

قسم الهندسة المدنية
Civil Engineering Department

.I - Compulsory Courses:

A student from any of the three branches must complete at least (6 credits) i.e. two out of the following three courses:

	Subject	code	credits
1	Advanced Mathematics	GE 604	3
2	Advanced Statistics.	GE606	3
3	Numerical Methods in Engineering	GE 609	3

II - Elective Graduate Courses:

Civil Engineering Department Graduate Courses

Structure **BRANCH**

	Subject	code	credits
1	Theory of Elasticity.	CE601	3
2	Advanced dynamic of Structure.	CE602	3
3	Finite Element Method.	CE603	3
4	Theory of Elastic Stability.	CE 604	3
5	Advanced Reinforced Concrete Design.	CE605	3
6	Theory of Plates	CE 606	3
7	Space Metal Structures	CE607	3
8	Theory of Shells	CE 608	3
9	Multistory Building	CE609	3
10	Engineering Geology for Civil Engineers	CE 641	3
11	Advanced Geotechnical Engineering I	CE 642	3
12	Advanced Geotechnical Engineering II	CE 643	3
13	Advanced Foundation Engineering	CE 644	3
14	Geotechnical Investigation	CE 645	3

15	Rock Mechanics	CE 646	3
16	Solid Dynamics	CE 647	3
17	Concrete Technology I	CE 664	3
18	Concrete Technology II	CE 665	3
19	Special Topics.	CE 695 S	3

Water resources **BRANCH**

	Subject	code	credits
1	Pipe Conveyance and Network Systems Analysis	CE 620	3
2	Advanced Fluid Mechanics 1	CE 621	3
3	Advanced Fluid Mechanics 2	CE 622	3
4	Open Channel Flow	CE 623	3
5	Statistical Hydrology	CE 624	3
6	Advanced Surface and Ground Water Hydrology	CE 625	3
7	Applied Hydraulics	CE 626	3
8	Advanced Coastal Engineering	CE 627	3
9	Physical Modeling	CE 628	3
10	Transient Flow in Closed Conduits	CE 629	3
11	Advanced Applied Hydrology	CE630	3
12	Environmental Management	CE 670	3
13	Environmental Laboratory	CE 671	3
14	Water and wastewater Treatment Conveyance Systems	CE 672	3
15	Environmental Control Systems I	CE 673	3
16	Environmental Control Systems II	CE 674	3
17	Water and wastewater Treatment Technology	CE 675	3
18	Industrial Wastewater Treatment	CE 676	3
19	Water Desalinations	CE 677	3

20	Air Pollution Control	CE 678	3
21	Solid Waste Management	CE 679	3
22	Special Topics.	CE 696 W	3

Trans/Surveying **BRANCH**

	Subject	code	credits
1	Transportation System Analysis I	CE 611	3
2	Transportation System Analysis II	CE 612	3
3	Transportation System Evaluation	CE 613	3
4	Geometric Design Of Highways	CE 614	3
5	Highway And Road Operation	CE 615	3
6	Advanced Highway Materials	CE 616	3
7	Highway Pavement Design And Construction	CE 617	3
8	Construction Planning And Methods	CE 618	3
9	Advanced Photogrammetry	CE 631	3
10	Advanced Geodesy	CE 632	3
11	Remote Sensing, Data Analysis and Interpretation	CE 633	3
12	Advanced Geometric Data Adjustment	CE 634	3
13	Analytical Photogrammetry	CE 635	3
14	Route Surveying	CE 636	3
15	Special Topic.	CE 697 TS	3

All Branches

	Subject	code	credits
1	Seminar	CE 698	1
2	Thesis	CE 699	6