

# Bachelor of Technology in Automobile Engineering School of Technology Pandit Deendayal Petroleum University



### **OUTLINE**

Automobile Engineering encompasses almost all facets of technologies that are currently developed. More importantly, the domain paves the way for the development of never-thought-of technologies. The current era is seeing a revolution in the way we think about Automobiles. There have been many positive disruptions in the domain viz. the use of non-conventional power source for Vehicle Propulsion, Innovative Transmission Technologies, Active Suspensions, Active Aerodynamics and Technologies for Unprecedented Safety, to name a few.

With the world turning towards connected devices and technologies of Industry 4.0, the scope of integrating these technologies in the domain of Automobile Engineering is immense.

The 'Bachelor of Technology in Automobile Engineering' at PDPU has been commenced with a similar inspiration to impart competencies in the domain of Automobile Engineering and make the aspirants competent of future technology development.

#### **Key Features:**

- Contemporary course curriculum.
- A robust and active framework for course curriculum vetting and updating. The framework takes the inputs from leading Industry personnel and educationalists.
- An established framework of the University helps in providing the best resources to the students.
- Modern Laboratory facilities.
- Availability of entire vehicle, exotic Engine-transmission assembly and the like for dissection purposes.

#### **Key Connect:**

- 'International Automobile Centre of Excellence' which has been formed in collaboration with Government of Gujarat, Maruti and PDPU to impart training for Automotive Technologies.
- Industry connect with Automobile companies like Ford Motors, Tata Motors, BMW
   India and the like.
- Student teams of PDPU have successfully been participating in 'Vehicle Design and Development' competitions like BAJA-SAEINDIA, SUPRA-SAEINDIA and many others.
- The Student team of PDPU also participates internationally in 'Shell Eco-Marathon,'
   Asia' by developing an ultra-efficient electric vehicle.

## INTERNATIONAL AUTOMOBILE CENTRE OF EXCELLENCE (iACE)









## BAJA SAEINDIA TEAM CZAR

ACHIEVEMENTS			
Year Details		Rank	
2020	Virtual Round Cleared		
2020	Work in progress		
2019	Virtual Round	1 <sup>st</sup>	
	Suspension and Traction	16 <sup>th</sup>	
	Rock Crawl	18 <sup>th</sup>	
2018	Sled Pull	10 <sup>th</sup>	
2017	2017 Design and Quality		
2016	Endurance Race	4 <sup>th</sup>	
	Overall Standing	10 <sup>th</sup>	
	Rank in Gujarat	1 <sup>st</sup>	
2015	Build Quality	3 <sup>rd</sup>	
	Engineering Design	3 <sup>rd</sup>	
2014	2014 Sales Presentation		
2013 Team Initiated		-	



	PLACEMENTS					
	Alumni	<b>Company Placed In</b>				
	Param Mehta	Mahindra & Mahindra				
	raiaiii ivieitta	(Through BAT)				
	Nabrit Sethi	Mortine Engineering				
	Krutin Rajani	Adani Gas				
	Ashish Dave	Reliance				
	Parth Patel	Bosch				
	Mohak Sheth					
	Vyom Wadhwana	Adani Gas				
	Purvang Soni					
	Neelkanth Thanki GNFC Bharuch					
	Deep Bhalodi					
Colu	Rhythm Patel	L&T Pvt.Ltd.				
	Keyur Vora					
	and many more					







## BAJA SAEINDIA TEAM SOVEREIGN

ACHIEVEMENTS				
Year Details		Rank		
2020	Virtual Round Cleared	9 <sup>th</sup>		
	Work in progress	9		
2019	Design Evaluation	3 <sup>rd</sup>		
	Endurance	12 <sup>th</sup>		
	Overall Ranking	12 <sup>th</sup>		
2018	Endurance	19 <sup>th</sup>		







PLACEMENTS				
Alumni	Placed at			
Chichia Doghova	Mahindra & Mahindra			
Shishir Raghava	(Through BAT 2019)			
A b b in a v V v va a v	Mahindra & Mahindra			
Abhinav Kumar	(Through BAT 2018)			
Sanket Patel	Hitachi			
Bhargavi Korot	Tata Chemicals			
Priyank Rajvir	Torrent Power			
Nisit Modi	Torrent Gas			
Romil Jhaveri	Nirma			
Shyam Sakaria	TCS			
Ravi Parmar	Infosys			
Dhwani Patel	IMEG			
and many more				







## SHELL ECO-MARATHON, ASIA

PDPU has been participating in 'Shell Eco-Marathon Asia (SEMA)', since 2015. Every year a team of about 23 students and 2 faculty mentors engage themselves in designing and developing an Electric vehicle for Shell Eco-Marathon.



PDPU at SEMA-2019, Malaysia

Year	2015	2016	2017	2018	2019
Result	Maiden Participation. Couldn't clear inspection	Completed Inspection. Lost on Track.	Ranked 16 <sup>th</sup> in Asia in Battery Prototype Category with an efficiency of 81 km/kWh	Couldn't clear inspection	Ranked 12 <sup>th</sup> in Asia in Battery Prototype Category with an efficiency of about 123 km/kWh

#### BMW ENGINE - TRANSMISSION ASSEMBLY

- PDPU participated in the BMW's Skill Next Initiative as part of which we have received a BMW Engine and Automatic Transmission Assembly (BMW TwinPower Turbo in-line 2.0 litre 4-cylinder diesel engine and the BMW eight-speed Steptronic automatic transmission) for Educational purposes at no cost.
- The same engine and transmission assembly is found in currently manufactured BMW cars
- A 'Train the Trainer' program was also held for training on the Assembly.



**BMW** Engine-Transmission Assembly at PDPU



'Train the Trainer' Program

## FORD VEHICLE AT PDPU

- PDPU received a fully functional vehicle from Ford Motors, Sanand at our PDPU Campus, at no cost.
- The Vehicle has been received for education/training of our students.
- The Vehicle can be used for learnings by disassembly and demonstrations.



Ford Vehicle Delivery Program



Ford Vehicle at PDPU