

# SCHEME

## B.TECH CIVIL ENGINEERING

(2006 Admission on wards )

**COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**B.TECH DEGREE COURSE IN CIVIL ENGINEERING**  
**Scheme of examinations**

**SEMESTER I&II**

Code No	Subject	Hrs/week		Int.	Uni v.	Total
		L	T/D/P			
CE/CS/EB/EC/EE/El/IT/ME/SE 101	Engineering Mathematics -I	3		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 102	Engineering. Physics	2		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 103	Engineering Chemistry	2		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 104	Engineering Mechanics	3	1	50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 105	Engineering Graphics	1	3	50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 106	Basic Civil & Mechanical Engineering	2		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 107	Basic Electrical & Electronics Engineering	2		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 108	Computer Programming	2		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 109	Technical Communication & Social Science	3		50	100	150
CE/CS/EB/EC/EE/El/IT/ME/SE 110	Computer Programming Lab	-	3	100		100
CE/CS/EB/EC/EE/El/IT/ME/SE 111	Workshops Practice	-	3	100		100
	TOTAL	20	10	650	900	1550

**SEMESTER III**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 301	Engineering. Mathematics -II	4		50	100	150
CE 302	Surveying -I	3	1	50	100	150
CE /EE 303	Strength of Materials	3	1	50	100	150
CE 304	Concrete Technology	4		50	100	150
CE 305	Fluid Mechanics -I	3	1	50	100	50
CE 306	Engineering Materials & Building Construction	4		50	100	150
CE 307	Survey Practicals -I	-	3	100		100
CE 308	Strength of Materials Lab	-	3	100		100
	TOTAL	21	9	500	600	1100

**STREAM A**

**SEMESTER IV**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 401A/B	Engineering Mathematics -III	4		50	100	150
CE 402A/B	Surveying -II	3	1	50	100	150
CE 403A/B	Mechanics of Structures	3	1	50	100	150
CE 404A/B	Engineering Geology & Seismology	4		50	100	150
CE 405A/B	Fluid Mechanics II	3	1	50	100	150
CE 406A/B	Construction Engineering & Management - I	3	1	50	100	150
CE 407 A	Survey Practicals -II	-	3	100		100
CE 408 A	Fluid Mechanics Lab	-	3	100		100
	TOTAL	20	10	500	600	1100

**SEMESTER V**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 501A/B	Engineering Mathematics -IV	4		50	100	150
CE 502A/B	Analysis of Structures -I	3	1	50	100	150
CE 503A/B	Design of Structures-I	3	1	50	100	150
CE 504A/B	Geotechnical Engineering -I	3	1	50	100	150
CE 505A	Transportation Engineering -I	4		50	100	150
CE 506A/B	Construction Engineering & Management -II	4		50	100	150
CE 507 A	Geotechnical Engineering Lab	-	3	100		100
CE 508 A	Transportation Engineering Lab	-	3	100		100
	TOTAL	21	9	500	600	1100

**SEMESTER VI**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 601A	Environmental Engineering -I	3	1	50	100	150
CE 602A/B	Analysis of Structures -II	3	1	50	100	150
CE 603A/B	Design of Structures-II	3	1	50	100	150
CE 604A/B	Geotechnical Engineering -II	3	1	50	100	150
CE 605A	Transportation Engineering -II	4		50	100	150
CE 606A/B	Water Resources & Irrigation Engineering	4		50	100	150
CE 607 A	CAD in Civil Engineering	-	3	100		100
CE 608 A	Environmental Engineering Lab	-	3	100		100
	TOTAL	20	10	500	600	1100

**SEMESTER VII**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 701A	Environmental Engineering - II	4		50	100	150
CE 702A/B	Prestressed Concrete Structures	3	1	50	100	150
CE 703A/B	Earthquake Engineering	3	1	50	100	150
CE 704A/B	Quantity Surveying and Valuation	3	1	50	100	150
CE 705A/B	Elective -I	3	1	50	100	150
CE 706A	Computer Applications in Civil Engg.		3	100		100
CE 707A	Construction and Structural Engg. Lab	-	3	100		100
CE 708A/B	Seminar	-	2	50		50
CE 709A	Project		2	50		50
	TOTAL	16	14	550	500	1050

**SEMESTER VIII**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 801A/B	Architecture & Town Planning	4		50	100	150
CE 802A/B	Construction Safety & Fire Engineering	4		50	100	150
CE 803A/B	Retrofitting and Rehabilitation of Structures	4		50	100	150
CE 804A/B	Elective -II	4	1	50	100	150
CE 805A	Building Technology and NDT Lab	-	3	100		100
CE 806A	Project		10	200		200
CE 807A	Viva Voce				100	100
	TOTAL	16	14	500	500	1000

**Grand Total**

**8000**

*Elective -I*

- 705 (a) Finite Element Method .  
 (b) Advanced Construction Techniques & Field Quality Control  
 (c) Advanced Foundation Engineering.  
 (d) Groundwater Engineering  
 (e) Highway & Airfield Pavement Design

*Elective -II*

- 804 (a) Bridge Engineering  
 (b) Cost Effectives Building Techniques.  
 (c) Ground Improvement Techniques  
 (d) Remote Sensing & GIS.  
 (e) Industrial Waste Engineering & Management

**STREAM B**

**SEMESTER IV**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 401A/B	Engineering Mathematics -III	4		50	100	150
CE 402A/B	Surveying -II	3	1	50	100	150
CE 403A/B	Mechanics of Structures	3	1	50	100	150
CE 404A/B	Engineering Geology & Seismology	4		50	100	150
CE 405A/B	Fluid Mechanics II	3	1	50	100	150
CE 406A/B	Construction Engineering and Management - I	4		50	100	150
CE 407 B	Survey Practicals -II	-	3	75		75
CE 408 B	Fluid Mechanics Lab	-	3	75		75
CE 409 B	Industrial/Field Training		6	75		75
	TOTAL	21	15	525	600	1125

**SEMESTER V**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 501A/B	Engineering Mathematics -IV	4		50	100	150
CE 502A/B	Analysis of Structure -I	3	1	50	100	150
CE 503A/B	Design of Structures-I	3	1	50	100	150
CE 504A/B	Geotechnical Engineering -I	3	1	50	100	150
CE 505 B	Transportation Engineering	4		50	100	150
CE 506A/B	Construction Engineering Management II	4		50	100	150
CE 507 B	Geotechnical Engineering Lab	-	3	75		75
CE 508 B	Transportation Engineering Lab	-	3	75		75
CE 509 B	Industrial/Field Training		6	75		75
	TOTAL	21	15	525	600	1125

**SEMESTER VI**

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 601B	Environmental Engineering	3	1	50	100	150
CE 602A/B	Analysis of Structure -II	3	1	50	100	150
CE 603A/B	Design of Structures-II	3	1	50	100	150
CE 604A/B	Geotechnical Engineering -II	3	1	50	100	150
CE 605B	MIS & Finance Management	4		50	100	150
CE 606A/B	Water Resources & Irrigation Engineering	4		50	100	150
CE 607 B	CAD in Civil Engineering	-	3	75		75
CE 608 B	Environmental Engineering Lab	-	3	75		75
CE 609 B	Industrial/Field Training		6	75		75
	TOTAL	20	16	525	600	1125

### SEMESTER VII

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 701 B	Contracts & Legal Aspects in Construction	5		50	100	150
CE 702A/B	Prestressed Concrete Structures	3	1	50	100	150
CE 703A/B	Earthquake Engineering	3	1	50	100	150
CE 704A/B	Quantity Surveying and Valuation	3	1	50	100	150
CE 705A/B	Elective -I	3	1	50	100	150
CE 706B	Computer Applications in Civil Engineering		3	75		75
CE 707 B	Construction & Structural Engg Lab		3	75		75
CE 708A/B	Seminar		2	50		50
CE 709 B	Industrial/Field Training		6	75		75
	TOTAL	17	18	525	500	1025

### SEMESTER VIII

Code No	Subject	Hrs/week		Int.	Univ.	Total
		L	T/D/P			
CE 801A/B	Architecture and Town Planning	4		50	100	150
CE 802A/B	Construction Safety & Fire Engineering	4		50	100	150
CE 803A/B	Retrofitting & Rehabilitation of Structures	4		50	100	150
CE 804A/B	Elective -II	4	1	50	100	150
CE 805B	Industrially Oriented Project	-	13	250		250
CE 806B	Viva Voce				100	100
	TOTAL	16	14	450	500	950

**Grand Total**

**8000**

#### *Elective -I*

- 705 (a) Finite Element Method .  
 (b) Advanced Construction Techniques & Field Quality Control  
 (c) Advanced Foundation Engineering.  
 (d) Groundwater Engineering.  
 (e) Highway & Airfield Pavement Design

#### *Elective -II*

- 804 (a) Bridge Engineering.  
 (b). Cost Effectives Building Techniques  
 (c) Ground Improvement Techniques  
 (d) Remote Sensing & GIS.  
 (e) Industrial Waste Engineering & Management

