| Comman Newsday and News | | | | | | | | | | | | | |
|---|---------------------|--|----------|----------|-----------|----------|-----------|----------|----------|---------|----------|---|--|
| Course Number and Name BCE 101 – BASIC CIVIL ENGINEERING | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Credits and Contact Hours | | | | | | | | | | | | | |
| 2 & 30 Course Coordinator's Name | | | | | | | | | | | | | |
| Mr.Meikandan | | | | | | | | | | | | | |
| Text Books and References | | | | | | | | | | | | | |
| TEXT BOOKS: | | | | | | | | | | | | | |
| Raju.K.V.B, Ravichandran .P.T, "Basics of Civil Engineering", Ayyappa Publications, Chennai, 2012. SeetharamanS., "Basic Civil Engineering", Anuradha Agencies, (1st ed. 2005). Dr.M.SPalanisamy, "Basic Civil Engineering" (3rded. 2000), TUG Publishers, New Delhi/Tata McGrawHill Publication Co., New Delhi REFERENCE BOOKS: | | | | | | | | | | | | | |
| Rangwala.S.C, "Engineering Materials", Charotar Publishing House, Anand, 41st Edition: 2014. National Building Code of India, Part V, "Building Materials", 2005 Ramesh Babu"A Textbook on Basic Civil Engineering" (1998). Anuradha Agencies, Kumbakonam. Ramamrutham S., "Basic Civil Engineering", Dhanpat Rai Publishing Co. (P) Ltd. (1999). | | | | | | | | | | | | | |
| | | Basic | Civil En | gineerir | ig", Dha | прат ка | i Publisi | ning Co. | (P) Lta. | (1999). | | | |
| Course Description Understand the basic concepts of civil engineering. | | | | | | | | | | | | | |
| | | equisit | | | | | | С | o-requi | sites | | | |
| +2 Level Maths & | Physic | cal Scie | nce | | | Physic | s I & C | hemist | ry I | | | | |
| required, elective, or selected elective (as per Table 5-1) | | | | | | | | | | | | | |
| Required | | | | | | | | | | | | | |
| Course Outcomes (COs) CO1 Will gain knowledge in Design, concept preparation | | | | | | | | | | | | | |
| CO1 | VVIII { | gain kr | iowieag | ge in De | sign, coi | ncept pi | eparati | on | | | | | |
| CO2 | Loading calculation | | | | | | | | | | | | |
| CO3 | Struc | Structural component design | | | | | | | | | | | |
| CO4 | Draw | Drawing and chart preparation | | | | | | | | | | | |
| CO5 | Will | Will understand the components of buildings. | | | | | | | | | | | |
| | | | | • | | | | | | | | | |
| CO6 | | | | | • | | | | y and se | ewage d | isposal. | | |
| Student Outcom | 1 | | | | | | | | - | | I . | | |
| COs/SOs | a | b | c | d | e | f | g | h | i | j | k | 1 | |
| CO1 H | | H | | | Н | | L | | | | | | |
| CO2 | | | | | Н | Н | | | | | | | |
| CO3 | | | | | | | Н | L | | | | | |
| CO4 | | | | | | | | | L | | | | |
| CO5 | | | | | | | | | | Н | L | | |
| CO6 | | | | | | | | | | | | | |

| List | of 7 | Горіс | s Cov | rered |
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UNIT I CIVIL ENGINEERING MATERIALS

8

Introduction - Civil Engineering - Materials - Stones - Bricks - Sand - Cement - Plain Concrete -

Reinforced Cement Concrete – Steel Sections – Timber – Plywood – Paints – Varnishes (simple examples only)

UNIT II SURVEYING

5

Surveying – objectives – classification – principles of survey-Measurement of distances – Chain survey – Determination of areas – Use of compass – Use of leveling Instrument – (simple examples only)

UNIT III FOUNDATION FOR BUILDING

5

Bearing Capacity of Soil – Foundation – Functions – Requirement of good foundations – Types of foundations – Merits & Demerits.

UNIT IV SUPERSTRUCTURE

7

Stone Masonry – Brick Masonry – Columns – Lintels – Beams – Roofing – Flooring – Plastering– White Washing (Simple examples only)

UNIT V MISCELLANEOUS TOPICS

5

Types of Bridges –Dam- purpose – selection of site - Types of Dams – Water Treatment & Supply sources – standards of drinking- distribution system. – Sewage Treatment (simple examples only)