should take one course from Mechanical System Design Courses if his/her ME407 design project is about a thermal system.) One course can be taken from another engineering department subject to approval of the department.

<sup>\*\*\*:</sup> For mechanical projects ME301, ME307, ME402. For thermo-fluid projects ME304, ME313, ME463.