# FINAL YEAR ACADEMIC PROJECT:

# "Dynamic Characteristics of Polymeric Foam Materials under Low Speed - High Impact Energy using Dynatup 825CF

<u>\ccomplished</u> by

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## **Project Synopsis**

Title	"Dynamic Characteristics of Polymeric Foam Materials under Low Speed - High Impact Energy Using Dynatup 8250"
Number of students involved	
Course	Bachelor in Engineering (Hons.XMechanical) KM20
Supervisor	Mr. Zamri Abdul Rahman (Lecturer, Faculty of Mechanical Engineering, UiTM Shah Alam.
Abstract	This project study mainly concerns on the study of the dynamic characteristics of polymeric foam materials as an impact energy absorbent medium.
	Experimentation procedures conducted should be treated as the preliminary stages towards gaining sufficient information before the simulation of the dynamic behaviour of foam materials is possible (the simulation part will be performed by the next group of researchers using Simulink® - a, compliment software of Matlab®):
Objective	• To acquire the dynamic characteristics of polymeric foam materials, particularly its capability of absorbing impact energy.
	• To obtain dynamic relationship, as well as mathematical model of the foam materials.
Background required	• Literature review from the International Journals of Impact Engineering.
	• Basic knowledge of foam materials.
	••• Related knowledge in applied mechanics
Facilities required	• Data acquisition system (Dynatup 930-1)
	• Impact Test Machine (Dynatup 8250)

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