

University requirement [Credit hours]	College Core requirement [Credit hours]	College Elective requirement [Credit hours]	Department requirement [Credit hours]	Free courses [Credit hours]	Total credit hours [Credit hours]
12	42	6	73	6	139

3rd Semester (Total credit hours 18)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
IC 101	Introduction to Islamic culture	2	-	-	2	-	-
ARAB 101	Linguistic skills	2	-	-	2	-	-
PHYS 131	General Physics	3	1	-	4	-	-
GE 104	Basics of Engineering Drawing	1	2	-	3	-	-
MATH 106	Integral Calculus	2	-	1	3	-	-
CHEM 111	General Chemistry	3	1	-	4	-	-

4th Semester (Total credit hours 18)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
IC 102	Islam and Community Building	2	-	-	2	IC 101	-
GE 105	Basics of Engineering and Technology	1	1	-	2	GE 104	-
MATH 107	Linear Algebra&Analytic Geometry	2	-	1	3	-	-
MATH 203	Differential and Integral Calculus	2	-	1	3	MATH 106	-
GE 201	Statics	2	-	1	3	MATH 106	-
GEO 285	Engineering Geology	1	-	1	2	-	-
++++ ++	Free Course-1	-	-	-	3	-	-

5th Semester (Total credit hours 17)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
IC 103	Economic System in Islam	2	-	-	2	IC 101	-
MATH 208	Differential Equations	2	-	1	3	MATH 203	-
GE 211	Introduction to Engineering Design-I	1	2	-	3	-	-
CSC 209	Computer Programming	2	1	-	3	MATH 107 MATH 203	-
GE 202	Dynamics	2	-	1	3	GE 201	-
CE 202	Mechanics of Materials	2	-	1	3	GE 201 MATH 203	-

6th Semester (Total credit hours 17)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
STAT 328	Probabilities and statistics	2	-	1	3	MATH 203	-
GE 213	Introduction to Engineering Design-2	1	1	-	2	GE 211	-
CE 205	Properties of Structural Materials	1	1	-	2	CE 202	-
CE 230	Fluid Mechanics	2	-	1	3	MATH 106 GE 201	-
CE 231	Fluid Mechanics Laboratory	-	1	-	1	-	CE 230
CE 212	Plane Surveying	1	1	1	3	MATH 107	-
CE 206	Structural Analysis – 1	2	-	1	3	CE 202	-

7th Semester (Total credit hours 17)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
ARAB 103	Arabic Writing	2	-	-	2	-	-
CE 306	Structural Analysis - 2	1	-	1	2	CE 206	-
CE307	Properties and Testing of Concrete	1	1	-	2	CE 205	-
CE 330	Hydraulics	1	-	1	2	CE 230	-
CE 353	Geotechnical Engineering	2	-	1	3	GEO 285	-
CE 354	Geotechnical Engineering Laboratory	-	1	-	1	-	CE 353
CE 343	Transportation and Traffic Engineering	2	-	1	3	MATH 203	-
ME 327	Building Thermal Loads	2	-	1	2	PHYS 131	-

8th Semester (Total credit hours 16)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
IC 104	Political System in Islam	2	-	-	2	IC 101	-
CE 318	Design of Reinforced Concrete Structures	3	-	1	4	CE 306 CE 307	-
CE 370	Water and Wastewater Engineering	3	-	1	4	CE 330	-
CE 375	Steel Structures Design	2	-	1	3	CE 306	-
+++ ++	College Elective – 1	-	-	-	3	-	-

9th Semester (Total credit hours 17)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
ECON 401	Engineering Economy	2	-	1	3	Pass 90 cr	-
CE 363	Foundation Engineering	2	-	1	3	CE 353 CE 318	-
CE 331	Hydrology	2	-	1	3	CE 330	-
CE 447	Highway Engineering	1	-	1	2	CE 205 CE 343	-
CE 4++	Civil Engineering Elective -1	-	-	-	3	-	-
CE 491	Senior Design Project - 1	1	2	-	3	Pass 100 cr	-

10th Semester for Summer Training students (Total credit hours 19)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
MGMT 402	Project Management	2	-	1	3	Pass 90 CR	-
CE 320	Construction Engineering	2	-	1	3	Pass 90 CR	-
CE 4++	Civil Engineering Elective -2	-	-	-	3	-	-
+++ +++	College Elective – 2	-	-	-	3	-	-
+++ +++	Free Course – 2	-	-	-	3	-	-
CE 492	Senior Design Project- 2	1	1	-	2	CE 491	-
GE 406	Summer Training	-	-	-	2	Pass 100 CR	-

10th Semester for COOP Training students (Total credit hours 19)

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
MGMT 402	Project Management	2	-	1	3	Pass 90 CR	-
CE 320	Construction Engineering	2	-	1	3	Pass 90 CR	-
+++ +++	College Elective – 2	-	-	-	3	-	-
+++ +++	Free Course – 2	-	-	-	3	-	-
GE 407	Cooperative Training	-	-	-	7	Pass 100 CR	-

• **Summer Training:**

- 1) Students are required to spend (8 – 12 weeks) of practical training in a relevant field in the summer break
- 2) Can be taken before or after the 10th semester, but students must pass 100 CR.
- 3) Student is not permitted to register for any other courses during the ST program.

• **Cooperative Training:**

- 1) Students are required to spend (6 – 7 months) of practical training in a relevant field.
- 2) Can be taken before or after the 10th semester, but students must pass 100 CR.
- 3) Student is not permitted to register for any other courses during the COOP program.

Civil Elective Courses

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
CE 317	Computer Applications	2	-	1	3	-	CE 491
CE 401	Concrete Technology	2	-	1	3	CE 307	-
CE 403	Advanced Reinforced Concrete Design	2	-	1	3	CE 318	-
CE 412	Advanced Steel Design	2	-	1	3	CE 375	-
CE 418	Structural Analysis – 3	2	-	1	3	CE 306	-
CE 443	Design of Pavement	2	-	1	3	CE 447	-
CE 448	Construction and maintenance of Highways	2	-	1	3	-	CE 447
CE 453	Advanced Geotechnical Engineering	2	-	1	3	CE 353	-
CE 457	Open Channel Hydraulics	2	-	1	3	CE 330	-
CE 458	Design of Water Structures	2	-	1	3	CE 330	-
CE 459	Groundwater Hydrology	2	-	1	3	CE 331	-
CE 462	Engineering Surveying	2	-	1	3	CE 212	-
CE 468	Rock Mechanics	2	-	1	3	CE 353	-
CE 469	Applications in Foundation Engineering	2	-	1	3	CE 363	-
CE 474	Design and Operation of Water and Wastewater Treatment Plants	2	-	1	3	CE 370	-
CE 475	Environmental Engineering	2	-	1	3	CE 370	-
CE 490	Selected Topics in Civil Engineering	2	-	1	3	-	CE 491

College Elective Courses

Course Code	Course Title	Credit hours				Pre-Req	Co-Req.
		LT	LB	TU	CR		
MATH 244	Linear Algebra	2	-	1	3	MATH 107	-
MATH 254	Numerical Methods	2	-	1	3	MATH 107 MATH 106	-
MATH 328	Applied Operation Research	2	-	1	3	MATH 107	-
MGMT 411	Development of Management skills	3	-	-	3	GE 211	-
GE 412	Value Engineering	2	-	1	3	GE 213	-