

AICTE Sponsored Short Term Course

on

Applied Impact Mechanics

31st October – 05th November, 2018

Coordinator

Prof. C Lakshmana Rao



Organized by

Department of Applied Mechanics
Indian Institute of Technology Madras
Chennai - 600 036
www.iitm.ac.in

INTRODUCTION

Impact phenomena are ubiquitous in sports, musical instruments, vehicle collisions, ballistics and natural disasters. A branch of physics that attempts to understand the forces, displacements and material failure associated with impact, is called as *impact mechanics*. The application of impact mechanics in design of engineering systems which involve impact mechanics can be termed as *applied impact mechanics*. The knowledge of impact mechanics is very essential in many disciplines including but not limited to mechanical, automobiles, mining, aerospace, civil, naval, biomedical, etc. The industries and research laboratories engaged in design for crashworthiness of road vehicles, space crafts, ballistics, armors and airplanes practice this subject in various capacities to develop products to withstand the high strain rate loadings subjected on them. Although Applied Impact Mechanics is an important topic in industry and research, this subject is taught only in less than 2 or 3 institutes in India.

COURSE OBJECTIVES

1. To disseminate the fundamental concepts of applied impact mechanics
2. To create an awareness about the practical applications and opportunities
3. To expose different modelling, simulation and tests methods in this area.

COURSE DURATION & VENUE

The course is of one week (six days) duration from **31st October – 05th November, 2018**. Classes will be held at the IIT Madras, Chennai.

RESOURCE FACULTY

The resource faculty includes experts from IIT Madras and Industries.

ELIGIBILITY

The course is open to faculty with background in Applied Mechanics, Mechanical, Aerospace, Automobile, Civil, Metallurgy and Ocean Engineering.

ABOUT THE DEPARTMENT

The Department of Applied Mechanics has been in existence since 1959 and has grown into a full-fledged inter disciplinary graduate research department over the years. The Department focuses on academic activities in three broad areas viz., Biomedical Engineering, Fluid Mechanics and Solid Mechanics. The Department has played a major role in contributing to the academic community and society. The faculty have won international recognition for their industrial research and sponsored projects. Some of the facilities available in various laboratories of this Department are unique in the country. Coupled with its multi-disciplinary background, the Department boasts of a highly diverse and experienced faculty. It has an excellent student-teacher ratio, providing opportunities for academically intense learning.

Equipped with state of the art facilities in a serene campus, the department offers an enriching academic environment.

Website: <https://apm.iitm.ac.in/>

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APPLICATION FORM

Name:
Designation:
Department:
Organization:
Qualification:
Experience:
Mailing Address:

Phone:
Mobile:
Fax:
E-mail:
(Required)

Date: **Signature of the Applicant**

SPONSORSHIP CERTIFICATE

Certified that Dr./Mr./Mrs.
is a faculty of our institute and is hereby nominated
for attending the QIP short term course on "**Applied
Impact Mechanics**" to be conducted at IIT Madras
from **31st October – 05th November, 2018**.

Signature of Sponsoring Authority
(With date and seal)

Duly filled application forms should be sent to:

Prof. C Lakshmana Rao
Professor
Department of Applied Mechanics
Indian Institute of Technology Madras
Chennai – 600 036
Tel. : +91 - 44 – 22575078
E-mail : lakshman@iitm.ac.in
<http://apm.iitm.ac.in/smlab/clr/>

IMPORTANT DATES

Last date for applications: 13th August 2018
Intimation of selection: 23th August 2018
(By email)
Confirmation of participation: 31th August 2018
(By email)

REGISTRATION FEE

There is **no course fee** for the participants from
AICTE approved engineering colleges.

TRAVEL

The train fare (ONLY two way 3-Tier AC train fare by
the shortest route from your institute to Chennai and
back) will be provided to the selected participants as
per AICTE guidelines.

BOARD AND LODGING

Boarding and lodging facilities will be provided for the
selected candidates in Taramani Guest House at IIT
Madras.