

الهندسة المدنية:

● برنامج هندسة الإنشاءات

1- المواد المطلوب إنجازها:-

Preparatory Phase

(Minimum 36 credits and one summer training course)

1. Basic Subjects : (Compulsory 30 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
MATH 101	Mathematics (I)		3	2	2	-
MATH 102	Mathematics (II)	MATH 101	3	2	2	-
BENG 103	Mechanics (I)		3	2	2	-
BENG 104	Mechanics (II)		3	2	2	-
BENG 105	Production Engineering (I)		3	2	-	4
CHM 106	Chemistry (I)		3	2	2	1
PHY 107	Physics (I)		3	2	2	1
PHY 108	Physics (II)		3	2	2	1
COMP 109	Introduction to Computer Programming		2	1	1	2
BENG 110	Engineering Drawing (I)		2	1	-	3
BENG 111	Engineering Drawing (II)	BENG 110	2	1	-	3

2. Basic Subjects : (Elective 2 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CHM 112	Chemistry (II)	CHM 106	2	1	1	2
COMP 113	Computer Programming	COMP 109	2	1	1	2
BENG 114	Production Engineering (II)	BENG 105	2	1	2	2

3. Humanity & Language Courses : (Compulsory 4 credits)

Code	Course title	.Pre. Req	Credits	.Lec	.Ex	.Lab
HUM 115	History of Engineering		2	2	-	-
LNG 116	(Technical English (I		2	2	-	-
LNG 117	(Technical English (II	LNG 116	2	2	-	-

4. Summer Training: (One complete training period – 5 credits)

STR (I)	Computer& workshop skills		5	-	-	60
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B.Sc. In Civil Engineering**(Basic phase)****(Construction & Construction Management Engineering)****(Minimum 70 credits and two summer training courses)****1. Basic Subjects : (Compulsory 60 credits)**

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 201	Engineering Graphics	BENG 111	3	1	4	-
CENG 202	Introduction to Civil Eng.		3	2	1	2
CENG 203	Mathematics (III)	MATH 102	3	2	2	-
CENG 204	Mathematics (IV)	CENG 203	3	2	2	-
CENG 205	Properties & Receptivity of Materials I		3	2	1	2
CENG 206	Strength of Material & Structure		3	2	2	-
CENG 207	Civil Engineering Mechanics	BENG 104	3	2	2	-
CENG 208	Surveying (I)		4	2	3	2
CENG 209	Surveying (II)	CENG 208	3	2	1	2
CENG 210	Geotechnical Engineering (I)	CENG 205	4	2	3	2
CENG 211	Fluid Mechanics		3	2	2	1
CENG 212	Hydraulics	CENG 211	3	2	2	1
CENG 213	Computer Application (I)	CENG 201	2	1	1	2
CENG 214	Computer Application (II)	CENG 216	2	1	1	2
CENG 215	Structural Analysis	CENG 206	3	2	2	-
CENG 216	Structural Design (I)	CENG 215	3	2	2	-
CENG 217	Reinforced Concrete Design	CENG 216	4	3	2	1
CENG 218	Structural Design (II)	CENG 216	3	2	2	-
CENG 219	Hydrology	CENG 212	2	2	1	-
CENG 220	Building Technology	BENG 111	3	2	2	-

2. Basic Subjects : (Elective 2 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 221	Properties & Receptivity of Materials (II)	CENG 205	3	2	2	-
CENG 222	Mechanical Engineering		3	2	1	-

CENG 223	Electrical Engineering	PHY 108	2	2	1	-
CENG 224	Civil Engineering Technology	CENG 202	3	2	1	-
CENG 225	Building Equipment		2	2	1	-

3. Humanity & Language Courses : (Compulsory 4 credits)

Code	Course title	.Pre. Req	Credits	.Lec	.Ex	.Lab
CENG 226	.Communication in Civil Engineering		2	2	-	-
CENG 227	Technical Report Writing		2	2	-	-
CENG 228	Foundation of rational thoughts		2	2	-	-
CENG 229	Engineering Geology		2	2	1	-
CENG 230	Engineering Economics		2	2	1	-

4. Summer Training: (Two complete training period – 10 credits)

STR (II)	Field Training	STR (I)	5	-	-	60
STR (III)	Practical Training	STR (II)	5	-	-	60

B.Sc. In Civil Engineering ***(Specialized phase)***

(Construction Engineering)

(Minimum 65 credits and one summer training course)

1. Specialized Engineering Courses : (Compulsory 47 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 301	Geotechnical Engineering (II)	CENG 210	3	2	2	1
CENG 302	Transportation Engineering		3	2	2	-
CENG 303	Structural Steel Design (I)	CENG 218	3	2	2	-
CENG 304	Foundation Design	CENG 301	3	2	2	-
CENG 305	Highway Engineering		3	2	2	-
CENG 306	Advanced Reinforced Concrete (I)	CENG 217	3	2	2	1
CENG 307	Advanced Reinforced Concrete (II)	CENG 306	3	2	2	1
CENG 308	Sanitary Waste water Systems	CENG 317	3	2	2	-
CENG 309	Structural Steel Design (II)	CENG 303	3	2	2	-
CENG 310	Roads & Runways Design		3	2	2	-
CENG 311	Municipal Engineering		3	2	2	-
CENG 312	Matrix analysis & Structure	CENG 218	3	2	2	-
CENG 313	Structure Steel Design (III)	CENG 309	3	2	2	-
CENG 314	Quantities and specifications		3	2	2	-
CENG 315	Tunnels and underground structures	CENG 301	3	2	2	-
CENG 316	Construction management		2	2	1	-

2. Specialized Engineering Courses : (Elective 6 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 317	Environmental Engineering		3	2	2	-
CENG 318	Decision Making in Urban		3	2	2	-
CENG 319	Civil Planning & Housing		3	2	2	-
CENG 320	Town Planning		3	2	2	-
CENG 321	Numerical Analysis	CENG 204	3	2	2	-
CENG 322	Quality Control		3	2	2	-
CENG 323	Water Engineering	CENG 219	3	2	2	-

3. B.Sc Projects : (Compulsory 8 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 324	B.Sc. Project Premium		3	-	4	-
CENG 325	B.Sc. Project	CENG 324	5	1	3	8

4. Humanity& Language Courses : (Compulsory 4 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
CENG 326	History of the build Environment		2	2	-	-
CENG 327	Legislations in Civil Engineering		2	2	-	-
CENG 328	Feasibility studies		2	2	-	-

5. Summer Training: (One complete training period – 5 credits)

Code	Course title	Pre. Req.	Credits	Lec.	Ex.	Lab.
STR (IV)	Field & Practical Training	STR (III)	5	-	-	60