

## **Mechanics of Materials**

Project 2 - 2

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## 1. 3D IN CATIA

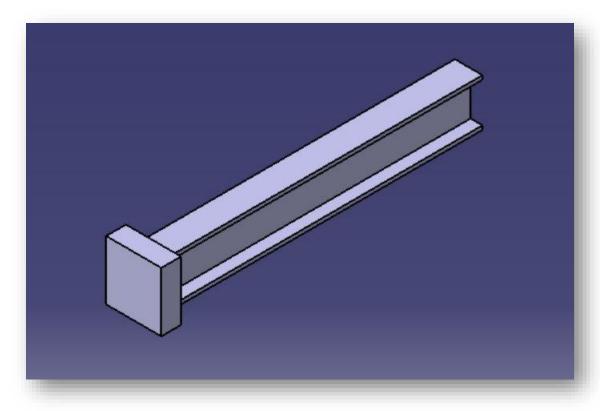


Figure 2.Isometric view of the I-beam



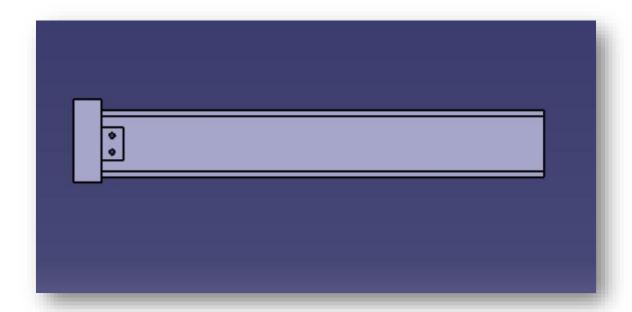


Figure 3 Front view of the I-beam



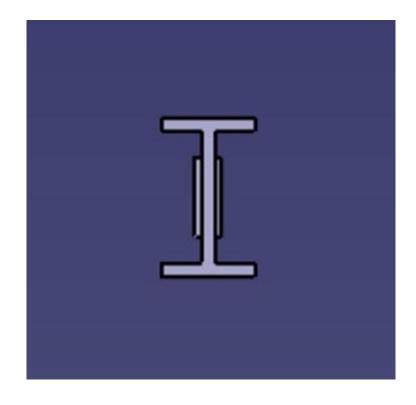


Figure 4 Side view of I-beam



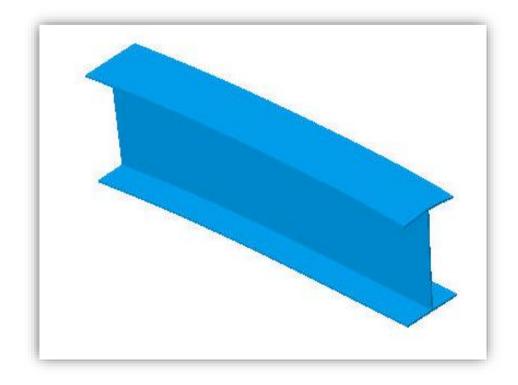


Figure 5. Bending Test



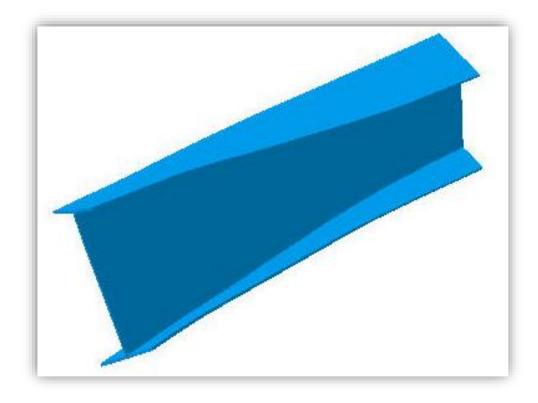


Figure 6. Torsion test





Figure 7 Tension test



## II. Main Free Body Diagram

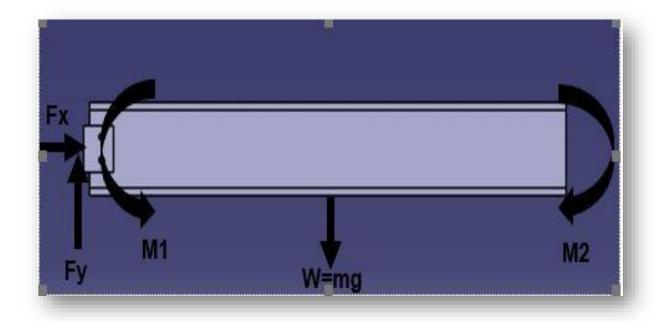


Figure 8 FBD



# II. Bending

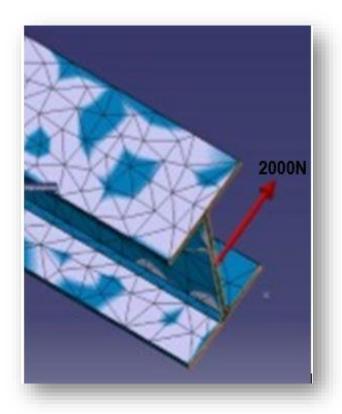


Figure 9 Bending's Force



## **III.**Torsion

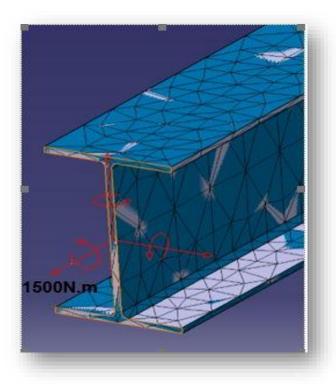


Figure 10 Torsional Force

