



INTEGRATED CIRCUIT AND MICROSYSTEM PACKAGING

Interdisciplinary MTech Program



About the program

- ✓ Interdisciplinary
- ✓ Advance Packaging – Future of Electronics
- ✓ Electrical; Mechanical; Material Engineering
- ✓ Close Knit Interaction with Industry
- ✓ First of its Kind – Running Successfully



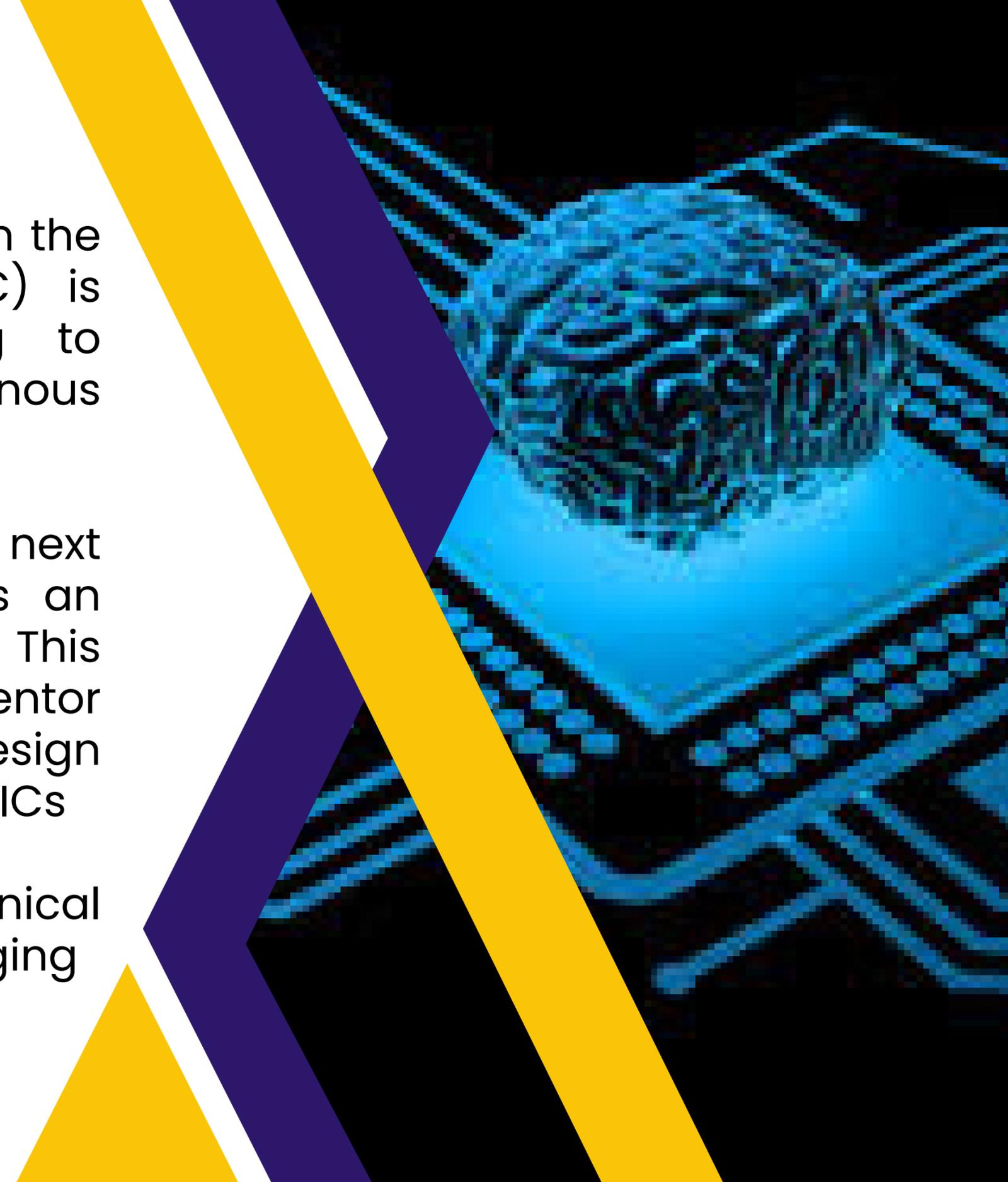
Introduction

Ability to incorporate more functionality with the same area in an Integrated Circuit (IC) is transcending beyond transistor scaling to innovations in packaging. Heterogeneous Intergration is the order of the next decade.

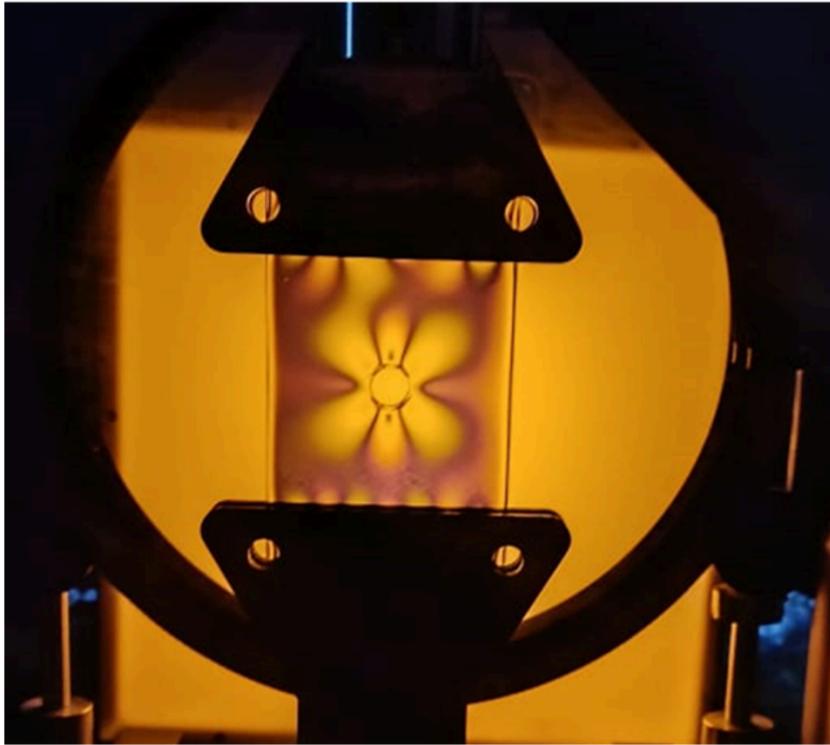
Catch the wave is the success mantra. The next era of scaling through packaging needs an engineer with interdisciplinary knowledge. This ICMP program is designed to mentor enthusiastic students in the nuances of design and manufacturing of present and futuristic ICs

Equal emphasis is given to Electrical, Mechanical and Material aspects of ICs and their packaging

Interdisciplinary is the way forward...

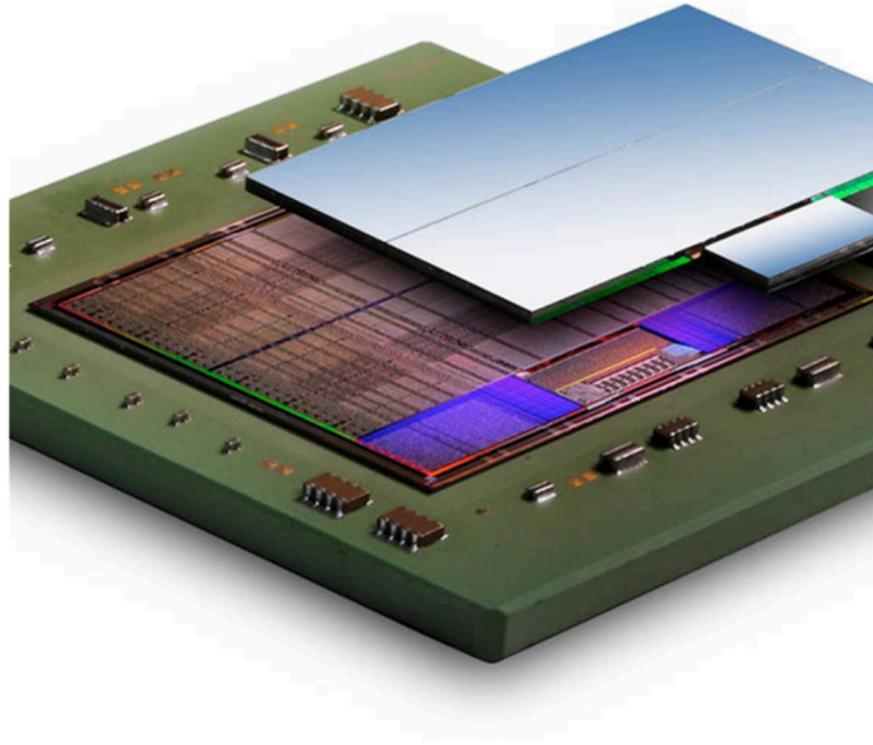


Focus Areas



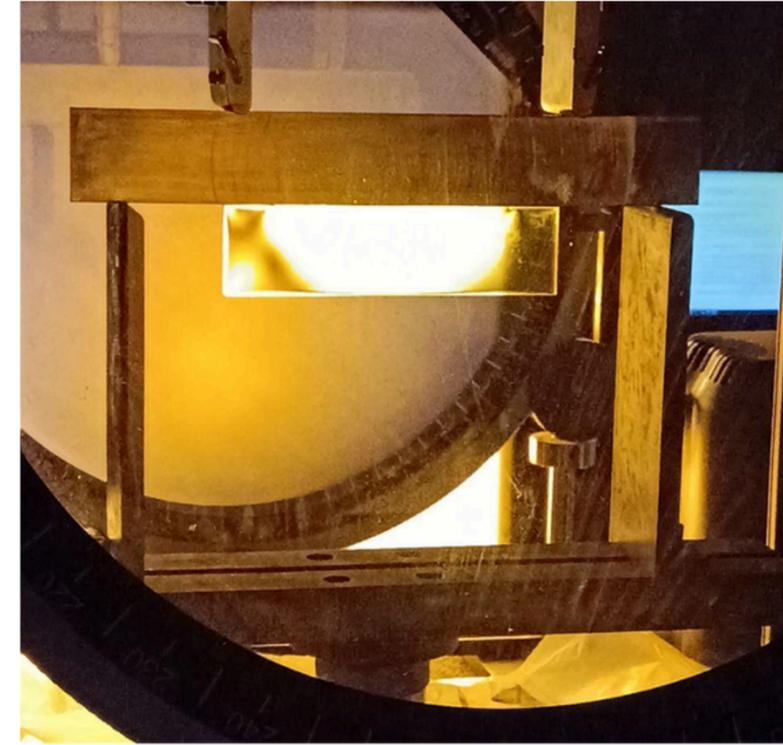
MECHANICAL

- Thermal Management
- Fracture & Fatigue Analysis
- Predicting Reliability



ELECTRICAL

- Heterogeneous Integration
- Signal & Power Integrity
- 3D IC, MEMS, TSV
- Optical Interconnects



MATERIALS

- Semiconductor Fabrication
- Thin Film Synthesis
- Materials for packaging

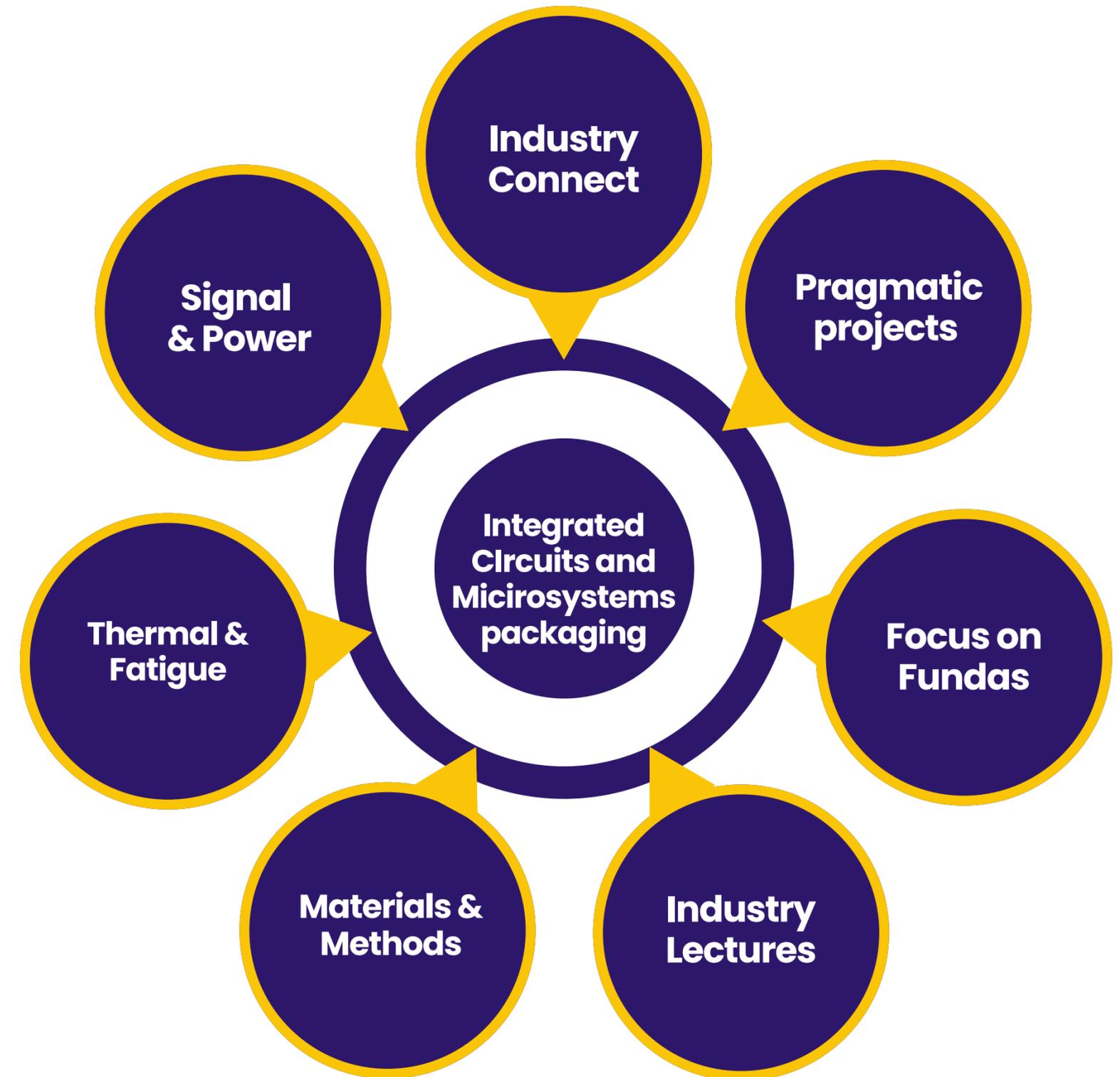
Who Can Apply

Gate: EE, EC, ME, IN, MS, PHY

Engg Branches: Electrical & allied
Mechanical & allied, Materials &
allied, Physics & allied

We Encourage all branches

**RELEVANT TO IC MANUFACTURING
AND PACKAGING**



Industry taught courses



- Embedded Systems and microcontrollers
- Embedded Systems and microcontrollers lab



- Fundamentals of Semiconductor Package Manufacturing and Test
- Fundamentals of IC Packaging Assembly and Manufacturing



Contact Us

For any queries:

-  040-23016464 (Off. Hours)
-  <https://icmp.cip.iith.ac.in/home>
-  svanjari@ee.iith.ac.in
-  IIT Hyderabad

THANK YOU

