جامعة ظفار
Dhofar University
Vision for the future

Dhofar University

College of Engineering

Department of Electrical and Computer Engineering

Bachelor of Science in Electrical and Electronics Engineering

Plan of Study

September 2025

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Bachelor Study Plan

1- Program Statistics by Course Category

Course Category	No. of Courses	Credit Hours	Percentage of Total Credit Hours
University Requirements	9	27	19.57%
College Requirements	11	30	21.74%
Program Core Requirements	28	64	46.38%
Program Elective Courses	6	14	10.14%
General Elective	1	3	2.17%
Total	55	138	100%

2- Classification of Requirements

2.1 University Requirements

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
ARAB 101	Academic Writing in Arabic	3	FPE 103C / FPEL 100	-
ENGL 101	Basic Academic English	3	FPE 103C	-
ENGL 102E	English for Engineering and Sciences I	3	ENGL 101	-
ENGL 203E	English for Engineering and Sciences II	3	ENGL 102E / ENGL 102C	-
ENGL 204	Advanced English for Academic Purposes and Research	3	ENGL 203E	-
ENGL 305	Advanced English Language and Communication Skills	3	ENGL 204	-
ENTR 200	Entrepreneurship: Innovation and Creativity	3	ENGL 203E	-
MATH 199	Calculus I	3	FPE 103C + FPM 101A + FPM 102B	-
SOCS 102	Omani Society	3	FPE 103C + FPEL 100	-
Total Credits		**27**		

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2.2 College Requirements

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
EECE 130	Computers and Programming I	3	FPE 103C + FPM 102B + FPT 102B	-
ENGR 100	Introduction to Engineering	3	FPE 103C + FPM 102B + FPT 102B	-
ENGR 105	Engineering Graphics	2	FPE 103C	-
ENGR 110	Engineering Workshop	1	FPE 103C + FPM 101A + FPM 102B	-
ENGR 300	Engineering Economy	3	ENGR 100 + MATH 199	-
MATH 200	Calculus II	3	MATH 199	-
MATH 205	Calculus III	3	MATH 200	-
MATH 210	Differential Equations	3	MATH 200	-
MATH 250E	Probability and Statistics	3	MATH 200	MATH 200
MATH 335	Mathematics for Science and Engineering	3	MATH 205 + MATH 210	-
PHYS 170	Fundamentals of Physics I	3	MATH 199 / MATH 103	MATH 199
Total Credits		**30**		

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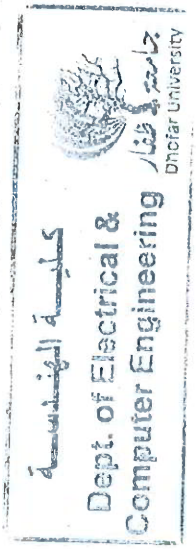
2.3 Program Major (Compulsory) Requirements

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
CHEM 130	Chemical Principles I	3		-
EECE 130L	Computers and Programming Laboratory	1	EECE 130	-
EECE 210	Electric Circuits I	3	PHYS 170	-

EECE 210L	Electric Circuits Laboratory I	1	EECE 210	-
EECE 211	Electric Circuits II	3	EECE 210	-
EECE 211L	Electric Circuits Laboratory II	1	EECE 211	EECE 211
EECE 212	Basic Electronics	3	EECE 210	EECE 210
EECE 212L	Basic Electronics Laboratory	1	EECE 212	EECE 212
EECE 220	Digital Systems Design	3	EECE 210	-
EECE 220L	Digital Systems Laboratory	1	EECE 220	-
EECE 221	Microprocessor Systems	3	EECE 220	-
EECE 221L	Microprocessor Laboratory	1	EECE 221	-
EECE 222	Discrete Mathematics for Engineers	3	MATH 205	-
EECE 230	Computers and Programming II	3	EECE 130	-
EECE 340	Signals and Systems	3	MATH 335 + EECE 210	MATH 335
EECE 342	Communication Systems	3	EECE 340	EECE 340
EECE 343	Electromagnetic Field Theory	3	MATH 335	MATH 335
EECE 350	Fundamentals of Electric Power Engineering	3	EECE 211	-
EECE 360	Control Systems	3	EECE 340	EECE 340
EECE 361	Power Systems I	3	EECE 211	-
EECE 362	Introduction to Electric Machines	3	EECE 211 + EECE 343	EECE 343
EECE 400	Practical Training	0		-
EECE 401	Final Year Project I	0	>90 credits	-



EECE 402	Final Year Project II	3	EECE 401	-
EECE 461	Instrumentation	3	EECE 221	-
MATH 277	Linear Algebra I	3	MATH 210	-
PHYS 170L	Introductory Physics Laboratory	1	PHYS 170	PHYS 170
PHYS 210	Fundamentals of Physics II	3	PHYS 170 / MATH 200	MATH 200
Total Credits		**64**		

2.4 Program Elective Courses

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
EECE 311	Data Structures and Algorithms	3	EECE 230 + EECE 130L	-
EECE 320	Computer Organization and Architecture	3	EECE 221	OEP 100B
EECE 330	Software Engineering	3	EECE 311	-
EECE 410	Advanced Computer Architecture	3	EECE 320	-
EECE 411	Computer System Analysis	3	EECE 320	-
EECE 412	Computer Graphics	3	EECE 320	-
EECE 413	Embedded System Design	3	EECE 221	-
EECE 414	Fault Tolerant Computing	3	EECE 220	-
EECE 422	Information Theory and Coding	3	MATH 335	-
EECE 424	Data Communication Networks	3	EECE 470	-
EECE 430	Design and Applications of Information Systems	3	EECE 330	-
EECE 432	Distributed Object-Oriented Systems	3	EECE 330	-

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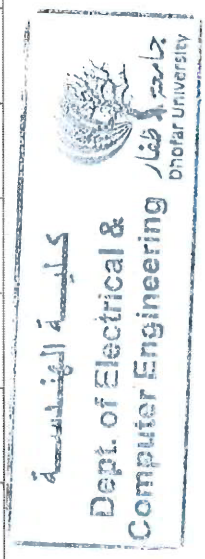
EECE 433	Database Management Systems	3	EECE 230	-
EECE 437	Optimizing Compilers	3	EECE 231 + EECE 320	-
EECE 439	Object-Oriented Systems	3	EECE 330	-
EECE 440	Fiber Optics	3	EECE 342	-
EECE 443	Microwave Communication Systems	3	EECE 342	-
EECE 444	Environmental Impacts of Energy Systems	3	ENGR 100	-
EECE 450	Artificial Intelligence	3	EECE 311	-
EECE 452	Neural Networks	3	EECE 311	-
EECE 460	Digital Controls	3	EECE 360	-
EECE 462	Power Electronics	3	EECE 212	-
EECE 463	Power Systems II	3	EECE 361	-
EECE 470	Computer Networks	3	MATH 335 + EECE 342	EECE 342
Total Credits		**12**		



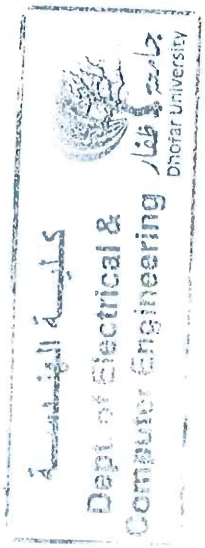
2.5 Lab Elective Courses

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
EECE 330L	Object Oriented Technologies Laboratory	1	EECE 230	-
EECE 342L	Communication System Laboratory	1	EECE 342	EECE 342
EECE 361L	Power Systems Simulation Laboratory	1	EECE 361	EECE 361
EECE 370L	Web Programming Laboratory	1	EECE 130	-
EECE 413L	Embedded System Design Laboratory	1	EECE 413	EECE 413

EECE 421L	Computer Interfacing Laboratory	1	< EECE 130 + EECE 220	EECE 220
EECE 422L	Information Theory and Coding Laboratory	1	EECE 422	EECE 422
EECE 460L	Control Systems Laboratory	1	EECE 360	EECE 360
Total Credits		2		

2.6 General Elective Courses

Course Code	Course Title	Credit Hours	Prerequisite	Co-requisite
00XXX	General Elective	3	As per the course	-
Total Credits		**3**		



3- Study Plan

Year 1				
Course Code	**Course Title**	**Credit Hours**	**Prerequisite**	**University/ College/Major/Elective requirements**
Fall				
SOCS 102	Omani Society	3	< FPE 103C + < FPEL 100	U
ENGL 101	Basic Academic English I	3	< FPE 103C	U
MATH 199	Calculus I	3	< FPE 103C + < FPM 101A + < FPM 102B	U
PHYS 170	Fundamentals of Physics I	3	<= MATH 199 / < MATH 103	C
PHYS 170L	Introductory Physics Laboratory	1	<= PHYS 170	M
ENGR 105	Engineering Graphics	2	< FPE 103C	C

CHEM 130	Chemical Principles I	3		M
Total Credits		**18**		
	Spring			
EECE 130	Computers and Programming I	3	< FPE 103C + < FPM 102B + < FPT 102B	C
EECE 130L	Computers and Programming Laboratory	1	< EECE 130	M
EECE 210	Electric Circuits I	3	< PHYS 170	M
ENGL 102E	English for Engineering and Sciences I	3	< ENGL 101	U
ENGR 100	Introduction to Engineering	3	< FPE 103C + < FPM 102B + < FPT 102B	C
MATH 200	Calculus II	3	< MATH 199	C
ENGR 110	Engineering Workshop	1	< FPE 103C + < FPM 101A + < FPM 102B	C
Total Credits		**17**		
	Summer			
ENGL 203E	English for Engineering and Sciences II	3	< ENGL 102E / < ENGL 102C	U
MATH 205	Calculus III	3	< MATH 200	C
Total Credits		**6**		

Year 2				
Course Code	**Course Title**	**Credit Hours**	**Prerequisite**	**University/ College/Major/Elective requirements**
	Fall			
EECE 211	Electric Circuits II	3	< EECE 210	M
EECE 210L	Electric Circuits Laboratory I	1	< EECE 210	M

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EECE 220	Digital Systems Design	3	< EECE 210	M
EECE 230	Computers and Programming II	3	< EECE 130	M
EECE 222	Discrete Mathematics for Engineers	3	< MATH 205	M
PHYS 210	Fundamentals of Physics II	3	< PHYS 170 / <= MATH 200	M
EECE 211L	Electric Circuits Laboratory II	1	<= EECE 211	M
Total Credits		**17**		
	Spring			
EECE 212	Basic Electronics	3	<= EECE 210	M
EECE 212L	Basic Electronics Laboratory	1	<= EECE 212	M
EECE 220L	Digital Systems Laboratory	1	< EECE 220	M
EECE 221	Microprocessor Systems	3	< EECE 220	M
MATH 250E	Probability and Statistics	3	<= MATH 200	C
MATH 210	Differential Equations	3	< MATH 200	C
ENTR 200	Entrepreneurship: Innovation and Creativity	3	< ENGL 203E	U
Total Credits		**17**		
	Summer			
MATH 277	Linear Algebra I	3	< MATH 210	M
Total Credits		**3**		

Year 3				
Course Code	**Course Title**	**Credit Hours**	**Prerequisite**	**University/ College/Major/Elective requirements**
	Fall			
EECE 221L	Microprocessor Laboratory	1	< EECE 221	M

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EECE 343	Electromagnetic Field Theory	3	<= MATH 335	M
EECE 350	Fundamentals of Electric Power Engineering	3	< EECE 211	M
ENGL 204	Advanced English for Academic Purposes and Research	3	< ENGL 203E	U
ENGR 300	Engineering Economy	3	< ENGR 100 + < MATH 199	C
MATH 335	Mathematics for Science and Engineering	3	< MATH 205 + < MATH 210	C
Total Credits		**16**		
	Spring			
ENGL 305	Advanced English Language and Communication Skills	3	< ENGL 204	U
EECE 340	Signals and Systems	3	<= MATH 335 + < EECE 210	M
EECE 361	Power Systems I	3	< EECE 211	M
EECE 362	Introduction to Electric machines	3	< EECE 211 + <= EECE 343	M
EECE XXXL	Major Elective Laboratory	1		E
EECE XXX	Major Elective	3		E
Total Credits		**16**		
	Summer			
EECE 400	Practical Training	0		M
Total Credits		**0**		

Year 4				
Course Code	**Course Title**	**Credit Hours**	**Prerequisite**	**University/ College/Major/Elective requirements**
	Fall			
EECE 401	Final Year Project I	0	(>90credits)	M

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EECE 342	Communication Systems	3	<= EECE 340	M
ARAB 101	Academic Writing in Arabic	3	< FPE 103C / < FPEL 100	U
EECE XXX	Major Elective	3		E
EECE XXX	Major Elective	3		E
EECE 360	Control Systems	3	<= EECE 340	M
EECE XXXL	Major Elective Laboratory	1		E
Total Credits		**16**		
	Spring			
EECE 402	Final Year Project II	3	< EECE 401	M
EECE 461	Instrumentation	3	< EECE 221	M
EECE XXX	Major Elective	3		E
XXX	General Elective	3		E
Total Credits		**12**		

Total 138

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