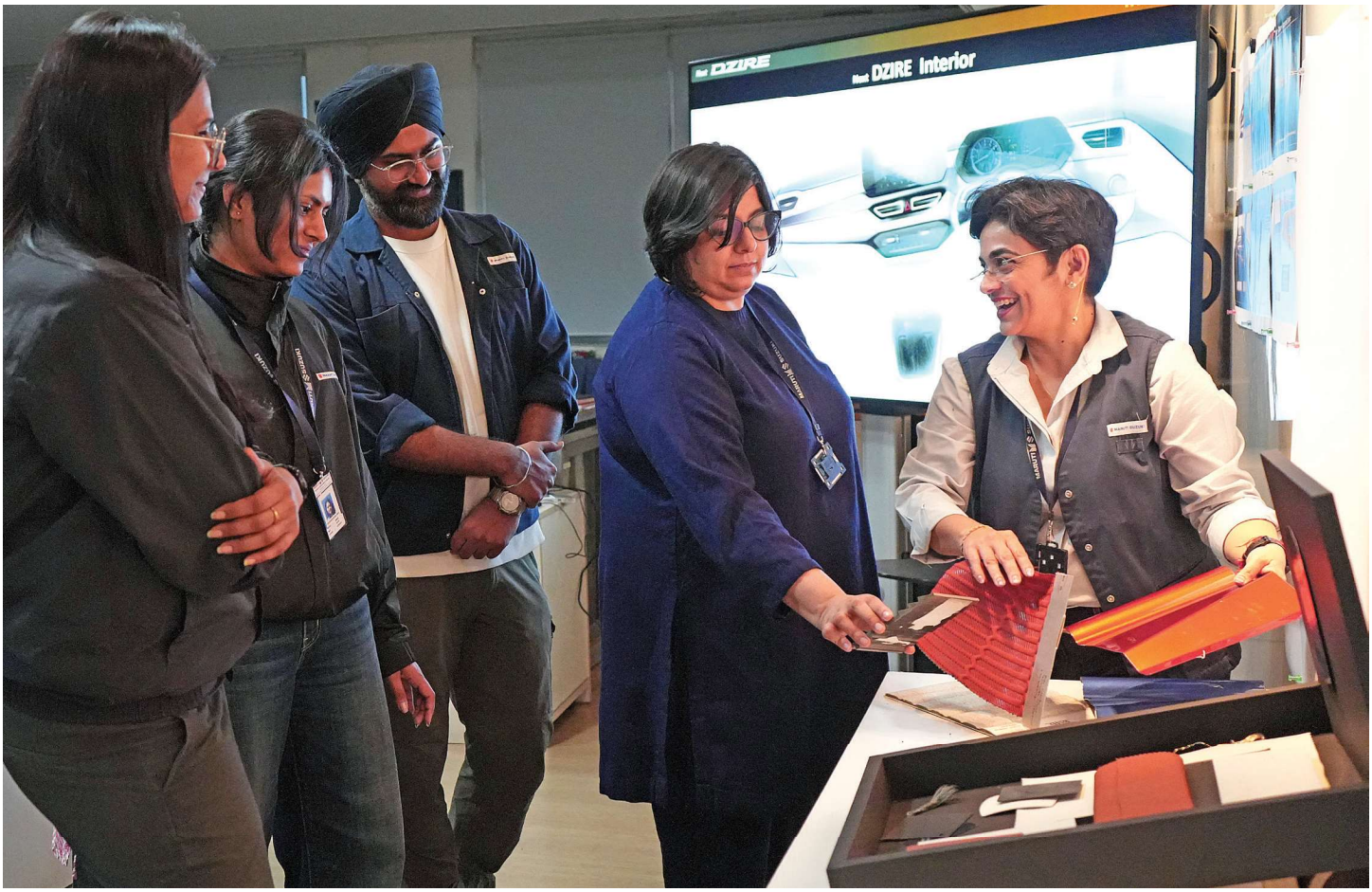
BREAKING BARRIERS IN AUTO DESIGN

As automotive design takes the centre stage, **Radhika Dave** explores how women are shaping future trends in a world where cars are increasingly becoming an extension of consumers' identities.



As cars have become sleeker over the years, there has been an increased focus on automotive design. The design aspect will continue to be a differentiating factor, as cars are increasingly becoming an expression of individuality, as opposed to a mere means of transportation. Given these factors, auto design is emerging as a viable career option, especially for women. The definition and roles within the automotive design space have expanded vastly, even as women designers work across the entire gamut of roles, notes Pratap Bose, Chief Design and Creative Officer, Mahindra & Mahindra.

"There are, however, some areas of concentration we find women designers tend to gravitate towards. These are CMF Design, Digital Design and Design Visualisation. Areas such as Colour Materials and Finish, Design Quality, Visualisation, Design HR, HMI Design, Clay and CAS Modelling, all benefit from the talent and perspective of our women colleagues, who have principal or lead roles in all these areas." Bose adds that while many (women) come from textile, product and graphic design backgrounds, the love for creating innovative solutions in automotive design drives them.

More and more women are entering the auto industry in areas such as design and technology.

Maria Idicula Kurian, a Senior CMF Designer with McLaren Automotive, adds that a diverse design team brings varied perspectives and solutions. "The importance of gender and skill diversity in design is crucial, not just for representation, but for the holistic development of creative and effective design solutions."

Rahul Bharti, Executive Officer, Corporate Affairs, Maruti Suzuki India Ltd, notes that over the years there has been an increasing focus on the interior design of a car. "Modern customers demand not just a great looking car from the outside but an equally exciting interior. Women possess strong aesthetic sensibilities of design, colours, and tactile materials. These are all very important parameters of new age mobility solutions."

Maruti Suzuki has women leading its Creative Design Division. Akansha Hakhu is the Department head for Colour Material and Finish, and Neha Chandra heads the Interior Design and Graphic User Interface Department.

Akanksha has designed fresh colors and finishes for multiple award-winning models like the Brezza and the Baleno. She has also developed an exclusive body colour strategy for Nexa. Under her creative guidance, the team recently designed and developed body colors and unique interior finishes for the Dzire and the company's first EV, the e Vitara.

Neha has worked on the interiors of new products like the Fronx and the new Dzire. She has also worked on the first ever graphical user interface (GUI) designed by the company. She not only leads the interior design department but also mentors the GUI team working on the next generation human interface of MSIL vehicles.

Women's participation in design roles within India's automotive sector has been gradually increasing, and yet remains modest. While comprehensive statistics specific to design roles are limited, the overall representation of women in the automotive industry is approximately 11-15% of the workforce, notes FR Singhvi, President, ASDC, adding that access to specialised training in areas like CAD software, materials engineering, and ergonomics is limited for women, creating a skill gap.

Subburathinam P, Chief Operating Officer, TeamLease Services, says, "To bridge the skill gap, companies must prioritise structured upskilling programmes, apprenticeships, and industry collaborations. A diverse workforce will address talent shortages and also drive innovation and long-term industry growth." Concerted efforts are being undertaken by the industry to reduce this gap. Take for example, Maruti Suzuki. Its design team has been actively engaging with all leading automotive design colleges in India, such as NID and IITs, and some renowned global colleges to identify and groom potential women designers from an early stage.

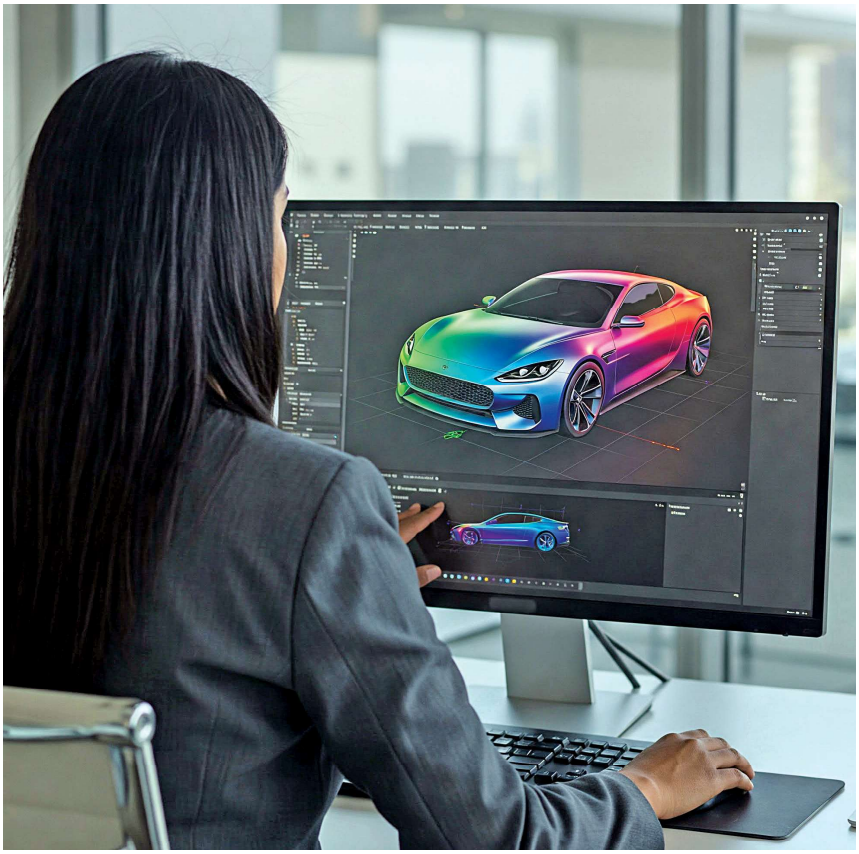
McLaren Automotive's Kurian notes that short internships at the beginning of one's career help to prepare and provide an understanding of real-world scenarios.

The Automotive Skills Development Council, for instance, has developed specialised courses to create opportunities for women in automotive design such as the Basics of Automotive Design- which covers vehicle architecture, aesthetics, and emerging trends. It also has a course-Automotive Design Safety Specialist Qualification Focusing on safety compliance, crashworthiness, and vehicle engineering. "By fostering such collaborations and skill-based programs, ASDC is ensuring that women are equipped with the expertise needed to excel in the evolving automotive landscape," notes ASDC's Singhvi.

Rahul Bharti adds that while traditionally, automobile design was offered at the Master's level, now there are multiple streams available at the graduate level. Most designers pursued an M.Des degree after completing their bachelor's in Mechanical Design. There were very few women graduates pursuing a mechanical engineering degree, which drastically reduced the number of women in automobile design and eventually car design as a career of choice, he said. "Today, there are multiple streams in design available at graduate level. Designers from multidisciplinary streams are preferred by companies, as they bring in the lateral thinking required to explore new creative and unconventional solutions."

The future of mobility is not just about technological advancements but also about equipping designers with the right skills. "Design education must evolve to keep pace with industry shifts, ensuring that students graduate with practical knowledge and the ability to innovate in a rapidly changing mobility landscape," says Nandita Abraham, Dean, BITS Design School. She notes that they have observed a growing interest among female students in sustainable automotive design, particularly in fields like EV development, urban mobility planning, and innovative public transportation. "We focus on inclusive design thinking, where women's perspectives bring valuable insights into areas like ergonomic vehicle interiors, safety-first public transport solutions, and accessible mobility for diverse users. Sustainable transportation is not just about reducing carbon footprints but also about ensuring mobility solutions cater to all demographics, and having more women in design provides a broader, more life-centric approach," Abraham said.

The BITS Design School's programs equip students with practical, future-ready skills and competencies. Training women and bridging the skills gap requires a holistic approach from all stakeholders. From a mere Rs 294 crore in the revised estimates of FY25, the "new ITI upgradation" programme was allocated Rs 3,000 crore in the 2025 budget, signalling the government's urgency to impart skill education to a large section of the young population. Given the size of youth looking for skill training, it is time for industry and academia to join hands in offering skill-based education. It can done by developing curriculums together, notes Majesh Kumar Singh, Department of Mechanical Engineering, and Professor in Charge of the IITK Motorsport Club. "In recent times we have observed a significant increase in the hiring of female students by automobile companies. The hiring of female students has increased from less than 1% to about 25% in the last three years," he says. ■



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