

University General Education Requirements:

(a) University Required Courses (18 Cr.Hrs.)

No .	Course ID	Course Name	Credit Hours (Cr. Hr.)	Lec-Lab-Tut Hours	Pre-requisites
1	ARB111	Comm. Skills in Arabic Lang.	3	3-0-0	-----
2	ISL114	Islamic Culture	3	3-0-1	-----
3	INN311	Innovation and Entrepreneurship (English)	3	3-0-0	-----
4	COM111	IT Fundamentals	3	2-2-0	-----
5	STA112	Statistics	3	2-2-0	-----
6	ENV111	Environmental Science	3	3-0-0	-----

(b) University Elective Courses (6 Cr.Hrs.)

Long list see catalog page 378 (Biomedical Engineering)

1. a. College Required Courses (33 Cr. Hrs.)

		College Required Courses	33		
1	MTH121	Engineering Mathematics I	3	3-0-2	-----
2	PHY121	Engineering Physics I	4	3-2-2	-----
3	CHE101	Chemistry for Engineers	3	2-2-2	-----
4	MTH122	Engineering Mathematics II	3	3-0-2	MTH121
5	PHY122	Engineering Physics II	4	3-2-2	PHY121
6	MTH221	Engineering Mathematics III	3	3-0-2	MTH122
7	MTH222	Engineering Mathematics IV	3	3-0-2	MTH221
8	MTH321 ELE304	Engineering Mathematics V Probability and Random Variables	3	3-0-2	MTH222
9	ELE301	Report Writing and Presentation	3	3-0-1	-----
10	CIE 499	Training (Internship)	4		

(b) Program Required Courses (72 Cr. Hrs.)

		Program (Core)	72		
1	CIE101	Introduction to Civil Engineering	1	1-0-1	-----
2	CIE 112	Civil Engineering Drawing*	3	1-4-0	-----
3	CIE 201	Programming for Engineers	3	2-2-1	COM111
4	CIE 211	Statics	3	3-0-2	PHY121
5	CIE 212	Mechanics of Materials	3	3-0-2	CIE 211, MTH122
6	CIE 213	CAD for Civil Engineering*	3	1-4-0	CIE 112
7	CIE 222	Civil Engineering Materials	4	3-2-0	CHE101, CIE 212
8	CIE 241	Surveying I	3	2-2-0	MTH121
9	CIE 242	Transportation Engineering	3	3-0-0	CIE 241
10	CIE 331	Structural Analysis I	3	3-0-0	CIE 212, MTH222

11	CIE 332	Structural Analysis II	3	3-0-0	CIE 331
12	CIE 334	Design of Reinforced Concrete Structures	3	3-0-2	CIE 331, CIE 222
13	CIE 336	Computational Methods and Software Systems for Design of Structures	3	2-2-0	CIE 201, CIE 331
14	CIE 342	Highway Design	3	3-0-0	CIE 242, CIE 222
15	CIE 351	Fluid Mechanics	4	3-2-0	CIE 211
16	CIE 352	Environmental Engineering	3	3-0-0	ENV111, CHE101
17	CIE 361	Geotechnical Engineering I	3	2-2-0	CIE 212, CIE 222
18	CIE 371	Engineering Economics	3	3-0-0	MTH122, STA112
19	CIE 431	Design of steel structures	3	3-0-0	CIE 331
20	CIE 451	Hydrology & Water Resources	3	3-0-0	CIE 351
21	CIE 471	Specification and Quantity Surveying	3	3-0-0	CIE 213, CIE 334
22	CIE 473	Construction Management	3	3-0-0	CIE 334 Co: CIE 471
23	CIE 491	Graduation Project I	3		Completion 90 credit hours CIE 334, CIE 342, CIE 371, CIE 352, CIE 361
24	CIE 492	Graduation Project II	3		CIE 491

c) Program Electives Courses (12 Cr. Hrs.) The student will take three of the following Specialization Electives as approved by the academic advisor.

Table 5: List of specialization electives (to select three courses – 9 Cr. Hr.)

No.	Course ID	Course Name	Credit Hours (Cr. Hr.)	Lec-Lab-Tut Hours	Pre-requisites
1	CIE 481	Advanced Structural Analysis And Design	3	3-0-0	CIE 332,
2	CIE 482	Pre-Stressed Concrete	3	3-0-0	CIE 334, MTH222
3	CIE 483	Traffic Engineering	3	3-0-0	CIE 242
4	CIE 484	Pavement Materials and Design	3	3-0-0	CIE 222 CIE 242
5	CIE 485	Surveying II	3	3-0-0	CIE 241
6	CIE 486	Geotechnical Engineering II	3	3-0-0	CIE 361
7	CIE 487	Solid and Hazardous Waste Management	3	3-0-0	CIE 352

Free elective (to select one course – 3 Cr. Hr.): In addition to the specialization electives 1 – 7 listed above, students will have the opportunity to select a *free elective* from a different specialization such as project management and marketing management. The student's selection will require advisor's approval in addition to the requirements of course pre-requisites.