Workshop Description

Studio and design strategy projects for graduate level curriculum share a similar structure and process but differ in their complexity and duration. Students are assigned formally structured design challenges, requiring a substantive research phase, an ideation or concept development phase and finishing with design presentation and reflection phases. Topics will be relevant to today's ever-changing cultural, environmental, economic and technological societies.

Transportation Industry Study – ‘Heritage to Future’
Project: Motorcycle-, Commercial Truck- and Automotive Industry in India

There has recently been a renaissance in the global transportation industry and the future of transportation to use electric energy to power vehicles more sustainably.

In the powertrain and energy storage development, the industry has seen more changes in the last 15 years than in the previous 100 years combined. Developments in EV technology specifically is changing from functional technology progress to a new fashion, image and emotional product differentiator for many transportation sectors. While the benefits are enticing, the shift from traditional propulsion and energy sources is not as simple as it may appear. Challenges in cost versus value, manufacturing and government regulations have challenged the industry in the wide-sweeping adaptation of these new technologies. Opportunities for innovative solutions in transportation design are as great, as renewable energy recovery has been seen by commercial and residential architects and designers as an opportunity for progressive design and differentiation. Transportation designers have the critical role of solving many similar challenges with electric powered vehicles.

In this workshop, you will group into teams and work as a team to study, as well as identify, potential opportunities and challenges associated with designing a uniquely branded experience through understanding your national transportation heritage broader and deeper. Each team will be assigned a transportation sector to research and continuously share their findings with the class. Then, each team will be required to analyze the ‘leading brand’ of each sector and develop a unique vehicle design concept as ‘strategic value proposition’.

Learning Outcomes

In this workshop, the students will demonstrate the following competencies:
- the ability to apply research understanding the past, current status quo and inspiration for future opportunities
- a comprehension of the entrepreneurial fundamentals that drive market opportunities
- the discipline to follow a multi-phase project plan to a successful outcome
- the maturity to integrate feedback and guidance from multi-disciplinary sources
- the ability to present a coherent, professional narrative and a high-level visual articulation of design solutions
Workshop Schedule and Deliverables

Day 1
What is the success heritage of the Motorcycle-, Commercial Truck and Automotive industry in India?
1. Milestone timeline of successful progress
2. Product segments (Matrix) ‘heritage to future’
3. Competitive Analysis

Assignment A
An Industry sector will be assigned to each of the 3 teams. Each team will be required to complete ‘milestone timeline’ and ‘product segment matrix’
Each team will present their findings to the class.

Day 2
Understand opportunities for ‘brand experience’ through design
1. Brand values and design strategy of ‘leading brand’
2. Technology and trend exploration
3. Design requirements

Assignment B
Each team will analyze Brand values and document results on provided templates
Each team will analyze opportunities to invent and define design requirements

Day 3
Vehicle Design Concept exploration
1. Ideation 2D or 3D sketch phase
2. Human & Component package definition
3. Final Team presentation to evaluate ‘strategic value propositions’

Assignment C
Each team will create potential concepts and develop a believable, factual narrative
Each team will collaborate to prepare a final presentation and present as team

Evaluation
The teams will be evaluated on the following criteria
1. Breadth and depth of research results and brand analysis
2. Uniqueness and ‘brand fit’ of individual design concept
3. Quality of the narrative presentation (verbal, visual)