

Practical component of IPCC

Sl No.	Experiments
1	Design a Bolted Connections using M S Excel
2	Design a welded Connections using M S Excel
3	Design of Tension members using M S Excel
4	Design of Compression Members using MS Excel
5	Design of Simple Slab Base using M S excel
6	Design of Gusseted Base using M S Excel
7	Draw the following using AutoCAD. Column bases and Gusseted bases with bolted and welded connections.
8	Draw the following using AutoCAD. Roof Truss – Welded and Bolted
9	Draw the following using AutoCAD. Connections – Beam to beam, Beam to Column by Bolted and Welded Connections.
10	Draw the following using AutoCAD. Built-up Columns with lacings and battens.
11	Drawing of Gantry Girder for the given data using AutoCAD.
12	Drawing of Welded Plate girder for the given data using Auto CAD.

List of Textbooks

1. N Subramanian, “Design of Steel Structures”, Oxford University Press, New Delhi, India.
2. S K Duggal, “Limit State Design of Steel Structures” McGraw Hill Publications Chennai.

List of Reference Books

1. Dayarathnam P, “Design of Steel Structures”, S Chand and Company Ltd., New Delhi.
2. Kazim S M A and Jindal R S, “Design of Steel Structures”, Prentice Hall of India, New Delhi.
3. IS 800-2007: General Construction in Steel Code Practice (Third revision), Bureau of Indian Standards, New Delhi.

List of URLs, Textbooks, Notes, Multimedia Content, etc

1. <https://nptel.ac.in/courses/105105162>

Graduate Attributes (As per NBA)

Course Outcomes	At the end of the course the student will be able to:	RBT Level
	CO1: Explain: the engineering properties and the behaviour of steel structural elements according to the guidelines.	L2
	CO2: Analyse and design: Structural connection of Steel Elements.	L4 & L5
	CO3: Analyse and design: the steel structural elements of different forms under different stresses.	L4 & L5

CIE marks for the theory component are 25 marks and that for the practical component is 25 marks. 25 marks for the theory component are split into 15 marks for two Internal Assessment Tests (Two Tests, each of 15 Marks with 01-hour duration, are to be conducted) and 10 marks for other assessment methods.

The Correlation of Course Outcomes (CO's) and PO's and PSOs

Course Code:	BCV701	Title: Design of Steel Structures							Faculty Member: Dr. Shruthi H G						
Course Outcomes	Program Outcomes													PSOs	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
CO-1	2	2	2	-	-	-	-	-	-	-	-	-	3	1	
CO-2	3	3	3	-	-	-	-	-	-	-	-	-	3	2	
CO-3	3	3	3	-	-	-	-	-	-	-	-	-	3	2	

Note: 3 = Strong Contribution 2 = Average Contribution 1 = Weak Contribution ‘-’ = No Contribution