

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

Yerpedu-Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh - 517 619

1.	Title of the course	Structural Steel Design
2.	Course number	CE215L
3.	Structure of credits (L-T-P-C)	2-1-0-3
4.	New course/modification to	Modified with CE301L/BASIC STRUCTURAL STEEL DESIGN
5.	To be offered by	Civil and Environmental Engineering
6.	Proposed by	M Nithyadharan
7.	Prerequisite	None
8.	Course Objective(s): To introduce the limit state design philosophy and the design of steel structural elements as per Indian Standards.	
9.	Course Content: Mechanical properties of structural steel; Introduction to steel structural systems; Limit state design philosophy; Loads and load combinations; Bolted and welded connections; Design of tension members; Introduction to buckling and design of compression members; Design of simple and gusseted column bases; Design of laterally supported and unsupported beams.	
10.	Textbook(s): 1. Subramanian N, Design of Steel Structures: Limit States Method, Oxford University Press (2017). 2. Sairam K S, Design of Steel Structures, 2nd Edition, Pearson Publications (2015).	
11.	Reference(s): 1. Lam D, Ang T C and Chiew S P, Structural Steelwork: Design to Limit State Theory, 3rd Edition, CRC Press (2004).	