

## DEPARTMENT OF CIVIL ENGINEERING

### COURSE OUTCOMES SUMMARY SHEET

#### 4<sup>TH</sup> SEM

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C211 Structural Analysis-I	C211.1	<b>Find</b> out indeterminacies of structures and be capable of differentiating the structure. (level 2, 4)
	C211.2	<b>Find</b> out and <b>apply</b> suitable method for <b>analysis</b> of structures to <b>evaluate</b> displacements. (level 3, 4, 6)
	C211.3	<b>Applying</b> strain energy method to find displacements of determinate structures. (level 2,3,4)
	C211.4	<b>Draw</b> Influence Line Diagram for functions such as reactions at the supports, bending moment and shear force at a section and capable of <b>evaluating</b> maximum values of these functions for various load positions.. (level 4,6)
	C211.5	<b>Analyze</b> suspension bridges and arches.(level 4)

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C212 HYDRAULICS ENGG	C212.1	<b>Analyze</b> turbulent flow in pipe and solve problems of pipe network. (level 4)
	C212.2	<b>Analyze</b> boundary layer flow and calculate drag and lift (level 4)
	C212.3	<b>Analyze</b> the flow in open channel (level 4)
	C212.4	<b>Apply</b> the dimensional analysis for fluid flow problem. (level 3)
	C212.5	<b>Analyze</b> the flow in turbines and pipes. (level 4)

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C213 Surveying & Geomatics	C213.1	<b>Discuss</b> the various aspects of Trilateration and Triangulation and <b>apply</b> the concepts to determine triangulation stations. <b>(level 2, 3)</b>
	C213.2	<b>Analyze</b> and <b>evaluate</b> the relevant computations, errors and observations. <b>(Level 2, 4)</b> <b>(level 4, 6)</b>
	C213.3	<b>Classify</b> and <b>apply</b> the knowledge of Tacheometry, various systems, instruments etc. <b>(level 2, 3)</b>
	C213.4	<b>Discuss</b> and <b>identify</b> the concepts of Photographic and aerial surveying and GPS. <b>(level 2,4)</b>
	C213.5	<b>Recognize</b> and <b>explain</b> the various equipment and methods used in hydrographic surveying. <b>(level 1, 2)</b>

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C214 Building Construction	C214.1	<b>Recognize</b> various parts of sub-structure with their functions. <b>(level 2)</b>
	C214.2	<b>Describe</b> Masonry, Doors, Windows and Lintels. <b>(level 2)</b>
	C214.3	<b>Identify</b> the suitability of various types of floors. <b>(Level 2,4)</b>
	C214.4	<b>Identify</b> the factors to be considered in construction of building and develop the construction practice and techniques. <b>(Level 4)</b>
	C214.5	<b>Recognize</b> construction procedure with safety procedure in various types of bonds. <b>(Level 2)</b>



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On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C215 Engg. Geology	C215.1	<b>Show</b> the Knowledge about Basic Concept of Geology. <b>(level 3)</b>
	C215.2	<b>Show</b> the knowledge of Mineralogy and Crystallography <b>(level 3)</b>
	C215.3	<b>Show</b> the knowledge of the petrology. <b>(level 3)</b>
	C215.4	<b>Interpret</b> the knowledge about Structural Geology. <b>(level 3)</b>
	C215.5	<b>Illustrate</b> the knowledge about the Engineering geology Landslides & Land subsidence. <b>(level 3)</b>

On successful completion of table the students should be able to

Course	COURSE OUTCOMES	
C216 Hydraulics lab	C216.1	<b>Differentiate</b> the one flow to another, <b>Compute</b> the discharge. <b>(level 4)</b>
	C216.2	<b>Computation</b> of coefficient of discharges & To <b>explain</b> hydraulic jump <b>(level 3,2)</b>
	C216.3	<b>Discuss</b> the discharge through spillway. <b>(level 2)</b>
	C216.4	<b>Show &amp; Illustrate</b> the performances and Characteristics of Turbines & Pumps <b>(level 3)</b>
	C216.5	<b>describe</b> the variation of friction factors. <b>(level 2)</b>



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Course	COURSE OUTCOMES	
C217-Surveying and Geomatics Lab	C217.1	<b>Demonstrate</b> the various practical aspects of Trilateration and Triangulation survey. <b>(level 3)</b>
	C217.2	<b>Compute</b> the relevant adjustment, errors and observations <b>(Level 3)</b>
	C217.3	<b>Apply</b> the knowledge of Tacheometry, various systems, instruments etc. <b>(Level 3)</b>
	C217.4	<b>Show</b> the expression and perform by Tangential method. <b>(Level 3)</b>
	C217.5	<b>Illustrate</b> the (Auto Level, Total station) instruments and familiar with their functioning. <b>(Level 3)</b>

On successful completion of table the students should be able to

Course	COURSE OUTCOMES	
C218 Engg. Geology	C218.1	<b>Show</b> the Knowledge about Basic Concept of Geology. <b>(level 3)</b>
	C218.2	<b>Show</b> the knowledge of Mineralogy and Crystallography <b>(level 3)</b>
	C218.3	<b>Show</b> the knowledge of the petrology. <b>(level 3)</b>
	C218.4	<b>Interpret</b> the knowledge about Structural Geology. <b>(level 3)</b>
	C218.5	<b>Illustrate</b> the knowledge about the Engineering geology Landslides & Land subsidence. <b>(level 3)</b>



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On successful completion of the lab the students should be able to

Course	COURSE OUTCOMES	
C219-Virtual Lab	C219.1	<b>Understand</b> the basic concept of hydraulic and fluid mechanics.
	C219.2	<b>Understanding</b> and learning opportunity of basic parts of the structure.
	C219.3	<b>Draw</b> maps on a suitable scale by using different surveying instrument.
	C219.4	<b>Knowledge</b> of the strength of materials so that student can perform different test on different materials.
	C219.5	Virtual lab provides remote experimentation which furnishes basic learning skill and built advanced concepts as well.