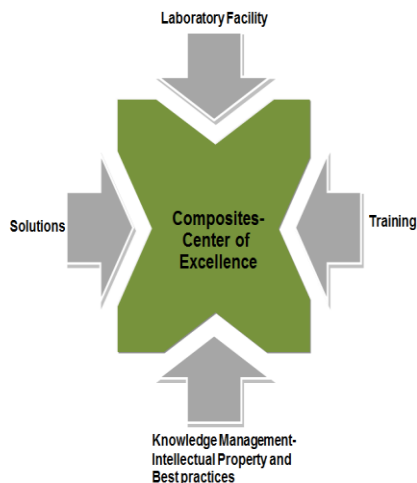


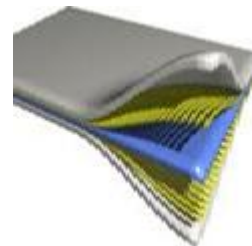
## Composites-Centre of Excellence: Pathway to Composites Excellence

### Composites-Centre of Excellence

A unique offering from enti INNOVATIONS to establish a clearing-house of repeatable best practices and disseminate knowledge in composites.

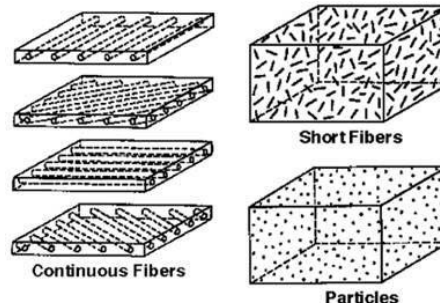


- Benefits
- Contemporary Technologies
- Reduce Cost and Time-to-Market by Reusability
- Shorter Implementation Cycles
- Cost-effective Solutions
- Maximize Project Team Successes



### Features

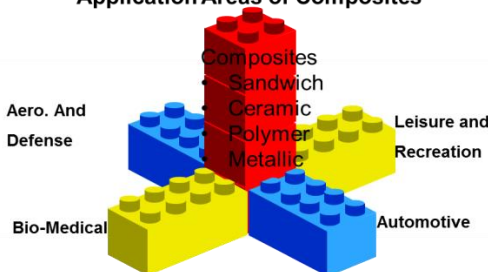
- Imparts practical training on the concepts and practice of composites technology.
- Facilitates students to understand the theory and application of composites across multiple technological disciplines.
- Helps the Institution showcase the Facility and participate in major research programs.
- Provides a career-path to the Faculty in the emerging area of composites.
- Objective of Composites-Centre of Excellence is to help the Institution demonstrate thought-leadership in the areas of Composites and play a role in Transforming Manufacturing.



### Advantages of Composites

- Extended Life cycle
- Improved Constructability
- Cost-effective Field Installation Cost
- Enhanced Serviceability and Sustainability
- No Corrosion in most Environments

### Application Areas of Composites



### Typical Deployments of Composites

- Access-walkways
- Storage Infrastructure for Hazardous Material
- Cooling Towers
- Air-Intake Manifold
- Wind Turbine Blades
- Contamination Systems
- Transmission Towers

## Enabling Role of Composites

- Global market for carbon fibre reinforced plastic (CFRP) will more than double to US\$36 Billion in 2020, growing at a compound annual growth rate of 13%, according to a Lux Research report.
- To enter this domain, individuals need specialized composites skills that are beyond the scope of regular academic education.
- **Composites-Centre of Excellence**, from enti INNOVATIONS brings together the laboratory facility, knowledge management, solutions and training, to enable the Institution to quickly address real-life engineering challenges by developing the Proof of Concept, and transition to the rapid-prototyping stage.
- **Composites-Centre of Excellence** supplements the engineering knowledge with specialized composites skills including analysis and design, manufacturing, testing, repair, lifecycle and maintenance support, and documentation skills.



## Project Management Methodology

**enti** INNOVATIONS has developed a comprehensive Project Management Plan to support the Institution in the establishment of the Composites-Centre of Excellence.

This ensures that the objectives of establishing the Centre of Excellence are achieved in the specified time and within the allocated budget.

Project Management extends across the lifecycle to include all activities during:

- Inception Phase
- Implementation Phase
- Roll-out Phase
- Maintenance Phase

## enti INNOVATIONS Composites Community

The Faculty and the students who have participated in any of the programs of the Composites-Centre of Excellence become lifetime members of the enti INNOVATIONS Composites Community. Membership of the Community enables the Faculty and students to keep abreast of the latest technological breakthroughs in the areas of manufacturing and composites, post queries and seek solutions to challenges by practitioners, and receive job postings, and alerts on the current research programs.

## enti INNOVATIONS-Partner of Choice for Establishing Centre of Excellence in Composites Technologies

- enti INNOVATIONS is promoted by industry leaders who understand manufacturing technologies and have deep inter-disciplinary domain expertise.
- enti INNOVATIONS works very closely with Legend Technologies, a Group Company recognized as Industry Leader for EXCELLENCE IN AEROSPACE INDIGENISATION.
- enti INNOVATIONS has deep academia linkages to bring forth the latest research to the industry.
- Our courses are accredited by Industry-recognized Professional Bodies including the Indian Institution of Production Engineers (IIPe), amongst others.

## Deliverables

- Preparation and Presentation of the Feasibility Report
- Preparation of the Detailed Project Report
- Oversight during the Construction and Facility Set-up Phase
- Maintenance Support
- Roll-out of Training
- Train-the-Trainer and build a qualified team
- Support Faculty in showcasing thought-leadership and bid for research projects.