



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 23AUT101 – ELEMENTS OF AUTOMOTIVE SYSTEM

I YEAR /II SEMESTER

Unit 1- VEHICLE STRUCTURE

Topic :Introduction to Automobile



Introduction to Automobiles

The automobile, often referred to simply as a car, is a wheeled motor vehicle used for transportation. It typically runs on roads, has seating for one to eight people, and is primarily powered by internal combustion engines fueled by gasoline or diesel. However, with advancements in technology, electric and hybrid vehicles have gained significant traction in recent years.





Evolution of the Automobile Sector



Early Developments (Late 19th Century): The automobile's history dates back to the late 19th century when pioneers like Karl Benz, Gottlieb Daimler, and Henry Ford developed the first practical automobiles. These early vehicles were rudimentary compared to today's standards but laid the groundwork for future innovations.

Mass Production and Fordism (Early 20th Century): Henry Ford's implementation of assembly line production techniques in the early 20th century revolutionized the industry. The Model T, introduced in 1908, became the first car to be mass-produced on assembly lines, making automobiles more affordable and accessible to the general public.



Evolution of the Automobile Sector



Technological Advancements (Mid-20th Century): The mid-20th century witnessed significant technological advancements in the automobile sector. This period saw the widespread adoption of features such as automatic transmissions, power steering, and air conditioning, enhancing comfort and convenience for drivers and passengers.

Global Expansion (Late 20th Century): In the latter half of the 20th century, the automobile industry experienced rapid global expansion. Car manufacturers emerged in various countries, leading to increased competition and innovation. Japanese automakers like Toyota and Honda gained prominence for their efficient production methods and high-quality vehicles.



Evolution of the Automobile Sector



Environmental Concerns and Regulations (Late 20th Century - Present): Concerns about pollution and environmental degradation led to the development of cleaner, more fuel-efficient vehicles. This prompted the rise of hybrid and electric vehicles, as well as stricter emissions regulations imposed by governments worldwide.

Digitalization and Connectivity (21st Century): The 21st century brought about a new era of digitalization and connectivity in the automobile sector. Advanced driver assistance systems (ADAS), autonomous driving technologies, and in-car infotainment systems became increasingly prevalent, enhancing safety, convenience, and entertainment for drivers and passengers.



Evolution of the Automobile Sector



Shift Towards Electric and Autonomous Vehicles (Present and Future): With growing concerns about climate change and advancements in battery technology, there's been a notable shift towards electric vehicles (EVs). Additionally, autonomous vehicle technology continues to advance, promising a future where cars can navigate roads without human intervention, potentially revolutionizing transportation as we know it.



THANK YOU