

M.Tech. IN ADVANCED INFORMATION TECHNOLOGY WITH SPECIALIZATION IN INTELLIGENT TRANSPORTATION SYSTEMS (MTECHTS)

2 years, full-time and residential



FOCUS AREAS

- ▶ Robotics
- ▶ Intelligent Systems
- ▶ Self-Learning Systems
- ▶ System on Chip for Automation
- ▶ Machine Vision
- ▶ Artificial Intelligence
- ▶ Digital Control Systems

“Requirement is for vehicles that produce no pollution, powered by electricity from any plug point and viable to both, the performance and commercial market adapted to new technologies, such as artificial intelligence and soft computing.”

Intelligent Transportation Systems program is a worldwide initiative to add information and communications technology to transport infrastructure and vehicles. Intelligent Vehicle Technologies comprise electronic, electromechanical, and electromagnetic devices - usually silicon micro machined components operating in conjunction with computer controlled devices and radio transceivers to provide precision, repeatability functions and emergency warning performance reconstruction. The advent of alternative energy based vehicles to address the problems of fossil fuel depletion and environmental degradation provides scope for innovative vehicle design for the future. Fully automated vehicle operations with respect to alternative energy based engines are still some years away for the markets. This program focuses on implementing the Electrical, Electronics, Communication and Computing Technology onto future hybrid and electric vehicles.

ELIGIBILITY

Graduates / Postgraduates with a Bachelors Degree in Engineering / Technology in Automobile / Mechanical / Chemical/Production / Electrical / Electronics / Communication / Instrumentation / Mechanical / Computer Science / IT or MSc. Physics / Electronics or equivalent (with minimum 55 percent marks or equivalent grades)

M.Tech. IN ADVANCED INFORMATION TECHNOLOGY WITH SPECIALIZATION IN INTELLIGENT TRANSPORTATION SYSTEMS (MTECHTS)

COURSE STRUCTURE

SEMESTER	CODE	COURSE NAME	CREDITS
SEMESTER I			
	MINI-001	Engineering Sciences I	6
	MINI-002	Embedded Systems Design	6
	MINI-003	Control Systems	6
	MINI-004	Communications Systems Engineering	6
	MINI-005	Digital Signal Processing	6
	MINI-047	Modern Vehicle Systems	6
	MINI-048	Seminar	4
	MIN-001	Life Skill Development I	6
		Total	46
SEMESTER II			
	MINI-006	Engineering Sciences II	6
	MINI-048	Automotive Electronics and Embedded Systems	6
	MINI-050	Vehicle Dynamics	6
	MINI-051	Vehicle Design and Performance	6
	MINI-052	Hybrid & Electric Vehicles	6
	MINI-053	Intelligent Vehicle Systems	6
	MIN-002	Life Skill Development II	6
		Total	42
SEMESTER III			
	MINP-011	Project Phase I	36
SEMESTER IV			
	MINP-012	Project Phase II	48
Total Credits			172