



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

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

	Semester	Course Code	Course Title	СН		Semester	Course Code	Course Title	CH	Course type
		ESPU107	Introduction to Academic English For Engineering		Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG215	Engineering Ethics		College Requirement
	4	CHEM111	General Chemistry I		Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	2	PHYS110	General Physics II		College Requirement
7	1	CHEM175	Chemistry Lab I for Engineering		College Requirement		PHYS140	General Physics Lab II		College Requirement
œ		PHYS105	General Physics I		College Requirement		GENG220	Engineering Thermodynamics		College Requirement
×	(Fall)	PHYS135	General Physics Lab I		College Requirement	(Spring)	STAT210	Probability and Statistics	3	College Requirement
	(i aii)	MATH130	Calculus I for Engineering		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	(Spring)	MATH1120/135	Calculus II for Engineering	3	College Requirement
		ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		CHEM2706/270	Materials Science		Specialization
				17					18	
		MATH2210/270	Differential Equations for Engineering		College Requirement		ELEC315	Fundamentals of Microelec Devices	3	Specialization
0.1	2	MATH2220/145	Linear Algebra for Engineering		College Requirement		ECOM320	Probability and Random Processes	3	Specialization
100	3	ELEC305	Electric Circuits I		Specialization	4	ELEC325	Engineering Electromagnetics	3	Specialization
g		ELEC310	Electric Circuits I lab		Specialization		ELEC360	Signals & Systems	3	Specialization
×	(Fall)	ELEC335	Digital Logic Design		Specialization	(Spring)	ELEC380	Analytical Methods for Electrical Engineering		Specialization
	(1 411)	ELEC345	Digital Logic Design Lab		Specialization		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
		GENG230	Computer Programming	3	Specialization					
				17					18	
		ECOM360	Fundamentals of Communication Systems		Specialization		ECOM412	Electromagnetic Waves		Specialization
-00		ELEC451	Microprocessors		Specialization	6	ELEC461	Microprocessors Lab		Specialization
- 14	5	ELEC370	Electronic Circuits		Specialization		ECOM432	Data Communications & Networks	3	Specialization
g		ELEC375	Electronic Circuits Lab		Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
×	(Fall)	Elective	Student choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)	(Spring)	ELEC462	Computer Architecture & Organization	3	Specialization
	(1 411)	GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)	(3611118)	Elective	Student choice	3	Major Elective
				_			GBT112	Fourth Industrial Revolution		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
				16					17	
		ELEC495	Industrial Training	15	Internship		ELECS85	Design and Critical Thinking in Electrical Engineering		Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
4	7			_		8 (Caraina)	Elective	Student choice	3	Major Elective
₩	,						ECOM402	Communication Systems Lab	1	Specialization
تق	(E-II)			_			ECOM422	Digital Communication Systems	3	Specialization
_	(Fall)					(Spring)	Elective	Student choice	3	Major Elective
							HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
			,	15					16	
	۵	ELECS90	Capstone Engineering Design Project		Specialization					
~	9	ECOM451	Digital Signal Processing		Specialization					
(C)		ECOM461	Digital Signal Processing Lab		Specialization					
×	(Fall)	ELective	Student choice		Major Elective					
	(· an)	GESU121	Sustainability		Gen Ed Course (Cluster 3: Area 2: Sustainability)					
				13						

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

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

Se	emester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	СН	Course type
		ESPU107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG215	Engineering Ethics	2	College Requirement
		CHEM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS110	General Physics II	3	College Requirement
7	1	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	2	PHYS140	General Physics Lab II	1	College Requirement
ā		PHYS105	General Physics I	3	College Requirement		GENG220	Engineering Thermodynamics	3	College Requirement
9 /Cr	aring)	PHYS135	General Physics Lab I	1	College Requirement	(Fall)	STAT210	Probability and Statistics	3	College Requirement
(3)	oring)	MATH1110/130	Calculus I for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	(i aii)	MATH1120/135	Calculus II for Engineering	3	College Requirement
		ISLM100/ISLM101	Islamic Culture/Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		CHEM2706/270	Materials Science	3	College Requirement
				17					18	
			Differential Equations for Engineering	3	College Requirement		ELEC315	Fundamentals of Microelec Devices	3	Specialization
	_	MATH2220/145	Linear Algebra for Engineering	3	College Requirement		ECOM320	Probability and Random Processes	3	Specialization
. 5	3	ELEC305	Electric Circuits I	3	Specialization	4	ELEC325	Engineering Electromagnetics	3	Specialization
ā	-	ELEC310	Electric Circuits I lab	1	Specialization		ELEC360	Signals & Systems	3	Specialization
₿ /Sr	oring)		Digital Logic Design	3	Specialization	(Fall)	ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
(3)	Jilligj	ELEC345	Digital Logic Design Lab	1	Specialization	(i aii)	GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
		GENG230	Computer Programming	3	Specialization					
				17					18	
		ECOM360	Fundamentals of Communication Systems	3	Specialization	6 (Fall)	ECOM451	Digital Signal Processing	3	Specialization
m	5	ELEC451	Microprocessors	3	Specialization		ECOM461	Digital Signal Processing Lab	1	Specialization
_	,	ELEC370	Electronic Circuits	3	Specialization		ELEC461	Microprocessors Lab	1	Specialization
e (c	/a . \	ELEC375	Electronic Circuits Lab	1	Specialization		Elective	Student choice	3	Major Elective
≥ (Sr	oring)	ECOM412	Electromagnetic Waves	3	Specialization		Elective	Student choice	3	Major Elective
(- F		Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
							HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)
				16					17	
		ELEC495	Industrial Training	15	Internship		ELECS85	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	_					_	Elective	Student choice	3	
4	7					8	Elective	Student choice	3	Major Elective
듄	•					_	GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
9 /Cr	a =: i = a \					/Eall\	GESU121	Sustainability	3	
(2)	oring)					(Fall)				
	٠.									
				15					15	
		ELECS90	Capstone Engineering Design Project		Specialization					
5	9	ECOM432	Data Communications & Networks		Specialization					
듄	9	ECOM442	Data Communications & Networks Lab	1	Specialization					
Θ.			Computer Architecture & Organization	3	Specialization					
í (Sr	oring)		Communication Systems Lab	1	Specialization					
(2)	6/		Digital Communication Systems	3	Specialization					
				14	aprenanta.					

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

For Students Admitted to the University from the Fall Semester

					Total Degree Cred	dit hours: 13	2			
	Semester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	CH	Course type
		ESPU107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG215	Engineering Ethics	2	College Requirement
		CHEM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS110	General Physics II	3	College Requirement
=	1	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	(Spring)	PHYS140	General Physics Lab II	1	College Requirement
rear		PHYS105	General Physics I	3	College Requirement		STAT210	Probability and Statistics	3	College Requirement
	(Fall)	PHYS135	General Physics Lab I	1	College Requirement		MATH135	Calculus II for Engineering	3	College Requirement
1	(raii)	MATH130	Calculus I for Engineering		Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)		ISLM101	Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
		HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)					
				17					15	
		MATH140	Linear Algebra I	3	College Requirement		ELEC315	Fundamentals of Microelec Devices	3	Specialization
		MATH275	Ordinary Differential Equations	3	College Requirement	4	ECOM320	Probability and Random Processes	3	Specialization
7	- 3	ELEC305	Electric Circuits I	3	Specialization		ELEC325	Engineering Electromagnetics	3	Specialization
₩.		ELEC310	Electric Circuits Hab	1	Specialization	-	ELEC360	Signals & Systems	3	Specialization
	(Fall)	ELEC335	Digital Logic Design	3	Specialization	(Spring)	ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
1	(raii)	ELEC345	Digital Logic Design Lab	1	Specialization		CHEM270	Materials Science	3	Specialization
		GENG230	Computer Programming	3	Specialization					
				17					18	
	5	ECOM360	Fundamentals of Communication Systems	3	Specialization		ECOM412	Electromagnetic Waves	3	Specialization
		ELEC370	Electronic Circuits	3	Specialization	6	ELEC461	Microprocessors Lab	1	Specialization
ćΩ		ELEC375	Electronic Circuits Lab	1	Specialization		ECOM432	Data Communications & Networks	3	Specialization
æ		ELEC451	Microprocessors	3	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
œ.	(Fall)	GEIT112	Fourth Industrial Revolution		Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)	(Spring)	ELEC462	Computer Architecture & Organization	3	Specialization
	(i aii)	GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)	(Shiiig)	Elective	Student choice	3	Major Elective
		ELEC395	Artificial Intelligence Applications in Engineering Laboratory	1	Specialization		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)
				17					17	
		ELEC485	Intrenship I	1	Internship		ELECS85	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
4	7	ELEC490	Intrenship II	1	Internship	8	Elective	Student choice	3	Major Elective
4	,						ECOM402	Communication Systems Lab	1	Specialization
(ea	/= II)					(a .)	ECOM422	Digital Communication Systems	3	Specialization
>	(Fall)					(Spring)	Elective	Student choice		Major Elective
	,					(-1- 0)	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
				2					16	
		ELECS90	Capstone Engineering Design Project	3	Specialization			·		
Ġ	9	ECOM451	Digital Signal Processing	3	Specialization					
₩.		ECOM461	Digital Signal Processing Lab	1	Specialization					
ě	(Fall)	ELective	Student choice		Major Elective					
	(ii dii)	Elective	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)					
				13						

Bachelor of Science in Communication Engineering Model Study Plan (2023-2024 Cohort onwards)
For Students Admitted to the University from the Spring Semester

	For Students Admitted to the University from the Spring Semester										
	Total Degree Credit hours: 132										
	Semester	Course Code	Course Title	СН	Course type	Semester	Course Code	Course Title	CH	Course type	
		ESPU107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)		GENG215	Engineering Ethics	2	College Requirement	
		CHEM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	_	PHYS110	General Physics II	3	College Requirement	
τ.	1	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	2	PHYS140	General Physics Lab II	1	College Requirement	
5	_	PHYS105	General Physics I	3	College Requirement	_	STAT210	Probability and Statistics	3	College Requirement	
Year	(Spring)	PHYS135	General Physics Lab I	1	College Requirement	(Fall)	MATH135	Calculus II for Engineering	3	College Requirement	
•	(Shiiild)	MATH130	Calculus I for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	(Fall)	ISLM101	Biography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)	
		HSS105	Emirates Studies	3	Gen Ed Course (Cluster 2: Area 3: Emirates Society)						
				17					15		
		MATH140	Linear Algebra I	3	College Requirement		ELEC315	Fundamentals of Microelec Devices	3	Specialization	
		MATH275	Ordinary Differential Equations	3	College Requirement	4	ECOM320	Probability and Random Processes	3	Specialization	
, 2	3	ELEC305	Electric Circuits I		Specialization		ELEC325	Engineering Electromagnetics	3	Specialization	
rear.		ELEC310	Electric Circuits I lab	1	Specialization		ELEC360	Signals & Systems	3	Specialization	
æ	(Spring)	ELEC335	Digital Logic Design		Specialization	(Fall)	ELEC380	Analytical Methods for Electrical Engineering	3	Specialization	
	(Shiiilg)	ELEC345	Digital Logic Design Lab		Specialization	(i aii)	GENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)	
		GENG230	Computer Programming	3	Specialization						
				17					18		
		ECOM360	Fundamentals of Communication Systems		Specialization		ECOM451	Digital Signal Processing	3	Specialization	
m	_	ELEC451	Microprocessors		Specialization	_	ECOM461	Digital Signal Processing Lab	1	Specialization	
ear	5	ELEC370	Electronic Circuits		Specialization	6	ELEC461	Microprocessors Lab		Specialization	
ě		ELEC375	Electronic Circuits Lab		Specialization		Elective	Student choice		Major Elective	
>	(Spring)	ECOM412	Electromagnetic Waves		Specialization	(Fall)	Elective	Student choice	3	Major Elective	
	(Shiiig)		Student Choice		Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)	(1 411)	CHEM270	Materials Science	3	Specialization	
		ELEC395	Artificial Intelligence Applications in Engineering Laboratory		Specialization		GEIE222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 1: Innovation and Entrepreneurship)	
				17					17		
		ELEC485	Intrenship I	1	Internship		ELECS85	Design and Critical Thinking in Electrical Engineering		Gen Ed Course (Cluster 1: Area 4: Critical Thinking)	
-	7	ELEC490	Intrenship II	1	Internship	8	Elective	Student choice	3	Major Elective	
2	/					٥	Elective	Student choice	3	Major Elective	
Year							GEIT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)	
×	(Spring)					(Fall)	GESU121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)	
	(9p8)					()					
				2					15		
10	_	ELECS90	Capstone Engineering Design Project		Specialization						
1	9	ECOM432	Data Communications & Networks		Specialization						
rear	,	ECOM442	Data Communications & Networks Lab		Specialization						
×	(Caring)	ELEC462	Computer Architecture & Organization		Specialization						
	(Spring)	ECOM402	Communication Systems Lab		Specialization						
		ECOM422	Digital Communication Systems	3	Specialization						





Bachelor of Science in Communication 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		Semester	Course Code	Course Title	CH	Course type
		GEAE101	Academic English for Humanities and STEM		Gen. Ed. Theme 2: Academic Language Proficiency		GENG215	Engineering Ethics		College Requirement
	4	CHEM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)	2	PHYS110	General Physics II	3	College Requirement
7	1	CHEM175	Chemistry Lab I for Engineering	1	College Requirement	2	PHYS140	General Physics Lab II	1	College Requirement
<u></u>	(Fall)	PHYS105	General Physics I	3	College Requirement		MATH140	Linear Algebra I		College Requirement
ş		PHYS135	General Physics Lab I		College Requirement	(Spring)	MATH135	Calculus II for Engineering		College Requirement
	(1 411)	MATH130	Calculus I for Engineering		College Requirement	(Spring)	Elective	Student choice		Gen. Ed. Theme 7 or 8 or 9 or 10
		GEEM110	Contemporary Emirati Studies	3	Gen. Ed. Theme 1: UAE National Identity		GEIE222	Fundamentals of Innovation and Entrepreneurship		Gen. Ed. Theme 4: Entrepreneurship
				17					18	
		STAT210	Linear Algebra I		College Requirement		ELEC315	Fundamentals of Microelec Devices		Specialization
	_	MATH275	Ordinary Differential Equations	3	College Requirement		ECOM320	Probability and Random Processes	3	Specialization
~	3	ELEC305	Electric Circuits I		Specialization	4	ELEC325	Engineering Electromagnetics		Specialization
æ		ELEC310	Electric Circuits I lab		Specialization		ELEC360	Signals & Systems		Specialization
ş	(Fall)	ELEC335	Digital Logic Design		Specialization	(Spring)	ELEC380	Analytical Methods for Electrical Engineering		Specialization
	(1 411)	ELEC345	Digital Logic Design Lab		Specialization		CHEM270	Materials Science	3	Specialization
		GENG230	Computer Programming	3	Specialization					
				17					18	
		ECOM360	Fundamentals of Communication Systems		Specialization	6 (Spring)	ECOM412	Electromagnetic Waves	3	Specialization
	5 (Fall)	ELEC370	Electronic Circuits	3	Specialization		ELEC461	Microprocessors Lab	1	Specialization
m		ELEC375	Electronic Circuits Lab	1	Specialization		ECOM432	Data Communications & Networks	3	Specialization
æ		ELEC451	Microprocessors		Specialization		ECOM442	Data Communications & Networks Lab		Specialization
ş		ELEC290	Artificial Intelligence for Engineering	3	Gen. Ed. Theme 3: Innovation		ELEC462	Computer Architecture & Organization		Specialization
		GENG315	Engineering Economics	3	College Requirement	(Spring)	Elective	Student choice		Major Elective
							ELEC395	Artificial Intelligence Applications in Engineering Laborator	1	Specialization
				16					15	
		ELEC485	Intrenship I	1	Internship		ELECS85	Design and Critical Thinking in Electrical Engineering	3	Specialization
4	7	ELEC490	Intrenship II	1	Internship	8	Elective	Student choice	3	Major Elective
É	,					0	ECOM402	Communication Systems Lab	1	Specialization
ä	/= III					(a .)	ECOM422	Digital Communication Systems	3	Specialization
>	(Fall)					(Spring)	Elective	Student choice	3	
	,					(-)	Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
				2					16	
	_	ELECS90	Capstone Engineering Design Project	3	Specialization					
ďΩ	9	ECOM451	Digital Signal Processing	3	Specialization					
æ		ECOM461	Digital Signal Processing Lab	1	Specialization					
ş	(Fall)	ELective	Student choice		Major Elective					
	(raii)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10					
				13						