

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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Project Report On

“DESIGN AND DEVELOPMENT OF FOLDABLE HELMET”

(Sponsored by KSCST)

*Project Report Submitted in Partial Fulfillment of the requirement for the award of
The degree of
Bachelor of Engineering*

In

MECHANICAL ENGINEERING

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ABSTRACT

Helmets are necessary for riding motorcycle to protect their headgears against accidents. Present helmets are not compact, difficult to carry and handle. Also there are chances of helmet theft with the present locking system.

Hence our objective is to design a comfortable, self-adjusting, protective, foldable helmet. Ergonomic design examines how well products, workspaces, and environment suit the people who use them. A usable design makes intuitive sense and is physically compatible with the human body. The Helmet can be folded in form of Simple Shape and then adjacent layers are dragged to form Helmet Shell Shape.

The model is designed using SOLID EDGE V18 and meshed using Hyper mesh 8. The dynamic analysis for impact velocity test has been carried out using LS-Dyna software.