كلية الهندسة College of Engineer

جامعة الإمارات العربية المتحدة United Arab Emirates University

Bachelor of Science in Mechanical Engineering Model Study Plan (2022-2023 Cohort onwards)

For Students Admitted to the University from the Fall Semester Total Degree Credit hours: 147

	ester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	СН	Course type
Sem			Calculus I for Engineering		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	Semester		Calculus II for Engineering		College Requirement
		PHYS105	General Physics I		College Requirement		PHYS110	General Physics II		College Requirement
		PHYS135	General Physics Lab I		College Requirement	2	PHYS140	General Physics Lab II		College Requirement
e		ESPU107	Introduction to Academic English For Engineering		Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG230	Computer Programming		College Requirement
≍ (F:			General Chemistry I		Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	(Spring)	GENG215	Engineering Ethics		College Requirement
(, ,	un,	CHEM175	Chemistry Lab I for Engineering		College Requirement	(301118)	MECH200	Introduction to Engineering Drawing and Workshop		Specialization
				14					13	
		MATH2220/145	Linear Algebra for Engineering	3	College Requirement		MECH305	Mechanics of Materials	3	Specialization
N	2	MATH2210/270	Differential Equations for Engineering	3	College Requirement	4	MECH315	Geometric Modeling	2	Specialization
	5	GENG220	Engineering Thermodynamics	3	College Requirement	4	MECH340	Fluid Mechanics	3	Specialization
e (-		CIVL240	Statics	3	Specialization	(G ·)	MECH348	Fluid Mechanics Lab	1	Specialization
≥ (⊦a	all)	MECH210	Measurement and Instrumentation lab	1	Specialization	(Spring)	ELEC372	Electro-Mechanical Devices	2	Specialization
•	. ,	MECH240	Introduction to Computing Lab in ME	1	Specialization	1.1. 0/	MECH384	Mathematics for Mech. Eng.	3	Specialization
				14					14	
		STAT210	Probability and Statistics	3	College Requirement		MECH306	Manufacturing Processes	3	Specialization
m [Applied Thermodynamics		Specialization	6	MECH310	Dynamics		Specialization
-			Engineering Materials		College Requirement		MECH426	Thermofluid System Design & Analysis	3	Specialization
۵ ۲	. 11.		Machine Design I		Specialization	10	MECH412	Machine Design II		Specialization
≻ (⊦a	all)	MECH411	Heat Transfer	3	Specialization	(Spring)	MECH350	Introduction to Mechatronics		Specialization
•	'						MECH430	Thermal Engineering Lab	1	Specialization
				15					16	
			Engineering Economics		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)		MECH495	Industrial Training	15	Internship
4			Dynamic Systems & Control		Specialization	8				
Le l			Kinematics Design of Machinery		Specialization	0			-	
9 (E-			Introduction to Computer Aided Manufacturing		Specialization	(Corring)			-	
~ (гe			Design and Manufacturing Lab		Specialization	(Spring)			+	
		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)				-	
-				15			1.1501.500		15	6 1 H H
			Design and Critical Thinking in Mechanical Engineering Dynamic Systems and Control Lab		Gen Ed Course (Cluster 1: Area 4: Critical Thinking) Specialization	4.0	MECH590 GESU121	Capstone Engineering Design Project Sustainability		Specialization Gen Ed Course (Cluster 3: Area 2: Sustainability)
10 C					Gen Ed Course (Cluster 2: Area 4: Islamic Culture)	10				
a		GEIT112	Islamic Culture/Biography of the Prophet "Sira" Fourth Industrial Revolution		Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)	-	Elective MECH540	Student choice Selected Topics in Design & Manufacturing		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts) Major Elective
9 (F:		GEI112 HS\$105	Fourth Industrial Revolution Emirates Studies		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution) Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(Spring)	MECH540 MECH532	Design of Mechatronics Systems		Major Elective Major Elective
	anj		Air Conditioning Systems		Gen Ed Course (Cluster 2: Area 3: Emirates Society) Major Elective	(Shing)	MECH032	Design of Mechanonics Systems	13	Major Elective
		MECHD13	An conditioning systems	3	major elective				_	

Bachelor of Science in Mechanical Engineering Model Study Plan (2022-2023 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 147

Semes	ter	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	E Course type
		MATH1110/130	Calculus I for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH1120/135	Calculus II for Engineering	3	College Requirement
- 1		PHYS105	General Physics I	3	College Requirement	2	PHYS110	General Physics II	3	College Requirement
	1	PHYS135			College Requirement	2	PHYS140	General Physics Lab II		College Requirement
ë (c	· • •	ESPU107	Introduction to Academic English For Engineering	ε	Gen Ed Course (Cluster 1: Area 2: English Communication)	/- IIN	GENG230	Computer Programming	3	College Requirement
≊ (Spri	ng)	CHEM111			Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	(Fall)	GENG215	Engineering Ethics		College Requirement
V - 1-	0,	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	(.)	MECH200	Introduction to Engineering Drawing and Workshop	1	Specialization
				14					13	
	1	MATH2220/145	Linear Algebra for Engineering	3	College Requirement		MECH305	Mechanics of Materials	3	Specialization
N 2	1	MATH2210/270	Differential Equations for Engineering	3	College Requirement	4	MECH311	Applied Thermodynamics	3	Specialization
. 5		GENG220	Engineering Thermodynamics	3	College Requirement	4	MECH340	Fluid Mechanics	3	Specialization
ä		CIVL240	Statics	3	Specialization	/- ···	MECH348	Fluid Mechanics Lab	1	Specialization
≥ (Spri	ng)	MECH210	Measurement and Instrumentation lab	1	Specialization	(Fall)	MECH390	Engineering Materials	3	College Requirement
(MECH240	Introduction to Computing Lab in ME	1	Specialization	()	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
				14					16	
		STAT210	Probability and Statistics	3	College Requirement		MECH350	Introduction to Mechatronics	3	Specialization
m 5	i i	MECH306	Manufacturing Processes	3	Specialization	6	MECH411	Heat Transfer	3	Specialization
	1	MECH310	Dynamics	3	Specialization	0	MECH407	Machine Design I	3	Specialization
ë (c ·		MECH315	Geometric Modeling	2	Specialization	(= 11)	MECH417	Kinematics Design of Machinery	3	Specialization
≻ (Spri	ng)	ELEC372	Electro-Mechanical Devices	2	Specialization	(Fall)	MECH433	Introduction to Computer Aided Manufacturing	2	Specialization
V - 1-	0,	MECH384	Mathematics for Mech. Eng.	3	Specialization	(- /				
				16					14	
		GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)		MECH495	Industrial Training	15	Internship
 7		MECH409	Dynamic Systems & Control	3	Specialization	8				
2 /	i i	MECH412	Machine Design II	3	Specialization	0				
ë (c ·		MECH426	Thermofluid System Design & Analysis	3	Specialization	(= 11)				
≍ (Spri	ng)	MECH430	Thermal Engineering Lab	1	Specialization	(Fall)				
(MECH440	Design and Manufacturing Lab	1	Specialization	()				
				14					15	
		MECH585	Design and Critical Thinking in Mechanical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)		MECH590	Capstone Engineering Design Project	3	Specialization
10 Q	i i	MECH450	Dynamic Systems and Control Lab	1	Specialization	10	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
- 9	1	ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)	10	Elective	Student choice	3	General Education Choice
ë, .		MECH516	Energy Management	3	Major Elective	/- ···	MECH513	Air Conditioning Systems	3	Major Elective
≥ (Spri	ng)	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)	(Fall)	MECH545	Maintenance Engineering	3	Major Elective
, sp		H\$\$105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)	(1	
				16					15	

Bachelor of Science in Mechanical Engineering Model Study Plan (2023-2024 Cohort onwards)

For Students Admitted to the University from the Fall Semester Total Degree Credit hours: 132

Semester	Course Code	Course Title	CH		Semester	Course Code	Course Title	СН	
	MATH130	Calculus I for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		MATH135	Calculus II for Engineering	3	College Requirement
H 1	PHYS105	General Physics I		College Requirement	2	PHYS110	General Physics II		College Requirement
H H	PHYS135	General Physics Lab I		College Requirement	2	PHYS140	General Physics Lab II		College Requirement
ea	ESPU107	Introduction to Academic English For Engineering		Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG230	Computer Programming		College Requirement
≻ (Fall)	CHEM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	(Spring)	GENG215	Engineering Ethics	2	College Requirement
(ran)	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	(Shing)	MECH200	Introduction to Engineering Drawing and Workshop	1	Specialization
	HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)		ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
			17					16	
	MATH140	Linear Algebra I	3	College Requirement		MECH305	Mechanics of Materials	3	Specialization
	MATH275	Ordinary Differential Equations	3	College Requirement		MECH315	Geometric Modeling	2	Specialization
H 3	GENG220	Engineering Thermodynamics	3	College Requirement	4	MECH340	Fluid Mechanics	3	Specialization
	CIVL240	Statics	3	Specialization		MECH348	Fluid Mechanics Lab	1	Specialization
≻ (Fall)	MECH210	Measurement and Instrumentation lab	1	Specialization	(Spring)	ELEC372	Electro-Mechanical Devices	2	Specialization
(Fail)	MECH240	Introduction to Computing Lab in ME	1	Specialization	(Spring)	MECH384	Mathematics for Mech. Eng.	3	Specialization
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)		GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
			17					17	
Summer	MECH485	Intrenship I	1	Internship					
			1						
	STAT210	Probability and Statistics		College Requirement		MECH306	Manufacturing Processes		Specialization
m 5	MECH311	Applied Thermodynamics	3	Specialization	6	MECH310	Dynamics	3	Specialization
	MECH390	Engineering Materials		College Requirement	0	MECH426	Thermofluid System Design & Analysis		Specialization
۵) (F. II)	MECH407	Machine Design I	3	Specialization	10	MECH412	Machine Design II		Specialization
× (Fall)	MECH411	Heat Transfer		Specialization	(Spring)	MECH350	Introduction to Mechatronics		Specialization
. ,	GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)	(GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
			18					18	
Summer	MECH490	Intrenship II	1	Internship					
			1						
	MECH585	Design and Critical Thinking in Mechanical Engineering	2	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)		MECH590	Capstone Engineering Design Project	2	Specialization
	MECH409	Dynamic Systems & Control		Specialization	8	MECH450	Dynamic Systems and Control Lab		Specialization
N /	MECH417	Kinematics Design of Machinery		Specialization	ð	Elective	Student choice		Major Elective
e c	MECH433	Introduction to Computer Aided Manufacturing		Specialization		Elective	Student choice		Major Elective
ຶ (Fall)	MECH430	Thermal Engineering Lab		Specialization	(Spring)	Elective	Student choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)
(1 all)	MECH430 MECH440	Design and Manufacturing Lab		Specialization	(Spring)	LIULUITE	Storent choice	13	our so course prover a second indes and Fille Arts)

Bachelor of Science in Mechanical Engineering Model Study Plan (2023-2024 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 132

1 Presido Presido (Spring) Celevitaria (Spring) Cel	General Physics1 General Physics1 Berneral Physics1 bit [bit for Engineering General Chemistry] Chemistry Lab Ifor Engineering Immarks Studies Unser Algebra1 Ordiany Oldermotal Equations Ordiany Oldermotal Equations Statist Messurement and Instrumentation Jab Immoduction to Coupung Lab In ME	S Gin Ed Course (Custer 1: Are 5: Capititative Responsing) Collogins Requirement Collogins Requirement Collogins Requirement Collogins Requirement Collogins Area (Course) Collogins Collogins	2 (Fall) 4 (Fall)	MATH135 PHYS110 PHYS140 GENG230 GENG215 MECH200 ISLM101 MECH305 MECH311 MECH340 MECH390	General Physics Lab II Computer Programming Engineering Ethics Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sira" Mechanics of Materials Applied Thermodynamics Filuld Mechanics	3 1 3 2 1 3 16 3 3	Cellage Requirement Cellage Requirement Cellage Requirement Cellage Requirement Special attom General attom General attom General Cellage Requirement Special attom Special attom
1 Pristas 157/107 (Spring) CHM111 CHM115 CHM15 CHH	General PhysicsLeb 1 General PhysicsLeb 1 General Chemistry 1 General Gene	College Requirement Gond Educary Cluster J. Ken 3: English Communication) Gen Educary Cluster J. Ken 3: Magnal Sciences) Gen Educary Cluster J. Ken 3: Magnal Sciences) Gen Educary Cluster J. Ken 3: Densities Sciences Goldges Requirement College Requirement Goldges Goldges Requirement Goldges Gold	4	PHYS140 GENG230 GENG215 MECH200 ISLM101 MECH305 MECH311 MECH340	General Physics Lab II Computer Programming Engineering Ethics Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sira" Mechanics of Materials Applied Thermodynamics Filuld Mechanics	1 3 2 1 3 16 3 3	College Requirement College Requirement College Requirement Special Jation Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Special Jation Special Jation
 Spring) Spring) Spring) CHRM112 CHRM175 HISS103 CHRM175 HISS103 CHRM175 GEN220 GEN220 GEN220 GEN220 CIVL20 MECR210 MECR210 	Introduction to Academic English for Engineering General Chemistry Chemistry Lab For Engineering Univer Algebra 1 Ordinary Differential Equations Ordinary Differential Equations Sealed: Measurement and Instrumentation Jab Measurement and Instrumentation Jab	3 Gent 5 Course (Cutore 1: Are 2: A Citylia Communication) 4 Callage Text Area 1: Maria 1: M	4	GENG230 GENG215 MECH200 ISLM101 MECH305 MECH311 MECH340	Computer Programming Engineering Ethics Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sira" Mechanics of Materials Applied Thermodynamics Fluid Mechanics	3 2 1 3 16 3 3	College Requirement College Requirement Specialization Gen 65 Course (Cluster 2: Area 4: Islamic Culture) Specialization Specialization
 S (Spring) CHEMI11 CHEMIT5 HISTOR CHEMIT5 HISTOR <!--</td--><td>General Chemistry II Chemistry Lab Tec Expineering Enrizates Studies Unner Algebra I Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation Iab Inforduction to Computing Lab In ME</td><td>3 Gmt Groups (Dutre 3 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 4 Gmt Groups (Dutre 7 Jen</td><td>4</td><td>GENG215 MECH200 ISLM101 MECH305 MECH311 MECH340</td><td>Engineering Ethics Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sra" Mechanics of Materials Applied Thermodynamics Fluid Mechanics</td><td>2 1 3 16 3 3</td><td>College Requirement Specialization Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Specialization Specialization</td>	General Chemistry II Chemistry Lab Tec Expineering Enrizates Studies Unner Algebra I Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation Iab Inforduction to Computing Lab In ME	3 Gmt Groups (Dutre 3 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 3 Gmt Groups (Dutre 7 Jen 1: Marril Sience) 4 Gmt Groups (Dutre 7 Jen	4	GENG215 MECH200 ISLM101 MECH305 MECH311 MECH340	Engineering Ethics Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sra" Mechanics of Materials Applied Thermodynamics Fluid Mechanics	2 1 3 16 3 3	College Requirement Specialization Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Specialization Specialization
(Spring) (CHRIII'S (Spring) (CHRIII'S (Spring) (Spring) (CHRIII (Spring) (Spring) (CHRIII)	Chemistry Lab Infor Engineering Emirates Studies Linear Algebra I Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation lab Introduction to Computing Lab In ME	1 College Requirement 3 College Requirement 1 College Requirement 1 Specialization 1 Specialization	4	MECH200 ISLM101 MECH305 MECH311 MECH340	Introduction to Engineering Drawing and Workshop Biography of the Prophet "Sira" Mechanics of Materials Applied Thermodynamics Fluid Mechanics	1 3 16 3 3	Specialization Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Specialization Specialization
A 2000 A 200	Emirates Studies Unear Mygdra 1 Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation lab Introduction to Computing Lab Im ME	3 Gmid Ecure (Cluster 2: Area 3: Emirates Society) 3 College Requirement 3 College Requirement 3 College Requirement 3 College Requirement 1 Specialization 1 Specialization 1 Specialization	4	ISLM101 MECH305 MECH311 MECH340	Biography of the Prophet "Sira" Mechanics of Materials Applied Thermodynamics Fluid Mechanics	3 16 3 3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture) Specialization Specialization
3 (Spring) MATH140 MATH140 MATH140 GENG220 CIVL240 MECH210 MECH210	Linear Algebra I Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and instrumentation lab Introduction to Computing Lab in ME	College Requirement College Requirement College Requirement College Requirement Specialization Specialization Specialization Specialization		MECH305 MECH311 MECH340	Mechanics of Materials Applied Thermodynamics Fluid Mechanics	16 3 3	Specialization Specialization
3 GENG220 CIVI240 MECH2210 MECH2210 MECH2240	Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation Jab Introduction to Computing Lab in ME	3 College Requirement College Requirement Specialization Specialization Specialization Specialization Specialization		MECH311 MECH340	Applied Thermodynamics Fluid Mechanics	3	Specialization
3 GENG220 CIVI240 MECH2210 MECH2210 MECH2240	Ordinary Differential Equations Engineering Thermodynamics Statics Measurement and Instrumentation Jab Introduction to Computing Lab in ME	3 College Requirement College Requirement Specialization Specialization Specialization Specialization Specialization		MECH311 MECH340	Applied Thermodynamics Fluid Mechanics	3	Specialization
(Spring)	Engineering Thermodynamics Statics Measurement and Instrumentation lab Introduction to Computing Lab in ME	College Requirement Sepecialization Specialization Specialization Specialization		MECH340	Fluid Mechanics		
(Spring) MECH210 MECH210 MECH240	Statics Measurement and Instrumentation lab Introduction to Computing Lab in ME	3 Specialization 1 Specialization 1 Specialization				3	
(Spring) MECH210 MECH240	Measurement and Instrumentation lab Introduction to Computing Lab in ME	1 Specialization 1 Specialization	(Fall)	MECH390			Specialization
(Spring) MECH240	Introduction to Computing Lab in ME	1 Specialization	(Fall)		Engineering Materials	3	College Requirement
				GENG315	Engineering Economics		Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
GEIE222	Fundamentals of Innovation and Entrepreneurship		(1 411)	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
		3 Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)					
		17				18	
STAT210	Probability and Statistics	3 College Requirement					
MECH306	Manufacturing Processes	3 Specialization					
5 MECH310	Dynamics	3 Specialization					
MECH315	Geometric Modeling	2 Specialization	Summer	MECH485	Intrenship I	1	Internship
(Corring) ELEC372	Electro-Mechanical Devices	2 Specialization	Summer				
(Spring) ELEC372 MECH384	Mathematics for Mech. Eng.	3 Specialization					
MECH348	Fluid Mechanics Lab	1 Specialization					
		17				1	
MECH350	Introduction to Mechatronics	3 Specialization		MECH585	Design and Critical Thinking in Mechanical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
MECH411	Heat Transfer	3 Specialization	7	MECH409	Dynamic Systems & Control	3	Specialization
6 MECH411 MECH407	Machine Design I	3 Specialization	/	MECH412	Machine Design II	3	Specialization
(Fall) MECH417	Kinematics Design of Machinery	3 Specialization	(MECH426	Thermofluid System Design & Analysis	3	Specialization
Fall) MECH433	Introduction to Computer Aided Manufacturing	3 Specialization	(Spring)	MECH430	Thermal Engineering Lab		Specialization
()			(0,0,0,0)	Elective	Student choice	3	Major Elective
		15				16	
Course and a second							
Summer MECH490	Intrenship II	1 Internship					
		1					
MECH590	Capstone Engineering Design Project	3 Specialization					
10 8 MECH450	Dynamic Systems and Control Lab	1 Specialization					
MECH440		1 Specialization					
d (F = II) Elective		3 Major Elective					
		3 Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)					
GEIT112	Fourth Industrial Revolution	3 Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)					
		13					



جامعة الإمارات العربيـة المتحدة United Arab Emirates University

Bachelor of Science in Mechanical Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Fall Semester Total Degree Credit hours: 132

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	СН	Course type
	MATH130	Calculus I for Engineering	3	Specialization			Calculus II for Engineering		College Requirement
	PHYS105	General Physics I	3	College Requirement	2	PHYS110	General Physics II	3	College Requirement
1	PHYS135	General Physics Lab I	1	College Requirement	2	PHYS140	General Physics Lab II	1	College Requirement
	GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency		GENG230	Computer Programming	3	College Requirement
(Fall)	CHEM111	General Chemistry I		College Requirement	(Spring)	GENG215	Engineering Ethics	2	College Requirement
(i aii)	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	(Spring)	MECH200	Introduction to Engineering Drawing and Workshop	1	Specialization
	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity		MATH140	Linear Algebra I	3	College Requirement
			17					16	
	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10		MECH305	Mechanics of Materials	3	Specialization
2	MATH275	Ordinary Differential Equations	3	College Requirement		MECH315	Geometric Modeling	2	Specialization
3	GENG220	Engineering Thermodynamics	3	College Requirement	4	MECH340	Fluid Mechanics	3	Specialization
	CIVL240	Statics	3	Specialization		MECH348	Fluid Mechanics Lab	1	Specialization
(Fall)	MECH210	Measurement and Instrumentation lab	1	Specialization	(Spring)	ELEC372	Electro-Mechanical Devices	2	Specialization
(Fail)	MECH240	Introduction to Computing Lab in ME	1	Specialization	(Spring)	MECH384	Mathematics for Mech. Eng.	3	Specialization
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship		Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
			17					17	
Summor	MECH485	Intrenship I	1	Internship					
Summer	MLC/1403	increasing i	*	internanp					
			1						
	STAT210	Probability and Statistics	3	College Requirement			Manufacturing Processes		Specialization
5	MECH311	Applied Thermodynamics	3	Specialization	6	MECH310	Dynamics	3	Specialization
5	MECH390	Engineering Materials	3	College Requirement	0	MECH426	Thermofluid System Design & Analysis	3	Specialization
(= 11)	MECH407	Machine Design I	3	Specialization	(c ·)	MECH412	Machine Design II	3	Specialization
(Fall)	MECH411	Heat Transfer	3	Specialization	(Spring)	MECH350	Introduction to Mechatronics	3	Specialization
(-)	GENG315	Engineering Economics	3	Specialization	(1) 0/	Elective	Student choice	3	Gen. Ed. Theme 3: Innovation
			18					18	
c.									
Summer	MECH490	Intrenship II	1	Internship					
			1						
	MECH585	Design and Critical Thinking in Mechanical Engineering	3	Specialization		MECH590	Capstone Engineering Design Project	3	Specialization
7	MECH409	Dynamic Systems & Control		Specialization	8		Dynamic Systems and Control Lab		Specialization
/	MECH417	Kinematics Design of Machinery		Specialization	Õ		Student choice		Major Elective
	MECH433	Introduction to Computer Aided Manufacturing	3	Specialization			Student choice		Major Elective
(Fall)	MECH430	Thermal Engineering Lab	1	Specialization	(Spring)	Elective	Student choice		Gen. Ed. Theme 7 or 8 or 9 or 10

Bachelor of Science in Mechanical Engineering Model Study Plan (2025-2026 Cohort onwards)

For Students Admitted to the University from the Spring Semester Total Degree Credit hours: 132

Semester	Course Code	Course Title	СН	Course type
	MATH130	Calculus I for Engineering	3	College Requirement
	PHYS105	General Physics I	3	College Requirement
1	PHYS135	General Physics Lab I	1	College Requirement
	GEAE101	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency
(Spring)	CHEM111	General Chemistry I	3	Specialization
(Shime)	CHEM175	Chemistry Lab I for Engineering	1	College Requirement
	GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity
			17	
	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10
2	MATH275	Ordinary Differential Equations	3	College Requirement
3	GENG220	Engineering Thermodynamics	3	College Requirement
	CIVL240	Statics	3	Specialization
(Spring)	MECH210	Measurement and Instrumentation lab	1	Specialization
(Shi ji B)	MECH240	Introduction to Computing Lab in ME	1	Specialization
	GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship
			17	
	STAT210	Probability and Statistics	3	College Requirement
-	MECH306	Manufacturing Processes	3	Specialization
5	MECH310	Dynamics	3	Specialization
	MECH315	Geometric Modeling	2	Specialization
(Spring)	ELEC372	Electro-Mechanical Devices	2	Specialization
(Shime)	MECH384	Mathematics for Mech. Eng.	3	Specialization
	MECH348	Fluid Mechanics Lab	1	Specialization
			17	
	MECH411	Heat Transfer	3	Specialization
6	MECH407	Machine Design I	3	Specialization
0	MECH417	Kinematics Design of Machinery	3	Specialization
(= 11)	MECH433	Introduction to Computer Aided Manufacturing	3	Specialization
(Fall)	Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
(-)				
			15	
Summer	MECH490	Intrenship II	1	Internship
Summer	MECH450	increnship in	1	internship
			1	
	MECH590	Capstone Engineering Design Project	3	Specialization
8	MECH450	Dynamic Systems and Control Lab	1	Specialization
0	MECH440	Design and Manufacturing Lab	1	Specialization
(E . II)	Elective	Student choice	3	Major Elective
(Fall)	Elective	Student choice	3	Gen. Ed. Theme 3: Innovation
(.)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10

Semester	Course Code	Course Title	CH	Course type
	MATH135	Calculus II for Engineering	3	College Requirement
2	PHYS110	General Physics II		College Requirement
2	PHYS140	General Physics Lab II	1	College Requirement
	GENG230	Computer Programming	3	College Requirement
(Fall)	GENG215	Engineering Ethics	2	College Requirement
(i aii)	MECH200	Introduction to Engineering Drawing and Workshop	1	Specialization
	MATH140	Linear Algebra I	3	College Requirement
			16	
	MECH305	Mechanics of Materials		Specialization
4	MECH311	Applied Thermodynamics	3	Specialization
4	MECH340	Fluid Mechanics	3	Specialization
	MECH390	Engineering Materials	3	College Requirement
(Fall)	GENG315	Engineering Economics		College Requirement
(i all)	MECH350	Introduction to Mechatronics	3	Specialization
			18	
Summer	MECH485	Intrenship I		internship
			1	
-	MECH585 MECH409	Design and Critical Thinking in Mechanical Engineering Dynamic Systems & Control		Specialization Specialization
/	MECH409 MECH412	Machine Design II		Specialization
	MECH412 MECH426	Machine Design II Thermofluid System Design & Analysis		Specialization
(Spring)	MECH426 MECH430			Specialization
(Shi ji B)	Elective	Thermal Engineering Lab Student choice		Major Elective
	Elective	student choice	3	wajor Elective