

Construction & Building Program Courses

| Year (1) Semester (1) | | | |
|------------------------------|----------------------------------|---------------------|--|
| COURSE | | PREREQUISITE | |
| BA113 | Physics 1 | NONE | |
| IM111 | Industrial Relations | NONE | |
| BA123 | Mathematics 1 | NONE | |
| BA141 | Engineering Mechanics 1 | NONE | |
| CC111 | Introduction To Computers | NONE | |
| ME151 | Engineering Drawing & Projection | NONE | |
| LH131 | ESP I | NONE | |

| YEAR (1) SEMESTER (2) | | | |
|------------------------------|--------------------------|---------------------|---------------------------|
| COURSE | | PREREQUISITE | |
| BA118 | Chemistry | NONE | |
| IM112 | Manufacturing Technology | NONE | |
| LH132 | ESP II | LH131 | ESP I |
| BA124 | Mathematics II | BA123 | Mathematics 1 |
| BA142 | Engineering Mechanics II | BA141 | Engineering Mechanics 1 |
| CC114 | Intro. To Programming | CC111 | Introduction To Computers |
| BA114 | Physics II | BA113 | Physics 1 |

| YEAR (2) SEMESTER (3) | | | |
|------------------------------|----------------------------|---------------------|----------------------------------|
| COURSE | | PREREQUISITE | |
| CB251 | Testing Of Materials | NONE | |
| CB221 | Construction Eng. Drawings | ME151 | Engineering Drawing & Projection |
| EE238 | Electrical Eng. Fundament | BA124 | Mathematics II |
| BA223 | Mathematics III | BA124 | Mathematics II |
| CB241 | Structural Analysis 1 | BA141 | Engineering Mechanics 1 |
| LH231 | Technical Report Writing | LH132 | ESP II |

| YEAR (2) SEMESTER (4) | | | |
|-----------------------|--------------------------------|---------------------|--|
| COURSE | | PREREQUISITE | |
| NE264 | Scientific Thinking | NONE | |
| CB271 | Construction Surveying 1 | BA124 | Engineering Mechanics 2 |
| CB281 | Hydraulics For Civil Engineers | BA114 | Physics II |
| BA224 | Mathematics IV | BA223 | Mathematics III |
| EE218 | Instrumentation & Measurements | EE238 | Electrical Eng. Fundament |
| CB242 | Strength Of Materials | CB241 & CB251 | Structural Analysis 1 & Testing Of Materials |

| YEAR (3) SEMESTER (5) | | | |
|-----------------------|-------------------------------|--------------|--------------------------------|
| COURSE | | PREREQUISITE | |
| CB361 | Engineering Geology | NONE | |
| BA329 | Probability & Statistics | BA124 | Engineering Mechanics 2 |
| CB382 | Water Resources Engineering | CB281 | Hydraulics For Civil Engineers |
| CB326 | Building Information Modeling | CB221 | Construction Eng. Drawings |
| CB343 | Structural Analysis 2 | CB242 | Strength Of Materials |
| CB352 | Construction Materials | CB251 | Testing Of Materials |

| YEAR (3) SEMESTER (6) | | | |
|-----------------------|---|--------------|----------------------------|
| COURSE | | PREREQUISITE | |
| CB354 | Design Of Reinforced Concrete Str. 1 | CB343 | Structural Analysis 2 |
| CB311 | Introduction To Construction Management | BA224 | Mathematics IV |
| CB313 | Quality Control In Construction | BA329 | Probability & Statistics |
| CB362 | Soil Mechanics | CB361 | Engineering Geology |
| CB312 | System Analysis For Const. Eng. | BA329 | Probability & Statistics |
| CB322 | Building Construction | CB221 | Construction Eng. Drawings |

| YEAR (4) SEMESTER (7) | | | |
|-----------------------|--|--------------|--------------------------------------|
| COURSE | | PREREQUISITE | |
| NE466 | Environmental Science & Tech. | NONE | |
| CB483 | Irrigation And Drainage | CB382 | Water Resources Engineering |
| CB455 | Design Of Reinforced Concrete Struc. 2 | CB354 | Design Of Reinforced Concrete Str. 1 |
| CB472 | Transportation And Traffic Engineering | CB271 | Construction Surveying 1 |
| AR411 | Architectural Design & Urban Landscape | CB221 | Construction Eng. Drawings |
| CC413 | Numerical Analysis | CC114 | Intro. To Programming |

| YEAR (4) SEMESTER (8) | | | |
|-----------------------|--|---------------|---|
| COURSE | | PREREQUISITE | |
| IM400CB | Practical Training | NONE | |
| CB444 | Design Of Metallic Structures | CB343 | Structural Analysis 2 |
| CB485 | Design & Construction Of Coastal Struc. | CB281 | Hydraulics For Civil Engineers |
| CB 474 | Highway Design And Construction | CB472 | Transportation And Traffic Engineering |
| CB 431 | Technical Installations In Buildings | CB322 | Building Construction |
| CB415 | Quantity Surveying, Cost Est. & Specs. | CB354 & CB322 | Design Of RC Str. 1 & Building Construction |
| CB463 | Design & Cons. Of Earth Struct. & Found. | CB354 & CB362 | Design Of RC Str. 1 & Soil Mechanics |

| YEAR (5) SEMESTER (9) | | | |
|-----------------------|---------------------------------------|----------------|--|
| COURSE | | PREREQUISITE | |
| CB501 | Project 1 | NONE | |
| CB516 | Construction Project Management 1 | CB 311 & CB322 | Introduction To Construction Management & Building Construction |
| CB514 | Construction Contracts & Law | CB 311 & CB415 | Introduction To Construction Management & Quantity Surveying, Cost Estimating & Specs. |
| CB523 | Methods & Equipment In Construction 1 | CB322 | Building Construction |
| CB532 | Environmental & Sanitary Engineering | CB382 | Water Resources Engineering |
| CB5XX | Department Elective Course 1 | VARIES | |

| YEAR (5) SEMESTER (10) | | | |
|------------------------|---|---------------|--|
| COURSE | | PREREQUISITE | |
| CB503 | Senior Project 2 | CB501 | Senior Project 1 |
| CB524 | Methods & Equipment In Construction 2 | CB523 | Methods & Equipment In Construction 1 |
| CB533 | Environmental Control & Energy In Buildings | CB431 | Technical Installations In Buildings |
| CB 519 | Construction Project Management 2 | CB516 & CB415 | Construction Project Management 1 & Quantity Surveying, Cost Estimating & Specs. |
| CB5XX | Department Elective Course 2 | VARIES | |

| DEPARTMENT ELECTIVE COURSES | | | |
|------------------------------------|---|----------------------|--|
| COURSE | | PREREQUISITE | |
| CB518 | Financial Management And Accounting In Construction | CB516 | Construction Project Management 1 |
| CB525 | Special Topics In Construction Engineering | CB523 | Methods & Equipment In Construction 1 |
| CB534 | Special Topics In Environmental Engineering | CB532 | Environmental & Sanitary Engineering |
| CB545 | Structural Dynamics | CB343 | Structural Analysis 2 |
| CB546 | Special Topics In Steel & Composite Structures | CB444 | Design Of Metallic Structures |
| CB556 | Concrete Technology | CB352 | Construction Materials |
| CB557 | Inspection, Maintenance & Repair | CB455 OR CB444 | Design Of RC Structures 2 Or Design Of Metallic Structures |
| CB558 | Special Topics In Reinforced Concrete Structures | CB455 | Design Of RC Structures 2 |
| CB564 | Special Topics In Geotechnical Engineering | CB463 | Foundation Analysis And Design |
| CB573 | Construction Surveying 2 | CB271 | Construction Surveying 1 |
| CB575 | Special Topics In Transportation Engineering | CB474 | Highway Design & Construction |
| CB576 | Special Topics In Railway Eng. | CB472 | Transportation & Traffic Engineering |
| CB584 | Special Topics In Hydraulic & Coastal Structures | CB483 | Irrigation And Drainage Engineering |