

## **A STUDY OF THE OPTIMAL DESIGN AND MECHANICAL SENSIBILITY IN THREE HINGE TRUSS**

**“In case that right and left member section size is same or not “**

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The purpose of this research is to determine the form height and the section depth size with the minimum weight for the load and span length and height position and to offer the design know-how by comparing both patterns in order to cultivate mechanical sensibility. In this paper, 2 types of asymmetrical 3 hinge's truss with compression stress were analyzed. For 2 component section size of truss, one was same and the other was different.

The gained conclusions are as follows;

- 1) A form height of truss with same section size is higher than that with different section size.
- 2) For section size of short span, a pattern with same component section size is larger than that with different component section sizes. On the other hand, for section size of long span, a pattern with different component section size is larger than that with same component section sizes.

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