

GUJARAT TECHNOLOGICAL UNIVERSITY
BRANCH NAME: M. Arch. (INTERIOR ARCHITECTURE)
SUBJECT NAME: PUBLIC TRANSPORT SYSTEMS INTERIOR
SUBJECT CODE: X36206
2nd Year: Semester-III

Pre requisite: There are no specific pre requisites for the elective course.

Rationale: The course aims to develop an understanding of the aspects related to Human factors in the designing of public transport systems.

TEACHING SCHEME			CREDIT S	EXAMINATION MARKS				TOTAL MARK S	UNIVERSIT Y EXAM TYPE
Field work	Lectures	Studio	C	External Exam		Internal Exam		100	VIVA
NA	1	1	02	(ESE) Theory (E)	(ESE) Viva (V)	(PA) Theory (M)	(PA) Viva (I)		
				00	50	00	50		

SR No	Content	Total Hours	Weight age
1	<p>Systems Approach in Transport Infrastructure:</p> <p>Understanding systems approach. Studying of various transport systems to propose design of systems and interiors for Public Transport Facility. The design of public transport units design and their system will have to be understood as a whole. Initial phase of the elective deals with the understanding of the aspects related to each unit from stops, stations, servicing, fueling and transit to understand components of the system.</p>	06	20%
2	<p>Identifying the Key Aspects affecting the human factors in interior design of Public Transport Systems:</p> <p>Various Aspects affecting can be considered such as Vehicle and Station Interior, Mobility and Convenience, Safety and Security, Ergonomics, Access and exit stairs of the transport units etc.,</p> <p>Detailed Design Aspects Such as: Inner height • Inner Width • Width of the aisle • Width of the individual seats • Height of back rest of the seats</p>	08	30%

	<ul style="list-style-type: none"> • Height of the seat cushion from the unit floor • Gap between seats • Inner length of the unit • Width of the twin seats • Height from the road to the first step of the access or exit stairs • Height of the steps of the access or exit stairs • Track of the steps of the access or exit stairs • Width of the access or exit door • Number of passengers. • Kind of Bus units. 		
3	<p>Design Proposal:</p> <p>Mapping, Designing and developing the proposals, /Detail drawings and Mock ups can be prepared related to Interior Architecture for BRTS/MRTS/LOCAL Transport considering the key aspects identified through various studies done.</p>	18	50%

*: indicative

REFERENCE BOOKS:

1. John.F. Pile, Interior Design, 2nd edition, illustrated, H.N.Abrams, 1995. Published by Govt of India, 2011.
2. Branton, P., and G. Grayson. 1967. "An Evaluation of Train Seats by Observation of Sitting Behaviour." *Ergonomics* 10 (1): 35–51.10.1080/00140136708930838 [Taylor & Francis Online], [Web of Science ®], [Google Scholar]
3. De Looze, M. P., L. F. M. Kuijt-Evers, and J. H. Van Dieën. 2003. "Sitting Comfort and Discomfort and the Relationships with Objective Measures." *Ergonomics* 46: 985–997.10.1080/0014013031000121977 [Taylor & Francis Online], [Web of Science ®], [Google Scholar]
4. Velasquez, P., 2000, "Accessibility, Transport and Integration", National Foundation of Urban Public Transportation (FONTUR), Venezuela.
5. Grandjean, Etienne, 1988, "Fitting the Task to the Man", Taylor & Francis, London, 4th Edition

Lectures/Tutorial work shall consist of presentations on various topics of the subject. AV projects may be introduced to students for documenting best practices and advances through case studies. Coursework shall consist of lectures/presentation on various topics listed above supported with visuals in form of drawings, sketches, photographs, models etc. Written assignments with sketches, drafted drawings for construction detailing and model making exercises, presentations etc can be given to students. Site visits, market surveys and various other ways to engage with industry must be incorporated in this course

*- this is suggestive for common purpose. Faculty may decide on this, considering student group and institution philosophy.

