

PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS007

Compliant Mechanisms

Name of the PMRF student

Sudhanva Bhat

Required background of the students taught

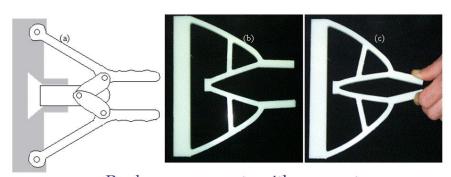
Any UG/PG student interested in exploring the applications of compliant mechanisms

Faculty coordinator

Dr. M. Anantha Sunil (BMSCE)

Online session coordinator

Ms. Aishwarya P



Replace many parts with one part.

Details of the content of the module

1 credit course. I lecture per week. I hour lecture. Total 15 sessions. **Title:** Compliant Mechanism

Content:

- 1. Introduction, Mobility analysis
- 2. Modelling of flexures
- 3. Compliant nature of a Cantilever beam, pseudo rigid-body modelling
- 4. Design using structural optimization
- 5. Distributed compliance and topology optimization
- 6. Instant centre, building-blocks methods
- 7. Bi-stability and static balancing
- 8. Microsystems using CM
- 9. Case studies, HW discussion, interactive sessions

Schedule of the module

Fridays 5 pm to 6.15 pm

Start date 4th June 2021

End date 17TH September 2021

15+1 sessions (1 extra if required)

Meeting link

https://us04web.zoom.us/j/78071002941 ?pwd=enhTUU95TWF0eDI3R2ZlaVd3bWJI Zz09

Contact email ID: isss.forum@gmail.com

Registration link:

https://forms.gle/h3 8tBPBW9oq4akoFA

