

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	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1	ENP107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	2	ENG215	Engineering Ethics	2	College Requirement
	CHM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS10	General Physics Lab I	1	College Requirement
	CHM175	Chemistry Lab For Engineering	1	College Requirement		PHYS40	General Physics Lab II	1	College Requirement
	PHYS105	General Physics I	3	College Requirement		ENG220	Engineering Thermodynamics	3	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		STAT10	Probability and Statistics	3	College Requirement
Year 2	MATH130	Calculus for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	4	MATH130/135	Calculus for Engineering	3	College Requirement
	ISLM100/ISLM101	Islamic Culture/Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		CHM270/270	Natural Science	3	College Requirement
	MATH210/270	Differential Equations for Engineering	3	College Requirement		ELEC115	Fundamentals of Microelectronic Devices	3	Specialization
	MATH210/245	Linear Algebra for Engineering	3	College Requirement		ECOM210	Probability and Random Processes	3	Specialization
	ELEC305	Electric Circuits I	3	Specialization		ELEC225	Engineering Electromagnetics	3	Specialization
Year 3	ELEC310	Electric Circuits Lab	1	Specialization	6	ELEC305	Signals & Systems	3	Specialization
	ELEC335	Digital Logic Design	3	Specialization		ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
	ELEC345	Digital Logic Design Lab	1	Specialization		ENG222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 3: Innovation and Entrepreneurship)
	ENG210	Computer Programming	3	Specialization		ECOM412	Electromagnetic Waves	3	Specialization
	ECOM360	Fundamentals of Communication Systems	3	Specialization		ELEC461	Microprocessors Lab	1	Specialization
Year 4	ELEC451	Microprocessors	3	Specialization	8	ECOM421	Microprocessors Lab	1	Specialization
	ELEC470	Electronic Circuits	3	Specialization		ECOM442	Data Communications & Networks	3	Specialization
	ELEC475	Electronic Circuits Lab	1	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
	ELEC485	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		ELEC462	Computer Architecture & Organization	3	Specialization
	ENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)		ELEC485	Student choice	3	Major Elective
Year 5	ELEC495	Industrial Training	15	Internship	9	ERT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
	ELEC590	Capstone Engineering Design Project	3	Specialization		ELEC485	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ECOM451	Digital Signal Processing	3	Specialization		ELEC490	Student choice	3	Major Elective
	ECOM461	Digital Signal Processing Lab	1	Specialization		ECOM422	Digital Communication Systems	3	Specialization
	ELEC490	Student choice	3	Major Elective		ERT112	Fourth Industrial Revolution	3	Major Elective
Year 6	ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)		ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 3: Emirati Society)

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

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1	ENP107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	2	ENG215	Engineering Ethics	2	College Requirement
	CHM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS10	General Physics Lab I	1	College Requirement
	CHM175	Chemistry Lab For Engineering	1	College Requirement		PHYS40	General Physics Lab II	1	College Requirement
	PHYS105	General Physics I	3	College Requirement		ENG220	Engineering Thermodynamics	3	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		STAT10	Probability and Statistics	3	College Requirement
Year 2	MATH130/130	Calculus for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	4	MATH130/135	Calculus for Engineering	3	College Requirement
	ISLM100/ISLM101	Islamic Culture/Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		CHM270/270	Natural Science	3	College Requirement
	MATH210/270	Differential Equations for Engineering	3	College Requirement		ELEC115	Fundamentals of Microelectronic Devices	3	Specialization
	MATH210/245	Linear Algebra for Engineering	3	College Requirement		ECOM210	Probability and Random Processes	3	Specialization
	ELEC305	Electric Circuits I	3	Specialization		ELEC225	Engineering Electromagnetics	3	Specialization
Year 3	ELEC310	Electric Circuits Lab	1	Specialization	6	ELEC305	Signals & Systems	3	Specialization
	ELEC335	Digital Logic Design	3	Specialization		ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
	ELEC345	Digital Logic Design Lab	1	Specialization		ENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	ENG210	Computer Programming	3	Specialization		ECOM451	Digital Signal Processing	3	Specialization
	ECOM360	Fundamentals of Communication Systems	3	Specialization		ECOM461	Digital Signal Processing Lab	1	Specialization
Year 4	ELEC451	Microprocessors	3	Specialization	8	ELEC461	Microprocessors Lab	1	Specialization
	ELEC470	Electronic Circuits	3	Specialization		ECOM442	Data Communications & Networks	3	Specialization
	ELEC475	Electronic Circuits Lab	1	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
	ECOM412	Electromagnetic Waves	3	Specialization		ELEC462	Computer Architecture & Organization	3	Specialization
	ELEC490	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		ENG222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 3: Innovation and Entrepreneurship)
Year 5	ELEC495	Industrial Training	15	Internship	9	ENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 3: Emirati Society)
	ELEC590	Capstone Engineering Design Project	3	Specialization		ELEC485	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ECOM432	Data Communications & Networks	3	Specialization		ELEC490	Student choice	3	Major Elective
	ECOM432	Data Communications & Networks Lab	1	Specialization		ECOM422	Digital Communication Systems	3	Specialization
	ELEC462	Computer Architecture & Organization	3	Specialization		ERT112	Fourth Industrial Revolution	3	Gen Ed Course (Cluster 1: Area 3: Fourth Industrial Revolution)
Year 6	ECOM462	Communication Systems Lab	1	Specialization		ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
	ECOM422	Digital Communication Systems	3	Specialization		ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 3: Emirati Society)

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 Credit hours: 132

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1	ENP107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	2	ENG215	Engineering Ethics	2	College Requirement
	CHM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS10	General Physics Lab I	1	College Requirement
	CHM175	Chemistry Lab For Engineering	1	College Requirement		PHYS40	General Physics Lab II	1	College Requirement
	PHYS105	General Physics I	3	College Requirement		ENG220	Engineering Thermodynamics	3	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		STAT10	Probability and Statistics	3	College Requirement
Year 2	MATH130	Calculus for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	4	MATH130	Calculus for Engineering	3	College Requirement
	ISLM100	Islamic Culture/Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		ISLM101	Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	MATH140	Linear Algebra I	3	College Requirement		ELEC115	Fundamentals of Microelectronic Devices	3	Specialization
	MATH175	Optimize Differential Equations	3	College Requirement		ECOM210	Probability and Random Processes	3	Specialization
	ELEC305	Electric Circuits I	3	Specialization		ELEC225	Engineering Electromagnetics	3	Specialization
Year 3	ELEC310	Electric Circuits Lab	1	Specialization	6	ELEC305	Signals & Systems	3	Specialization
	ELEC335	Digital Logic Design	3	Specialization		ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
	ELEC345	Digital Logic Design Lab	1	Specialization		ENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	ENG210	Computer Programming	3	Specialization		ECOM412	Electromagnetic Waves	3	Specialization
	ECOM360	Fundamentals of Communication Systems	3	Specialization		ELEC461	Microprocessors Lab	1	Specialization
Year 4	ELEC451	Microprocessors	3	Specialization	8	ECOM421	Microprocessors Lab	1	Specialization
	ELEC470	Electronic Circuits	3	Specialization		ECOM442	Data Communications & Networks	3	Specialization
	ELEC475	Electronic Circuits Lab	1	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
	ECOM412	Electromagnetic Waves	3	Specialization		ELEC462	Computer Architecture & Organization	3	Specialization
	ELEC490	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		ENG222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 3: Innovation and Entrepreneurship)
Year 5	ELEC495	Artificial Intelligence Applications in Engineering Laboratory	1	Specialization	9	ELEC485	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELEC485	Internship I	1	Internship		ELEC490	Student choice	3	Major Elective
	ELEC490	Internship II	1	Internship		ECOM422	Digital Communication Systems	3	Specialization
	ELEC590	Capstone Engineering Design Project	3	Specialization		ERT112	Fourth Industrial Revolution	3	Major Elective
	ECOM451	Digital Signal Processing	3	Specialization		ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
Year 6	ECOM461	Digital Signal Processing Lab	1	Specialization	9	ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 3: Emirati Society)
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					

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

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

Semester	Course Code	Course Title	CH	Course type	Semester	Course Code	Course Title	CH	Course type
Year 1	ENP107	Introduction to Academic English For Engineering	3	Gen Ed Course (Cluster 1: Area 2: English Communication)	2	ENG215	Engineering Ethics	2	College Requirement
	CHM111	General Chemistry I	3	Gen Ed Course (Cluster 3: Area 1: Natural Sciences)		PHYS10	General Physics Lab I	1	College Requirement
	CHM175	Chemistry Lab For Engineering	1	College Requirement		PHYS40	General Physics Lab II	1	College Requirement
	PHYS105	General Physics I	3	College Requirement		ENG220	Engineering Thermodynamics	3	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		STAT10	Probability and Statistics	3	College Requirement
Year 2	MATH130	Calculus for Engineering	3	Gen Ed Course (Cluster 1: Area 5: Quantitative Reasoning)	4	MATH130	Calculus for Engineering	3	College Requirement
	ISLM100	Islamic Culture/Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)		ISLM101	Geography of the Prophet "Sira"	3	Gen Ed Course (Cluster 2: Area 4: Islamic Culture)
	MATH140	Linear Algebra I	3	College Requirement		ELEC115	Fundamentals of Microelectronic Devices	3	Specialization
	MATH175	Optimize Differential Equations	3	College Requirement		ECOM210	Probability and Random Processes	3	Specialization
	ELEC305	Electric Circuits I	3	Specialization		ELEC225	Engineering Electromagnetics	3	Specialization
Year 3	ELEC310	Electric Circuits Lab	1	Specialization	6	ELEC305	Signals & Systems	3	Specialization
	ELEC335	Digital Logic Design	3	Specialization		ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
	ELEC345	Digital Logic Design Lab	1	Specialization		ENG315	Engineering Economics	3	Gen Ed Course (Cluster 2: Area 2: Social and Behavioral Sciences)
	ENG210	Computer Programming	3	Specialization		ECOM412	Electromagnetic Waves	3	Specialization
	ECOM360	Fundamentals of Communication Systems	3	Specialization		ELEC461	Microprocessors Lab	1	Specialization
Year 4	ELEC451	Microprocessors	3	Specialization	8	ECOM421	Microprocessors Lab	1	Specialization
	ELEC470	Electronic Circuits	3	Specialization		ECOM442	Data Communications & Networks	3	Specialization
	ELEC475	Electronic Circuits Lab	1	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
	ECOM412	Electromagnetic Waves	3	Specialization		ELEC462	Computer Architecture & Organization	3	Specialization
	ELEC490	Student choice	3	Gen Ed Course (Cluster 2: Area 1: Humanities and Fine Arts)		ENG222	Fundamentals of Innovation and Entrepreneurship	3	Gen Ed Course (Cluster 1: Area 3: Innovation and Entrepreneurship)
Year 5	ELEC495	Artificial Intelligence Applications in Engineering Laboratory	1	Specialization	9	ELEC485	Design and Critical Thinking in Electrical Engineering	3	Gen Ed Course (Cluster 1: Area 4: Critical Thinking)
	ELEC485	Internship I	1	Internship		ELEC490	Student choice	3	Major Elective
	ELEC490	Internship II	1	Internship		ECOM422	Digital Communication Systems	3	Specialization
	ELEC590	Capstone Engineering Design Project	3	Specialization		ERT112	Fourth Industrial Revolution	3	Major Elective
	ECOM451	Digital Signal Processing	3	Specialization		ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 2: Sustainability)
Year 6	ECOM461	Digital Signal Processing Lab	1	Specialization	9	ERT121	Sustainability	3	Gen Ed Course (Cluster 3: Area 3: Emirati Society)
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					
	ELEC490	Student choice	3	Major Elective					

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	Cr.	Course type	Semester	Course Code	Course Title	Cr.	Course type
Year 1 (Fall)	GEAE001	Academic English for Humanities and STEM	3	Gen. Ed. Theme 2: Academic Language Proficiency	2 (Spring)	GENG215	Engineering Ethics	2	College Requirement
	CHEN151	General Chemistry I	4	Gen. Ed. Theme 2: Academic Language Proficiency		PHYS140	General Physics I	4	College Requirement
	CHEN175	Chemistry Lab I for Engineering	1	College Requirement		PHYS140	General Physics Lab I	1	College Requirement
	PHYS105	General Physics I	3	College Requirement		MATH140	Linear Algebra I	3	College Requirement
	PHYS135	General Physics Lab I	1	College Requirement		MATH135	Calculus II for Engineering	3	College Requirement
Year 2 (Fall)	MATH130	Calculus I for Engineering	3	College Requirement	4 (Spring)	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10
	STEM135	Contemporary Global Studies	3	Gen. Ed. Theme 1: UAE National Identity		EENG252	Fundamentals of Innovation and Entrepreneurship	3	Gen. Ed. Theme 4: Entrepreneurship
	STAT210	Linear Algebra I	3	College Requirement		ELEC215	Fundamentals of Microelec. Devices	3	Specialization
	MATH275	Ordinary Differential Equations	3	College Requirement		ECOM235	Probability and Random Processes	3	Specialization
	ELEC305	Electric Circuits I	3	Specialization		ELEC325	Engineering Electromagnetics	3	Specialization
Year 3 (Fall)	ELEC310	Electric Circuits Lab	1	Specialization	6 (Spring)	ELEC340	Signals & Systems	3	Specialization
	ELEC335	Digital Logic Design	3	Specialization		ELEC380	Analytical Methods for Electrical Engineering	3	Specialization
	ELEC440	Digital Logic Design Lab	1	Specialization		ENMG270	Materials Science	3	Specialization
	ENMG230	Computer Programming	3	Specialization					
	ECOM450	Fundamentals of Communication Systems	3	Specialization		ECOM412	Electromagnetic Waves	3	Specialization
Year 4 (Fall)	ELEC370	Electronic Circuits	3	Specialization	8 (Spring)	ELEC461	Microprocessors Lab	1	Specialization
	ELEC370	Electronic Circuits Lab	1	Specialization		ECOM412	Data Communications & Networks	3	Specialization
	ELEC451	Microprocessors	3	Specialization		ECOM442	Data Communications & Networks Lab	1	Specialization
	ELEC290	Artificial Intelligence for Engineering	3	Gen. Ed. Theme 3: Innovation		ELEC442	Computer Architecture & Organisation	3	Specialization
	ENMG115	Engineering Economics	3	College Requirement		Elective	Student choice	3	Major Elective
Year 5 (Fall)	ELEC485	Internship I	1	Internship	8 (Spring)	ELEC395	Artificial Intelligence Applications in Engineering Laboratory	1	Specialization
	ELEC490	Internship II	1	Internship		ELEC385	Design and Critical Thinking in Electrical Engineering	3	Specialization
						Elective	Student choice	3	Major Elective
						ECOM402	Communication Systems Lab	1	Specialization
						ECOM422	Digital Communication Systems	3	Specialization
Year 5 (Fall)	ELEC590	Capstone Engineering Design Project	3	Specialization		Elective	Student choice	3	Major Elective
	ECOM451	Digital Signal Processing	3	Specialization		Elective	Student choice	3	Major Elective
	ECOM451	Digital Signal Processing Lab	1	Specialization		Elective	Student choice	3	Major Elective
	Elective	Student choice	3	Major Elective		Elective	Student choice	3	Gen. Ed. Theme 5: Sustainability
	Elective	Student choice	3	Gen. Ed. Theme 7 or 8 or 9 or 10					