

# Students design all-terrain vehicle for championship

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A 30-member team of Mechanical Engineering students of YMCA University of Science and Technology, Faridabad are headed to Odisha to participate in an event which aims at spreading awareness about the applications of "versatile vehicles" for disaster management.

These students are credited with having designed and developed an All-Terrain Vehicle (ATV) for Mega ATV Championship 2016 to be held from March 4 to 7 at Bhubaneswar.

Officials said that the team had put in three months to design the vehicle which cost over Rs 2.35 lakh. B.Tech final year student Kamran Shaikh, one of the students who designed the vehicle, said they hoped to learn essential engineering skills to solve practical problems at the event. "The vehicle has been designed in a way that it does not topple at any given situation. The vehicle was designed without gear and brakes," he said.

The Mega ATV Championship is a national level student based ATV designing, manufacturing and racing event. The aim of the championship is to promote good engineering practices in manufacturing of off-road and ATV by providing a platform where



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students can learn to design, manufacture and understand the utility of such vehicles.

Vice-Chancellor Prof Dinesh Kumar on Wednesday unveiled the ATV which was successfully tested by the Team MechNext Racing (TMR). Congratulating the team, the VC said that designing and building such vehicle gives students an experience beyond the classroom.

Associate Professor of Mechanical Engineering Dr Vasdev Malhotra, who guided the students in the project, said that the team is now gearing up for the competition. About 100 teams from reputed universities and engineering institu-

tions will be participating and it would be a tough competition, he said.

He said that the ATV, designed and developed by the students, is powered by a Briggs and Stratton 10 HP OHV engine and a customized alfa gearbox. With the total drive weight under 250 kg, the vehicle has a high power to weight ratio.

Its design and four-wheel drive system allows the driver to toggle between two and four-wheel drive according to situation. The vehicle is capable of climbing the stairs at an inclination of 45 degrees and can also jump from a height of 5 feet. The vehicle can be used in rescue missions, Malhotra said.