

 in Schools
WORLD FINALS
ABU DHABI | 2019

SUPPORTED BY



EVENT REPORT



What can I say? Just WOW! Our fifteenth World Finals was absolutely fantastic! We had three really intense, exciting days of competition, during which the students put their hearts and souls into showcasing their skills and performing to the highest levels.

The competition was rounded off with the most amazing awards evening, which took place on Turn 1 at Yas Marina Circuit, where all our teams experienced an incredible final celebration of the World Finals. Our congratulations go to Evolve UK, who took the top step of the podium and were crowned the 2019 F1 in Schools World Champions!

With the largest number of competing teams at this year's event, of which 40% were girls, we continue to represent the increasing popularity of STEM in education. F1 in Schools is just like Formula 1 in miniature and we aim to inspire more and more students to pursue careers in Motorsport and Engineering.

This year has seen Formula 1 and the F1 Teams offer even more support to us for the World Finals and I would like to thank Chase Carey for attending and taking time to meet all of our teams. I would also like to thank representatives from all the Formula 1 Teams, Formula 1, the FIA and all of our partners around the world for their continued support.

Our sincere thanks go to our title partner, ADNOC, and our hosts, YAS Marina Circuit, for providing the support to make it all possible.

Andrew Denford

Founder and Chairman of
The F1 in Schools STEM Challenge



#F1SWF19

**F1 in Schools
WORLD FINALS**

ABU DHABI | 2019



**David Croft,
Host**

It was great to be back in Abu Dhabi hosting the F1 in Schools World Finals. F1 in Schools and the sport of Formula 1 hold the same values and the same ingredients for success – hard work, passion and excellence of the people involved in each team. I was blown away with the level of innovation, creativity and engineering the students displayed which resulted in one of the most competitive World Finals yet!

The teams were great fun to work with and a credit to their schools and teachers. The support the event receives from the F1 community shows that we truly are working with the engineers of the future and I look forward to seeing some of these youngsters in the F1 paddock working amongst the F1 teams.

I congratulate all the students on their hard work and I hope each and everyone one of them enjoyed the experience in Abu Dhabi.

David Croft

Sky Sports F1® HD Commentator



It was fantastic to have had the F1 in Schools™ World Finals back on Yas Island and at Yas Marina Circuit. Having the pinnacle event of a hard-fought season just before the five-day Abu Dhabi Grand Prix 2019 meant excellent global exposure for the event as well as giving students the opportunity to be inspired by real-life Formula 1 teams and drivers.

Al Tareq Al Ameri,
Chief Executive Officer, Yas Marina Circuit



**Gary Anderson,
Chair of Judges**

It was a pleasure to return to Abu Dhabi to be the Chair of Judges at the 2019 World Finals.

The talent of the students at the World Finals is exceptional and this year was no disappointment. The level of entrepreneurship and engineering excellence exceeded all expectations and I have learnt to always expect the unexpected from these students.

My role gives me the opportunity to review all the designs and the methodology behind the Engineering that has been put into the teams producing their cars and this year I've seen teams take the rules to the edge and bring in new ideas that are extremely impressive. Alongside the intense competition, the sportsmanship and engagement between teams is something that can be truly admired.

Well done to all the students who made it to the World Finals, you are all winners, but my biggest congratulations goes to our new World Champions, Evolve UK on their superb achievement.

Gary Anderson

The Formula 1 in Schools program is fully aligned with ADNOC's commitment to advance the education and training of the UAE's young generations.

We believe that investing in our students today will result in a more competitive workforce for tomorrow.

Through this program, students are provided with new and exciting challenges that push the boundaries of what they can achieve.

The Formula 1 in Schools program provides exciting STEM learning opportunities for students and also gives students and parents a glimpse into possible future career options.

Reem Mubarak AlBuainain

Manager, Corporate Social Responsibility Department,
Abu Dhabi National Oil Company (ADNOC)



The Challenge

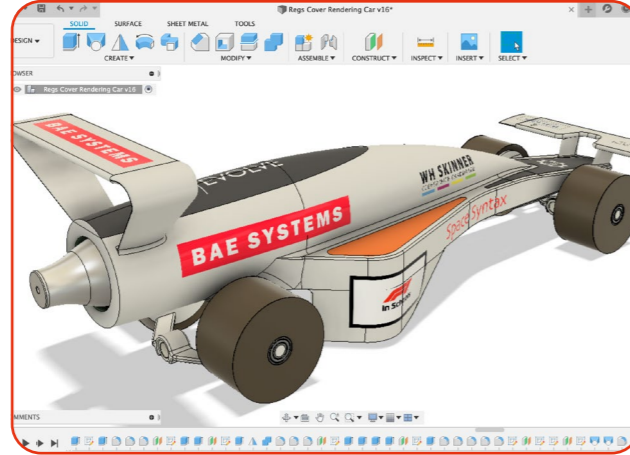
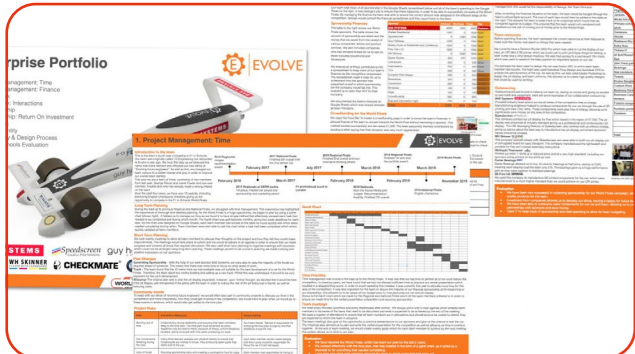
1 - FORM AN F1 IN SCHOOLS™ TEAM

A team is formed of three - six students, with a team name, allocated job roles; Team Manager, Manufacturing Engineer, Design Engineer, Graphic Designer and Resource Manager - The team then register for the regional finals. rendering and quality of finish and assembly will also be assessed.



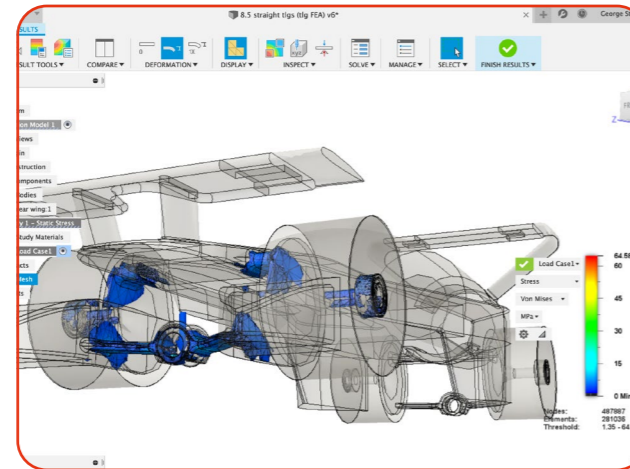
2 - PROJECT MANAGEMENT & SPONSORSHIP PLAN

The team prepare a business plan, develop a budget and raise sponsorship. Teams are encourage to collaborate with industry and create business links.



3 - DESIGN

Using 3D CAD (Computer Aided Design) software, the team designs an F1 car of the future to the specification set by the International Rules Committee, just like in Formula 1.



4 - ANALYSE

Aerodynamics are analysed for drag coefficient in a Virtual Reality Wind Tunnel using Computational Fluid Dynamics software (CFD).

5 - MAKE

Using 3D CAM (Computer Aided Manufacture) software, the team evaluates the most efficient machining strategy to make the car.



6 - TEST

Aerodynamics are tested in air trace visualisation tunnels. Aerodynamics is a major focus for all teams involved in the world of Formula 1 and can make the difference to a winning team. Students can fine tune designs to optimise speed and drag co-efficiency.



7 - PIT BOOTH

Teams put together an informative display showing their work through all stages of the competition, also incorporating their team identity.

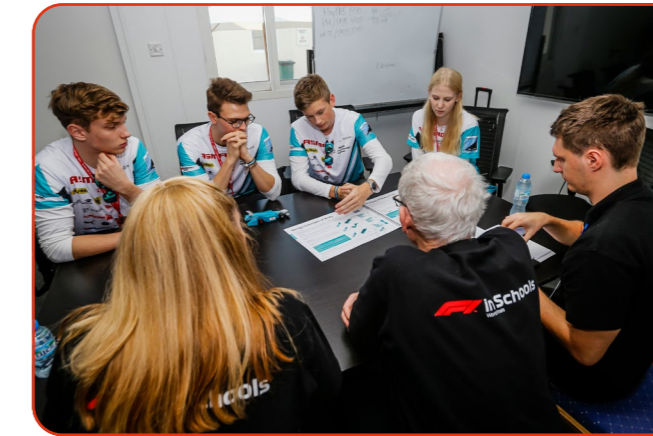


8 - SCRUTINEERING

Cars are submitted to parc fermé where the judges scrutinize every dimension to check they comply with the Rules and Regulations.

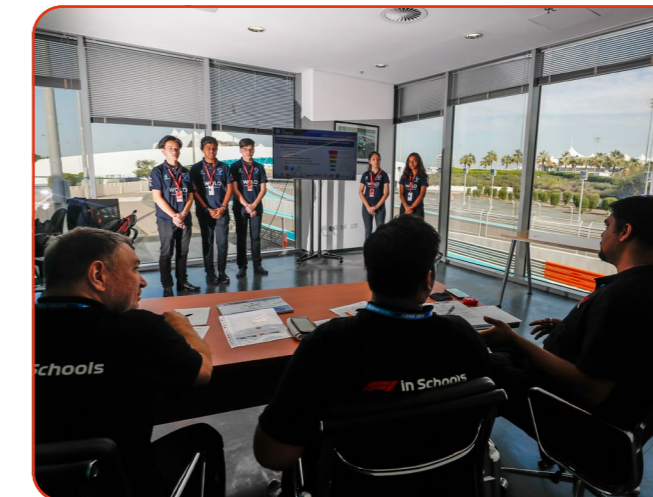
9 - ENGINEERING JUDGING

Judges question teams on how their car has been manufactured and why particular designs were chosen.



10 - VERBAL PRESENTATION

Teams prepare a presentation to perform to a panel of judges covering all aspects of the challenge. This is presented within a set time limit (10 mins).



11 - PORTFOLIOS JUDGING

The teams put together two 10 page A3 portfolios documenting their project.



12. Race

Teams are judged on car speed, as well as supporting evidence of their design, verbal presentation and marketing display stand in "the pits".

Teams put the cars to their ultimate test by racing them over a measured distance with the F1 in Schools 20m elevated track and F1 in Schools race system.

The Teams



T01
Team Leviathans
KUWAIT
The British School of Kuwait, Salwa



T02
Nakara Racing
THAILAND
Amnuay Silpa School, Bangkok



T03
Pixel
CYPRUS & GREECE
The English School, Nicosia
& 3rd General Lyceum of Serres



T04
Evolution
GERMANY
Märkisches Gymnasium Iserlohn,
Iserlohn



T05
Alacrity Dynamics
GREECE
Erasmios Greek-German School
& 2nd Public School of Alimos



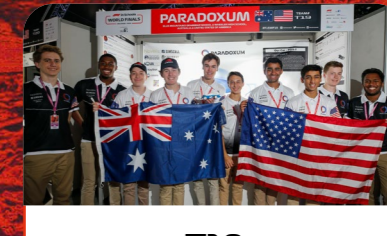
T16
Team Phoenix
JAPAN
Fukui senior High School attached to
Fukui University of Technology



T17
FUSION RACING
MEXICO
Colegio Esperanza, Aguascalientes



T18
TWRJ OXYURA
MALAYSIA
SMK Agama Johor Bahru, Johore



T19
PARADOXUM
AUSTRALIA & UNITED STATES
OF AMERICA
Blue Mountains Grammar School,
Wentworth Falls/Wheeler High
School, Marietta



T20
PINNACLE
UNITED STATES OF AMERICA
Palmetto High School, Manatee
County, Florida



T06
Divignite
SINGAPORE
Raffles Girls' School, Singapore



T07
Delta X-15
UNITED ARAB EMIRATES
GEMS World Academy Dubai



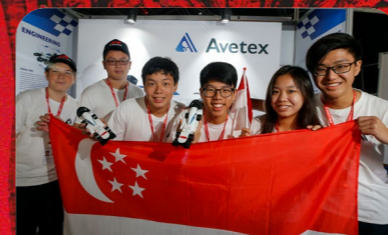
T08
Mercury
BRAZIL
Brazil, Colégio Vértice



T09
Orion Racing
INDIA
Scottish High International School,
Gurugram



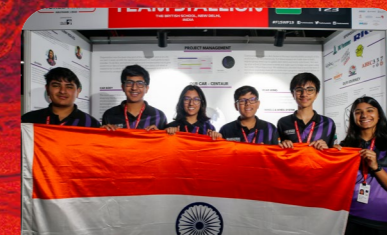
T10
Evolve UK
UNITED KINGDOM
Queen Elizabeth's Grammar School,
Faversham



T21
AVETEX
SINGAPORE
Geylang Methodist School
Secondary, Singapore



T22
VINTIUS RACING
IRELAND
Marist College Athlone



T23
TEAM STALLION
INDIA
The British School, New Delhi



T24
CJJ191
IRELAND
St. Brigid's College, Loughrea, Co.
Galway



T25
ORION
CYPRUS
The Heritage Private School,
Limassol



T11
Arrow
CYPRUS
The English School, Nicosia



T12
Arrow Racers
GREECE
Ekpaideytiki Anagnensisi in Athens &
1st GEL Panoramatos in Panorama



T13
Team Tribulus
IRELAND & UNITED ARAB
EMIRATES
De La Salle College, Waterford & JSS
International School, Dubai
& 3rd General Lyceum of Serres



T14
Nam Phong Racing
VIETNAM
British International School,
Ho Chi Minh City



T15
Hydra
BRAZIL & MEXICO
Colégio Vértice (Brazil) & Universidad
Autónoma de Campeche (Mexico)



T26
IONIC
AUSTRALIA
Wesley College, Perth,
& Mackay North State High School,
Mackay



T27
TEAM MATADORS
INDIA
Amity International School, Saket



T28
AFLEX HOSE
CENTURION RACING
UNITED KINGDOM
Rishworth School, Halifax



T29
ASCENSION
AUSTRALIA
Mount View High School,
Cessnock / Penrith Christian School,
Penrith



T30
SYNERGY RACING
UNITED STATES OF AMERICA
Granbury High School, Granbury,
Texas



T31
INFINITY RACING
WALES
St. John's College, Old St. Mellons, Cardiff



T32
TEAM AGERA
SINGAPORE
Raffles Girls' School



T33
LEGACY
THAILAND
Singapore International School of Bangkok, Bangkok



T34
EVOLVE AUSTRALIA
AUSTRALIA
Trinity Grammar School Kew, Melbourne



T35
VALKYRIE RACING
UNITED STATES OF AMERICA
Brentwood High School, Pittsburgh, PA



T36
MERCURY RACING
ITALY
St. Stephen's School, Rome



T37
SPYKAR
CHINA
Shixi high school Shanghai, China



T38
MOMENTUM
CHINA
The Experimental High School Attached To Beijing Normal University, Beijing



T39
NIHON UNIVERSITY TEAM WA
JAPAN
Nihon University, Tokyo



T40
FUSION
GERMANY
Gymnasium Unterrieden, Sindelfingen



T41
BLU COMET RACING
UNITED ARAB EMIRATES
Gems World Academy, Dubai



T42
SEVEN SPEED
BRAZIL
Escola SESI Reitor Miguel Calmon, Salvador - Bahia



T43
VENCERA RACING
MALAYSIA
Pusat GENIUSA Pintar Negara, Universiti Kebangsaan Malaysia, Bangi



T44
BRAZILIAN SIX
BRAZIL
Colégio Vértice, São Paulo



T45
MALAXA
ROMANIA
British School of Bucharest, Bucharest



T46
TEAM VELOCITAS
MALAYSIA
Petaling Jaya



T47
MATRIX RACING
THAILAND
Harrow International School Bangkok



T48
DOWNFORCE
CHINA
The Experimental High School Attached to Beijing Normal University, Beijing



T49
AVIDITY RACING
UNITED KINGDOM
Scarborough UTC



T50
PETRONAS ACCURA RACING
CHINA & MALAYSIA
Sultanah Hajjah Kalsom Secondary School, Shi Xi High School, Dazhong Technical School



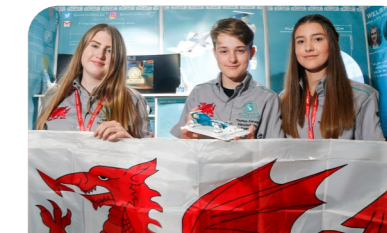
T51
AERO MATRIX
AUSTRIA
HTL Steyr in Steyr



T52
ANEMOS RACING
GREECE
Anatolia College, Thessaloniki/ University of Patras, Patras



T53
DESERT FOX
MEXICO
COBACH GUAYMAS, MEXICO



T54
QUANTUM
WALES
Denbigh High School, Denbigh



T55
ESCUDERIA QUETZAL
MEXICO
COBACAM O2, CANDELARIA

TIME TO RULE THE WORLD



Opening Ceremony



Competition - Day 1

This 15th World Finals started with an opening ceremony performed by Reem Mubarak AlBuainain, Manager, Corporate Social Responsibility Department, Abu Dhabi National Oil Company (ADNOC), who then sampled F1 in Schools racing with a demonstration run, racing with Andrew Denford, Founder and Chairman, F1 in Schools.

All 55 teams raced their cars in the first of three rounds of speed tests, with a team from Greece, 'Anemos Racing', topping the leaderboard on the first of three days of competition, posting a time of 1.041 seconds, just 0.005 seconds ahead of the second placed car of 'Ionic' from Australia.

The event had a lively buzz with all the teams having put a huge effort into building pit displays which showcase their work and a strong team spirit was evident all around the Yas Island venue.





Competition - Day 2

The competition continued on the second day with more judging sessions and racing.

This year's competition features new rules and regulations for the teams, with the F1 in Schools cars sporting wider, wing end mounted rear wings and two span front wings. Many of the teams produced innovative designs with intricate engineering which impressed the judges.



Unilever Williams Engineering Academy Assessment Centre & Knockout Competition

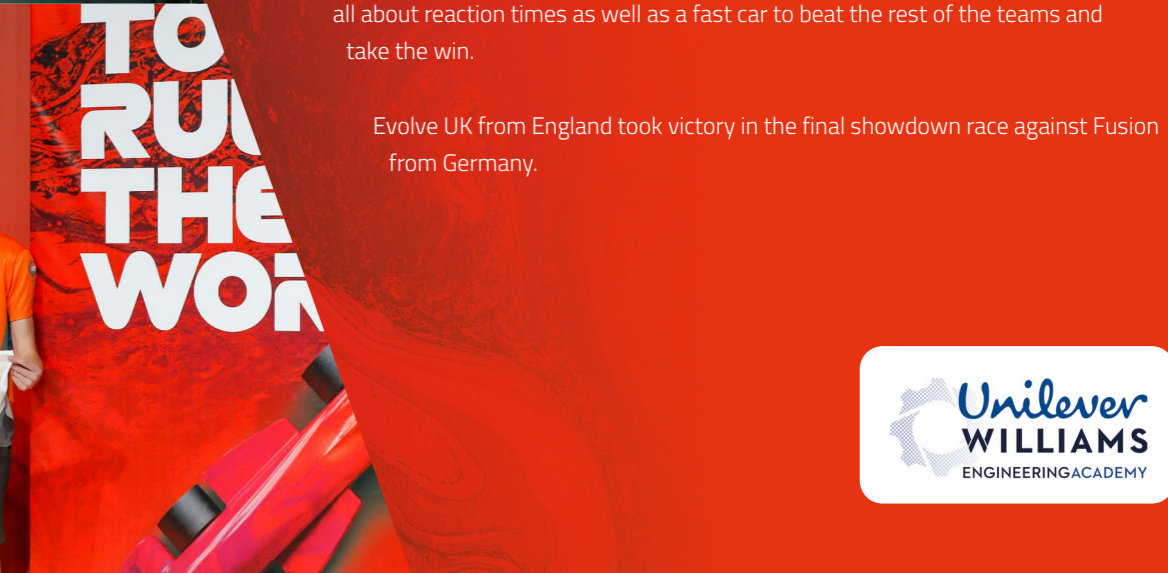
A rigorous selection process with a distinguished panel of Williams's and Unilever personnel assessed 25 talented F1 in Schools World Finalists during an assessment centre.

Launched in 2015 the students benefit from this remote e-learning programme with the successful candidates receiving support, training and guidance to underpin their engineering education.

The final day of competition was also host to the exciting Knockout Racing Competition.

The Knockout Racing always provides a great spectacle but it's extremely competitive, particularly for the student selected to 'drive' the team's car. It's all about reaction times as well as a fast car to beat the rest of the teams and take the win.

Evolve UK from England took victory in the final showdown race against Fusion from Germany.



The Awards

The stunning Awards Celebration Ceremony was held on Turn 1 under the iconic Shams Tower at the Yas Marina Circuit in Abu Dhabi, just two days before Formula 1 cars took to the track for the ETIHAD FORMULA 1 ABU DHABI GRAND PRIX 2019. The evening was attended by dignitaries from the world of Formula 1 and education, key Formula 1 personnel, the 55 world finals teams, teachers, judges, parents and many more who all came together to celebrate the achievements of the students; the future engineers and professionals of the Formula 1 industry.

The evening featured 21 awards, presented by representatives from award supporter companies and F1 personalities, including 2016 World Champion, Nico Rosberg and Formula 1 CEO, Chase Carey, with 15 teams, from Australia, USA, Thailand, India, UK, Ireland, Germany, Brazil, China and Malaysia visiting the stage to receive them.



World Champions Evolve UK



UNITED KINGDOM
Queen Elizabeth's Grammar School,
Faversham

Evolve UK, with team members George Stonor, Freddie Bull and Lewis Fowler collected awards for winning the Knockout Racing competition, Pit Display Award and Enterprise Portfolio Awards, before jumping on to the top step of the podium to claim the trophy, as fireworks lit up the sky to celebrate their success.



Two of the three boys applied for and won places in the Unilever Williams Engineering Academy (UWEA). Along with the World Champions title the boys have won scholarships to City, University of London, UCL Mechanical Engineering and the University of Huddersfield. They were also treated to an F1 Experience track tour, paddock access for each day of the Abu Dhabi Grand Prix and a trophy presentation on the Formula 1 podium.

George Stonor said, "We came here hoping for a top ten finish and possibly an award, so to have won three awards was amazing, but to be World Champions is just so much more than we could have imagined. We really didn't think we could do it, especially with so many good teams, it's just incredible. We've been devoted to this competition for so many years, it's taken over our lives, but it's been so worth it".



#2 FUSION



GERMANY
Gymnasium Unterrieden,
Sindelfingen

#3

**AFLEX HOSE
CENTURION RACING**

UNITED KINGDOM
Rishworth School,
Halifax



<p>Best Collaboration Team Award</p> <p>PETRONAS Accura Racing, China & Malaysia Supported by Shell</p>	<p>Best Team Project Management</p> <p>Aero Matrix, Austria Supported by Project Management Institute Educational</p>	<p>Chair of Judges Recognition of Achievement Award</p> <p>Aero Matrix, Austria Supported by Aston Martin Red Bull Racing</p>	<p>Innovative Thinking Award Achievement Award</p> <p>PLANNCLE, USA Supported by Renault F1 Team</p>	<p>Pit Display Award</p> <p>Evolve UK Supported by Scuderia Toro Rosso</p>	<p>Outstanding Sportsmanship Award</p> <p>Vinitus Racing, Ireland Supported by SportPesa Racing Point F1 Team</p>
---	---	---	--	--	---

<p>Digital Media Award</p> <p>PARADOXUM, Australia & USA Supported by ID PR & Marketing</p>	<p>Enterprise Portfolio Award in partnership with Turnitin</p> <p>Evolve UK Supported by ROKIT</p>	<p>Fastest Car Award</p> <p>Arrow Racers, Greece Supported by Mercedes-AMG Petronas Motorsport</p>	<p>Sponsorship & Marketing Award</p> <p>Alfex Hose Centurion Racing, UK Supported by Haas F1 Team</p>	<p>Sustainability Award</p> <p>Matrix Racing, Thailand Supported by Alfa Romeo Racing</p>	<p>Scrutineering Award</p> <p>Evolve Australia, Australia Supported by FIA</p>
---	--	--	---	---	--

<p>Identity Award</p> <p>Synergy Racing, USA Supported by Scuderia Ferrari</p>	<p>Research & Development Award</p> <p>Afex Hose Centurion Racing, UK Supported by McLaren Racing</p>	<p>Knockout Competition Winners</p> <p>Evolve UK Supported by Pirelli</p>	<p>Moment of the Week Award</p> <p>Brazilian Six, Brazil Supported by Motorsport Network</p>	<p>Women in Motorsport Award</p> <p>Team Agera, Singapore Supported by FIA Women in Motorsport Commission</p>	<p>Verbal Presentation Award</p> <p>Afex Hose Centurion Racing, UK Supported by Formula 1</p>
--	---	---	--	---	---

Unilever WILLIAMS



Unilever Williams Engineering Academy Class of 2019

The announcement of the Unilever Williams Engineering Academy students for 2019 was made during the Awards Ceremony Celebration.

Academy application is exclusively for F1 in Schools World Finals students and is a proven pathway to a Formula 1 career. A total of ten students were announced to join the academy by Nicola Salter and Dave Redding. This is the fifth intake to the Academy which is designed to identify talented engineers to mentor



YAS MARINA
CIRCUIT
حلبة فرانس ياس

Pit Lane Walk



The world finalists' had an amazing day visiting Yas Marina Circuit where they had a group photo taken on the start and finish straight around the official F1 safety car with the iconic Shams Tower in the background.

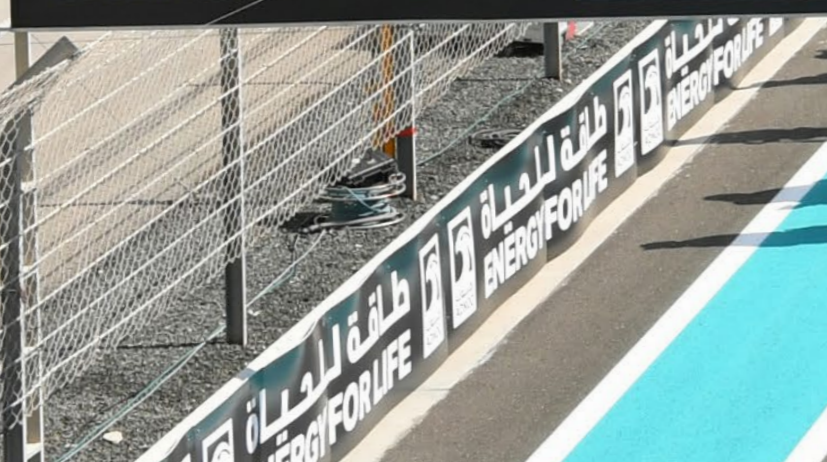
The VIP treatment didn't end there, the students were then given access to the F1 Pit lane Walk courtesy of the circuit and Formula 1. The students were able to see behind the scenes for an unforgettable experience.

The teams who won the F1 team awards were hosted by the F1 teams in their pit garages and given a behind the scenes tour and in-depth look at the cars up close.



CLASS OF 2019 - CONGRATULATIONS!

طاقة للحياة
ENERGY FOR LIFE



Winning Teams Visit the Formula 1 Paddock

Some teams stayed in Abu Dhabi to attend the Formula 1 2019 Etihad Airways Abu Dhabi Grand Prix, the finale of the 2019 F1 season.

The award winning teams were also given exclusive VIP access to the F1 paddock where they were given an exclusive behind the scenes tour.





F1 in Schools is proud to deliver such an exciting initiative that attracts so many females into the competition.

Women in Motorsport

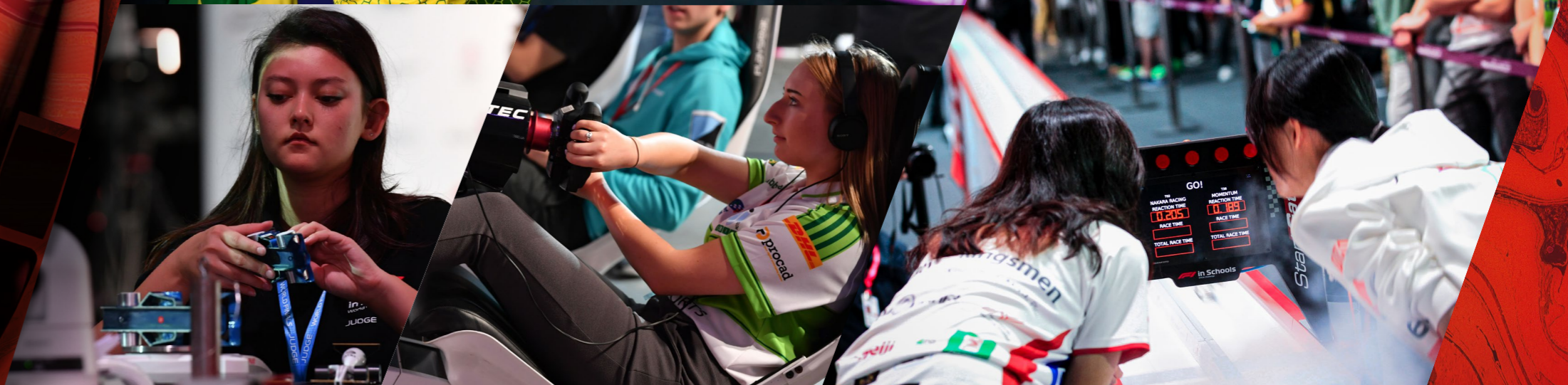
We continue to work with and support the FIA Women in Motor Commission to show that motorsport is open to women in all of its aspects, whether as competitors, officials, team managers, engineers, mechanics etc. It's important we continue to promote the place of women in motorsport and encourage the next generation of young women to see the opportunities available to them.



World Champions Hosted on the Formula 1 Grid Walk

Evolve UK, the newly crowned world champions were guests of Formula 1 with VIP paddock passes for the entire weekend as well as extremely exclusive Grid Access for race day, a truly once in a lifetime experience.

The team also had the opportunity to display their pit display to the entire F1 paddock whilst it was set-up over the race weekend in prime position.



F1 in Schools WORLD FINALS

ABU DHABI | 2019

SUPPORTED BY



SUPPORTED BY



HOSTED BY



OFFICIAL AIRLINE



SUPPORTED BY



#F1SWF19



The F1 IN SCHOOLS Logo, F1, Formula 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX and related marks are Trademarks of Formula One Licensing BV, a Formula 1 company. All rights reserved.