

Graduation Requirements

College Requirements

A total of 60 credit hours are required by the college as per the following table:

Subject Field	Semester	Course Code	Course Title	Cr. Hr.	Prerequisite
Compulsory Courses					
A total of 54 Cr. Hr. of the following compulsory courses					
BA	1	BA 113	Physics (1)	3	None
	2	BA 114	Physics (2)	3	BA 113
	2	BA 118	Chemistry	2	None
	1	BA 123	Mathematics (1)	3	None
	2	BA 124	Mathematics (2)	3	BA 123
	1	BA 141	Engineering Mechanics (1)	3	None
	3	BA 223	Mathematics (3)	3	BA 124
	4	BA 224	Mathematics (4)	3	BA 223
	5	BA 329	Probability & Statistics	3	BA 224
CC	1	CC 111	Introduction to Computer Science	2	None
	2	CC 114	Introduction to Programming	3	CC 111
EE	3	EE 238	Electrical Engineering Fundamentals	3	BA 124
	4	EE 365	Measurements & Instrumentation	3	EE 238
IM	1	IM 111	Industrial Relations	2	None
	2	IM 112	Manufacturing Technology	2	None
	8	IM 400	Practical Training	0	None
LH	1	LH 131	English for Special Purposes (1)	2	None
	2	LH 132	English for Special Purposes (2)	2	LH 131

	3	LH 231	Technical Report Writing	3	LH 132
ME	1	ME 151	Eng. Drawing and Descriptive Geometry	3	None
College Electives					
At least eight credit hours (6 cr. hr.) from the following list of the college electives					
IM	7	IM 531E	Human Resource Management	3	126 Cr. Hr.
	4	IM 535	International Operations Management	3	126 Cr. Hr.
NE	4	NE 264	Scientific Thinking	3	None
	4	NE 266	Creativity and innovation	3	None
	7	NE 465	Aesthetic Education and Art Appreciation	3	None

Department Requirements

A total of 120 credit hours are required by the department, which are distributed as follows:

- 114 credit hours of compulsory courses.
- A minimum of 6 credit hours of department restricted electives.

The required compulsory and restricted elective courses are listed in the following table.

Subject Field	Semester	Course Code	Course Title	Cr. Hr.	Prerequisite
Compulsory Courses					
A total of 114 Cr. Hr. of the following compulsory courses					
AR	7	AR 411	Architectural Design & Urban Landscape	3	CB 221
	6	CB 311	Construction Management 1	3	None
CB	6	CB 312	System Analysis for Construction Engineers	3	BA 329
	6	CB 413	Quality Control in Construction	3	BA 329
	7	CB 414	Construction Contracts and Law	3	None
	8	CB 415	Qty Surveying, Cost Estimating & Specs	3	CB 322
	7	CB 416	Construction Management 2	3	CB 311
	9	CB 517	Techniques of Planning, Scheduling & Project Control	3	CB 415
	3	CB 221	Construction Engineering Drawings	3	ME 151
	6	CB 322	Building Construction	3	CB 221
	9	CB 523	Methods & Equipment for Construction 1	3	CB 322
	10	CB 524	Methods & Equipment For Construction 2	3	CB 523
	8	CB 531	Technical Installations in Buildings	3	CB 322
	9	CB 532	Environmental & Sanitary Engineering	3	CB 382
	10	CB 533	Environmental Control & Energy in Buildings	3	CB 531

	3	CB 241	Structural Analysis 1	3	BA 141
	4	CB 242	Strength of Materials	3	CB 241, CB 251
	5	CB 343	Structural Analysis 2	3	CB 242
	8	CB 444	Design of Metallic Structures	3	CB 343
	3	CB 251	Testing of Materials	3	None
	5	CB 352	Construction Materials	3	CB 251
	6	CB 354	Design of Reinforced Concrete Structures 1	3	CB 343
	7	CB 455	Design of Reinforced Concrete Structures 2	3	CB 354
	10	CB 557	Inspection, Maint. & Repair of Structures	3	CB 444 or CB 455
	5	CB 361	Engineering Geology	3	None
	6	CB 462	Soil Mechanics	3	CB 361
	8	CB 463	Design & Const. of Earth Structures & Foundation	3	CB 462
	4	CB 271	Construction Surveying 1	3	BA 124
	7	CB 472	Transportation Engineering	3	CB 271
	8	CB 574	Highway Design and Construction	3	CB 472
	4	CB 281	Hydraulics for Civil Engineers	3	BA 114
	5	CB 382	Water Resources Engineering	3	CB 281
	7	CB 483	Irrigation & Drainage	3	CB 382
	9	CB 585	Design & Construction of Coastal Structures	3	CB 281
	9	CB 501	Graduation Project: Part (1)	3	S.S.*
	10	CB 502	Graduation Project: Part (2)	6	CB 501
IM	8	IM 400	Practical Training	0	None
ME	5	ME 255	Computer Aided Drafting (CAD)	3	CB 221
Department Restricted Electives					
At least two courses (6 Cr. Hr.) from the following list of the college electives					

* Senior Standing (Semesters 9 and 10 only).

Group X	9 – 10	CB 518	Financial Management & Accounting in const.	3	CB 517
	9 – 10	CB 525	Special Topics in Construction Engineering	3	CB 523
	9 – 10	CB 534	Special Topics in Environmental Engineering	3	CB 532
	9 – 10	CB 545	Structural Dynamics	3	CB 343
	9 – 10	CB 546	Special topics in Steel & Composite structures	3	CB 444
	9 – 10	CB 556	Concrete Technology	3	CB 352
	9 – 10	CB 558	Special topics in Reinforced Concrete structures	3	CB 455
	9 – 10	CB 564	Special Topics in Geotechnical Engineering	3	CB 463
	9 – 10	CB 573	Construction Surveying 2	3	CB 271
	9 – 10	CB 575	Special Topics in Transportation Engineering	3	CB 574
	9 – 10	CB 576	Special Topics in Railway Engineering	3	CB 472
	9 – 10	CB 584	Special Topics in Hydraulic & Coastal Structures	3	CB 483

Where the ten main course groups are:

- Group 0: The Training and Project Group – CB0
- Group 1: The Construction Management Group – CB1
- Group 2: The Construction Engineering Group – CB2
- Group 3: The Environmental Engineering Group – CB3
- Group 4: The Structural Analysis and Metallic Structures – CB4
- Group 5: The Construction Materials and Reinforced Concrete Structures – CB5
- Group 6: The Geotechnical Engineering Group – CB6
- Group 7: The Transportation Engineering Group – CB7
- Group 8: The Water Resources and Coastal Engineering Group – CB8
- Group X: The Construction and Building Engineering Elective Courses Group – CBX

