

Design of next-generation lightweight materials for personal and vehicle protection

PROJECT DESCRIPTION

In this research project, students will focus on understanding the deformation and failure mechanisms that govern the dynamic behavior of materials used in protection applications. Materials of interest include, but are not limited to, advanced and transparent ceramics, glasses, foams, polymers, composites, and structural and light-weight metals. Students will conduct independent research towards testing and modelling the behavior of materials, and will disseminate these results through presentations and publications. Students will interact with government and industry partners.

FACULTY-DEPARTMENT

Engineering - Mechanical Engineering

OPEN TO STUDENTS FROM THE FOLLOWING INSTITUTIONS

Chinese universities participating in the [*Double First-Class Initiative*](#).

DESIRED FIELD OF STUDENT STUDY

Mechanical Engineering; Material Science; Rock Mechanics; Experimental Mechanics; Computational Mechanics; Design

INTERNSHIP LOCATION

Edmonton Campus

NUMBER OF INTERNSHIP POSITIONS

3

INTERNSHIP DATES

Start: July 2, 2019

End: Oct 2, 2019

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.