

1-Department of Basic Engineering Sciences

Department of Basic Engineering Sciences

The Department of Basic Engineering Sciences offers a range of basic sciences courses relating to the major scientific engineering disciplines, so as to prepare the students to all educational programs of the faculty. Besides the Department offers advanced courses for postgraduate studies in all the departments.

The Basic Engineering Sciences Department provides courses including engineering mathematics, engineering mechanics, engineering physics, chemistry, geometrical projection (descriptive geometry) and engineering drawing. The department provides, also, the practical studies in the fields of engineering physics and chemistry.

Courses of human sciences and civil engineering are offered under the supervision of the Basic Engineering Sciences Department, and they will be coded with the abbreviation "HU" for human courses, and "CV" for civil engineering courses.

Basic Sciences Courses

Code No.	Course Title	Cr	Prerequisites
BE 101	Engineering Mathematics (1)	3	
BE 102	Engineering Mathematics (2)	3	BE 101
BE 103	Engineering Mathematics (3)	3	BE 102
BE 204	Engineering Mathematics (4)	3	BE 103
BE 205	Probabilities and Random Variables	3	BE 204
BE 206	Special Functions	3	BE 204
BE 207	Numerical Analysis	3	BE 204
BE 208	Applied Probability and Statistics	3	BE 204, CE 171
BE 111	Engineering Mechanics (1)	3	
BE 112	Engineering Mechanics (2)	2	BE 111
BE 113	Engineering Mechanics (3)	3	BE 112
BE 121	Engineering Physics (1)	3	
BE 122	Engineering Physics (2)	3	BE 121
BE 123	Modern Physics	3	BE 122
BE 131	General Chemistry	2	
BE 141	Eng. Drawing & Descriptive Geometry	3	
BE 141	Eng. Drawing & Descriptive Geometry	3	BE 141, *CE 100

* CE 100 Computer Fundamentals

Humanity Courses
Offered under the supervision of the
Department of Basic Engineering Sciences

Code No.	Course Title	Cr	Prerequisites
HU 111	English Language (1)	2	
HU 113	Technical Reports Writing and Presentation Skills	2	
HU 121	History of Engineering and Technology	2	
HU 122	Arabic Culture	2	
HU 131	Project Management	2	
HU 132	Accounting and Costs for Engineers	2	
HU 133	Engineering Statistics	2	
HU 134	Engineering Economy	2	
HU 135	Sales, Marketing and Communication Techniques	2	
HU 141	Ethics and Human Rights	2	
HU 142	Legislations and Contracts	2	
HU 143	Principles of Law	2	
HU 144	Communications Laws and Rules	2	
HU 151	Industrial Safety	2	
HU 161	Environment and Society	2	
HU 162	Human Computer Interaction	2	CE 100
HU 163	Astronomy and Space Sciences	2	
HU 164	Research Methods and Techniques	2	
HU 171	Psychology	2	
HU 172	Logic	2	

* CE 100 Computer Fundamentals

Civil Engineering Courses
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CV 251	Introduction to Civil engineering	3	BE 111
CV 252	Theory of Structures	3	BE 111
CV 253	Reinforced Concrete and Steel Structures	3	CV 252, CV 255
CV 254	Surveying	3	BE 101
CV 255	Testing of Materials	3	BE 121
CV 256	Soil Mechanics	3	BE 121, CV 252

SAMPLE STUDY PLAN

Year I

for all departments of the Faculty of Engineering

First semester

Code	Subject	Contact Hours			Credit Hours
		Lecture	Tutorial	Lab.	
BE 101	Engineering Mathematics (1)	3	2		3
BE 121	Engineering Physics (1)	3		2	3
BE 111	Engineering Mechanics (1)	3	2		3
BE 141	Eng. Drawing & Descriptive Geometry (1)	2	4		3
CE 100	Computer Fundamentals	2	1	2	3
HU 111	English Language	2		2	2
Total		15	9	6	17
		30			

Second semester

Code	Subject	Contact Hours			Credit Hours
		Lecture	Tutorial	Lab.	
BE 102	Engineering Mathematics (2)	3	2		3
BE 122	Engineering Physics (2)	3		2	3
BE 112	Engineering Mechanics (2)	2	2		2
BE 142	Eng. Drawing & Descriptive Geometry (2)	2	3	1	3
BE 131	General Chemistry	2		2	2
ME 170	Introduction to Manufacturing Processes	2		2	2
HU 121	History of Engineering and Technology	2			2
Total		16	7	7	17
		30			