

Getting into Formula 1 in 2022



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The rank of Formula 1 as an international sport is among the highest – there can hardly be a comparison for its intensity and prestige. The 2021 F1 season was one of the most exhilarating seasons in the history of the sport, and certainly the most heated of the post-hybrid era.

With the introduction of new regulations for the 2022 season, there is no better time to immerse into the fascinating world of F1. Like any sport, it is necessary to understand F1 to enjoy it to the fullest.

Here is what you need to know.

THE SPORT

Since 1950, F1 has been hosted every year. FIA, or the Federation Internationale de l'Automobile, is the governing body responsible for regulating the sport. Each year-long season consists of several races hosted in tracks all over the world.

The race tracks are mainly categorised into proper or race circuits, which are purpose-built tracks with gravel traps and sufficient runoff areas for safety, and street or road circuits, built on public roads with limited visibility and challenging turns due to high barriers and lack of runoff areas.

Three hour-long free practice sessions are given to the teams to run cars and gather data. To determine the race order, drivers must tally their times in consecutive three qualification rounds, where the slowest five drivers are eliminated each round and the fastest time gets the frontmost position.

Races must

cover a length of 305 km; Monaco being the only exception. To cover said distance, drivers must complete 50 to 70 laps depending on the track length, which are 4 to 7 km long each. Points are awarded to drivers and teams based on where they finish in a race. The winner receives 25 points, the second-place finisher 18 points, with 15, 12, 10, 8, 6, 4, 2 and 1 points for positions 3 through 10, respectively. Additionally, 1 point is gained for putting the fastest lap.

THE TEAMS

Ten teams, or constructors, participate in each season of F1, though the maximum number of permissible teams is 12. Each team lines up on the grid with two cars, and two drivers, to race. Moreover, they keep reserve drivers who can hop into the seats if the main drivers face health or other technical issues.

The number of employees in a team can vary from 200 to 1200, consisting of pit crew, race engineers, R&D engineers, race mechanics, production personnel in the factories, designers, managers and a team principal guiding them.

THE CARS

F1 cars are technological marvels which keep evolving to obtain the maximum performance achievable within regulations. The cars can hit top speeds of much over 300 kph, and can experience lateral forces up to 4 to 6 G's. The chassis and the powertrain are the two main constituents of the cars, the former of which has to be developed

by the individual teams while the latter can be purchased from different manufacturers, if necessary. Each of these cars are comprised of around 80,000 components, making them some of the most sophisticated pieces of machinery on earth.

Aerodynamics is perhaps the most important aspect of developing an F1 car. Regulations have certain parameters regarding the size, shape and weight of the car, but the aero approach is not set in stone, giving teams considerable liberty in developing the chassis to their liking.

Tyres are another key component, which are supplied by Pirelli. Harder tyres are more durable but provide less grip, whereas soft ones provide much more grip at the cost of higher degradation.

THE DRIVERS

Having only 20 driving seats available, the competition of getting into F1 is fierce. F1 drivers are some of the highest paid athletes in the world, and among the fittest.

Weight and height limits are imposed on them, and they can only get a seat after getting a super license by scoring points in other FIA championships. Drivers must have undivided attention and endurance, as one miniscule error can cost them the entire race.

THE STRATEGIES

With very little separating the cars and drivers of most of the teams, it is essential to strategise. Teams have to change their car setups to adapt to different tracks. They also have to keep developing the car throughout the season.

In a race, teams have to prepare multiple plans to adapt to all possible scenarios. Use of different tyre compounds, changing the racing line, pre-

serving charge and tyre life can make significant differences. Undercutting and overcutting to pit and making fewer or more pitstops can completely change outcomes.

THE REGULATIONS

Being such an adrenaline rushing sport, the FIA has to make sure to keep everything in check. Sporting, technical, and financial regulations are imposed to maintain fair racing without providing advantage to any particular team.

Driving within the white lines, not weaving and keeping space for another car are among the major rules a driver must follow on track, and they will be penalised for breaking them. Drivers might have to give back position, face time penalties or even stop their session depending on their offense.

THE FUTURE

F1 has been a reserved sport since its inception. However, after its acquisition by Liberty Media, the sport has opened up and thus grown in popularity significantly. Over 108 million tuned in to watch the 2021 Abu Dhabi GP, which rivals the viewership of many football matches.

Teams and drivers now have a strong social media presence, and merchandise is becoming more easily accessible. The new regulations of 2022 will mostly remain unchanged till 2026, when new drastic power unit regulations will be introduced. Talks of Audi and Porsche joining the sport and Andretti Motorsports' eagerness to join also indicate that F1 has been successful in raising the interest among motorsport corporations and enthusiasts alike.

