



Study Plan

Program	Bachelor	College	Faculty of Engineering & Information Technology
Department	Refrigeration, Air Conditioning & Heating	PlanNum	2
Plan Year	2018	Plan Hours	165

First Year-First Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
BENG1111	Introduction to Engineering		1
BENG1311	Physics "1"		3
BENG1112	Physics "1" Lab		1
BENG1312	Mathematics "1"		3
BENG1211	Engineering Drawing		2
UNIV2202	Computer Skills		2
UNIV1212	language Arabic		2
UNIV1211	Quran and Its Sciences		2
Sum Of Hours			16

First Year-Second Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
UNIV1221	English Language "1"		2
UNIV1222	Research Methodology		2
BENG1321	Physics "2" Laboratory		3
BENG1121	Physics "2" Lab		1
BENG1322	Mathematics "2"		3
BENG1323	Engineering Chemistry		3
BENG1122	Engineering Chemistry Lab		1
BENG1221	Engineering Workshop and Industrial Safety		2
BENG1123	Computerized Mechanical Drawing	Engineering Drawing	1
Sum Of Hours			18

Third Year-First Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
UNIV3112	History of Jerusalem		1
UNIV3111	First Aid		1
BRACE3311	Numerical Analysis	Linear Algebra and its Applications	3
BRACE3312	Theory of Machines		3



BRACE3313	Heat Transfer	Fluid Mechanics	3
BRACE3111	Heat Transfer Lab		1
BRACE3212	Electrical Machines	Electronics	2
BRACE3113	Electrical Machines Lab		1
BRACE3211	Probability and Statistics		2
BRACE3112	Fluid Mechanics Lab	Fluid Mechanics	1
Sum Of Hours			18

Third Year-Second Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
BRACE3321	Machine Design	Theory of Machines	3
BRACE3221	Fundamentals of Refrigeration	Heat Transfer	2
BRACE3121	Fundamentals of Refrigeration Lab		1
BRACE3222	Control Application in Refrigeration and Air Condi		2
BRACE3122	Control Application in Refrigeration and Air Condi		1
BRACE3223	Instrumentation and Measurements	Electrical Machines	2
BRACE3224	Engineering Programming	Numerical Analysis	2
BRACE3123	Engineering Programming Lab		1
BRACE3225	Introduction to Environmental Engineering		2
UNIV3121	Intro to Islamic Jurisprudence		1
UNIV3122	Human Development		1
Sum Of Hours			18

Second Year-First Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
UNIV2211	English Language 2	English Language "1"	2
BENG2211	Technical English Language		2
BRACE2311	Differential Equations	Mathematics "2"	3
BRACE2312	Engineering Mechnaics		3
BRACE2313	Thermodynamics "1"		3
BRACE2314	Material Science and Technology		3
BRACE2211	Electrical Circuits	Physics "2" Laboratory	2
BRACE2111	Electrical Circuits Lab		1
Sum Of Hours			19

Second Year-Second Semester

Course Code	Course Name	Pre Request Course	Num Of Hours
BENG2121	Technical Report Writing		1



BRACE2321	Linear Algebra and its Applications	Differential Equations	3
BRACE2322	Strength of Materials		3
BRACE2323	Thermodynamics "2"	Thermodynamics "1"	3
BRACE2121	Thermodynamics Lab	Thermodynamics "1"	1
BRACE2324	Fluid Mechanics		3
BRACE2221	Electronics	Electrical Circuits	2
BRACE2122	Electronic Lab	Electrical Circuits	1
UNIV2221	Palestinian Studies		2
Sum Of Hours			19
Fifth Year-First Semester			
Course Code	Course Name	Pre Request Course	Num Of Hours
BRACE5213	Ventilation in Buildings		2
BRACE5311	Graduation Project "1"		3
BENG5311	Engineering Economics	Differential Equations	3
BRACE5211	Central Air Conditioning	Domestic, Commercial and Industrial Air Conditioni	2
BRACE5111	Central Air Conditioning Lab		1
BRACE5212	Heat Exchangers	Heat Transfer	1
Sum Of Hours			12
Fifth Year-Second Semester			
Course Code	Course Name	Pre Request Course	Num Of Hours
BENG5221	Engineering Project Management		2
BRACE5221	Maintainance and Troubleshooting of Refrigeration		2
BRACE5222	Central Heating		2
BRACE5223	Mechanical and Electrical Systems in Buildings		2
BRACE5321	Graduation Project "2"		3
Sum Of Hours			11
Fourth Year-First Semester			
Course Code	Course Name	Pre Request Course	Num Of Hours
UNIV4111	Health and Environment		1
BENG4111	Entrepreneurship and Innovation		1
BRACE4211	Energy and Renewable Energy	Thermodynamics "2"	2
BRACE4212	Fundamentals of Air Conditioning	Fundamentals of Refrigeration	2
BRACE4111	Fundamentals of Air Conditioning Lab		1
BRACE4213	Industrial Heating Processes		2



BRACE4214	Domestic, Commercial and Industrial Refrigeration	Fundamentals of Refrigeration	2
BRACE4113	Domestic, Commercial and Industrial Refrigeration		1
BRACE4215	Water and Sanitary Engineering	Fluid Mechanics	2
BRACE4216	Digital Electronics	Electronics	2
BRACE4112	Refrigeration and Air Conditioning Workshops	Engineering Workshop and Industrial Safety	1
Sum Of Hours			17
Fourth Year-Second Semester			
Course Code	Course Name	Pre Request Course	Num Of Hours
BENG4121	Ethics of the Profession		1
BRACE4221	Renewable Energy Applications in Refrigeration and	Energy and Renewable Energy	2
BRACE4222	.Industrial Automatic Control	Digital Electronics	2
BRACE4121	Industrial Automatic Control Lab		1
BRACE4223	Computer Application in Refrigeration and Air Cond	Fundamentals of Air Conditioning	2
BRACE4224	Domestic, Commercial and Industrial Air Conditioni	Fundamentals of Air Conditioning	2
BRACE4124	Domestic, Commercial and Industrial Air Conditioni	Fundamentals of Air Conditioning	1
BRACE4122	Commertial Refrigeration and Air Conditioning Work	Refrigeration and Air Conditioning Workshops	1
BRACE4123	Refrigeration and Air Conditioning in Automobiles		1
BRACE4125	Loads Calculations and Air Conditioning Duct Desig	Fundamentals of Air Conditioning	1
BRACE4225	Practicum		2
UNIV4121	hadith		1
Sum Of Hours			17

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