

FORMULA STUDENT

Institution of
**MECHANICAL
ENGINEERS**

2018
11-15 JULY
SILVERSTONE, UK



TEAM HANDBOOK

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20
YEARS OF FORMULA STUDENT
1998-2018

RULES OF ENGAGEMENT

This event is held under the General Regulations of the Motor Sports Association, the MSA (incorporating the provisions of the International Sporting Code of the FIA), the Formula Student Rules 2018, the 2018 FSUK Supplementary Rules, FS-AI 2018 Rules and any other subsequent written instructions that the Organisers issue for the event. MSA Permit Number: CoE 106640.

Disclaimer: This information is for guidance only and does not replace or supersede the official Formula Student Rules governing the event. If there are any conflicts between this document and the Rules, then the Rules prevail. The Organisers reserve the right to make amendments to the schedules, plans and procedures as they see fit.



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ACCELERATION RUN-OFF

There will be an Acceleration Run-Off for the fastest 6 cars immediately after the main Acceleration Event on Saturday. Please refer to the event timetable for confirmation of timings, but also listen out for PA announcements. Please see Rule D5.2 in the FSUK Supplementary Rules for the Acceleration Run-Off procedure.

ACCREDITATION

See also ‘Sign on and Registration’.

We require all teams to identify team members wishing to attend the Silverstone event. This is vital for us to ascertain how many people are actually expected to be on site at Silverstone, to ensure we staff the event correctly and safely.

All registered and paid for team members will be issued with wristband accreditation at registration on Wednesday 11 July, which will be required in order to gain access to the venue from Thursday 12 July – Sunday 15 July. All team members will be required to collect their own wristbands this year as they feature RFID tags with your contact details. These tags can be scanned at sponsor and partner exhibition stands, should you wish to share your details with potential future employers, contacts and/or suppliers. All team members will be required to sign a consent form on receipt of their wristband.

The wristbands are festival style, secure and tamper proof and cannot be replaced if lost or stolen. If you are worried that your wristband has become loose or the secure fastening is not functioning correctly, return it to event officials at the Accreditation Centre (car park 49) where you can exchange it for a new one.

ALCOHOL

See 'Prohibited Items'.

ANNOUNCEMENTS

Teams wishing to make an announcement should proceed to the Information Point underneath Race Control and speak to event officials.

ASSISTANCE AND HELP

See also 'Information Point'.

Event officials can be identified by their uniform, as follows (See Appendix 1 for uniform guide):

Black polos	Team FS
Green polos	Scrutineers
Purple polos	Dynamic Events Team
Blue polos	Static Events Judges
White Shirts	Event Officials

Everyone is here to help you, or direct you to someone who can help, with any queries you may have. The Information Point, underneath Race Control, is open every day from Wednesday 11 July. Please refer to the event timetable for confirmation of opening times.

AWARDS CEREMONIES

Awards ceremonies will take place in the evenings on Saturday 14 and Sunday 15 July in the Pavilion. Please refer to the event timetable for confirmation of timings.

Please note that whilst every endeavour will be made to stick to planned timings, delays may arise in the event of appeals.

SATURDAY 14 JULY 2018	
SPONSOR	AWARD
IMechE	Class 2 Business Plan Presentation
IMechE	Class 2 Engineering Design
IMechE	Class 2 Cost & Manufacturing
IMechE	Class 1 Acceleration Winner
IMechE	Class 1 Skid Pad Winner

IMechE	Class 2 Overall Winner
RaceCar Engineering Magazine	RaceCar Engineering Engagement, Outreach and Communications Award
Bosch	Bosch Best Engineered Brake System
ExxonMobil	ExxonMobil Innovation Award
Jaguar Land Rover	The Art of Performance
Jaguar Land Rover	The Virtual Engineering Award
Mercedes-AMG High Performance Powertrains	Mercedes-AMG HPP Best Powertrain Installation of an Internal Combustion Engine
Mercedes-AMG High Performance Powertrains	Mercedes-AMG HPP Best High Voltage Powertrain Implementation
RaceTech Magazine	The Spirit of Formula Student Award
IMechE	Craig Dawson Award - Most Valuable Team Member
IMechE	Formula Student Outstanding Contribution Award
IMechE	Fastest Egress

SUNDAY 15 JULY 2018	
SPONSOR	AWARD
IMechE	Class 1 Engineering Design
IMechE	Class 1 Cost & Manufacturing
IMechE	Class 1 Business Plan Presentation
IMechE	Class 1 Overall Winner
IMechE	Class 1 Runner Up
IMechE	Class 1 Third Place
IMechE	Class 1 Dynamic Events Winner

Mercedes-AMG Petronas Motorsport	Mercedes-AMG Petronas Motorsport Endurance Award
IMechE	Class 1 Sprint Winner
IMechE	Class 1 Most Efficient Car
IMechE	Class 1 Most Efficient Internal Combustion Engine Car
IMechE	Class 1 Top Individual Driver
IMechE	Allan Staniforth Award - Best Newcomer
IMechE	Class 1 Most Cones Hit
IMechE	Class 1 Furthest Travelled Cone
IMechE	Class 1 Most Entertaining Driver
IMechE	Breakthrough Award

BUSINESS PLAN PRESENTATION

The Business Plan Presentation event will take place at the Silverstone UTC, opposite the National Pit straight. The walking route is via Copse tunnel. Please refer to the maps at the back of this handbook for directions. Alternatively there will be minibus shuttles running to and from the UTC and Paddock side of the Copse Tunnel between the hours of 07:30-19:00 on Thursday and Friday.

If you wish to use Apple Mac hardware, you must provide a Thunderbolt to HDMI/VGA adapter.

Power / connector cables will not be available to hire from event officials. Each team will need to bring:

- A laptop (with a fully charged battery) containing their presentation
- HDMI or VGA cable to connect laptop to screens / projectors
- 3.5mm jack for audio (if applicable to your presentation)

Please note: You should allow at least 15 minutes to walk to Silverstone UTC from the National Paddock and you should aim to arrive 5-10 minutes prior to your scheduled presentation time. To comply with UTC safety protocols, all team members are required to sign in and out so allow at least 10-15 minutes prior to your judging slot for this.

BUSINESS PLAN PRESENTATION FINAL

The Business Plan Presentation Final, featuring up to five finalists from the event, is an open event and will take place on Saturday in the Pavilion. Please check the event timetable for confirmation of time. Finalists will be notified of the arrangements, including presentation set up, by event officials. The winners will be announced at the Awards Ceremony on Sunday evening.

CAMERA MOUNTS

Any cameras mounted to competition vehicles must comply with FSUK Supplementary Rules T12.5. The mounts will be sealed as part of the Technical Inspection process, any competition vehicle with an unsealed camera mount will not be allowed on track.

CAMPSITE

There is a dedicated student campsite located in the grounds of Whittlebury Hall on the South side of Whittlebury Village.

You must book your campsite plot in advance via <https://formulastudent.checkfront.co.uk/reserve/>

CAR SET-UP ALTERATIONS

Teams do not have to use the same car set-up for all the dynamic events and are encouraged to make alterations, e.g. to tyre pressures and suspension settings, to give vehicle characteristics best suited to each specific event. Please see Rule IN1.6 in the Formula Student Rules for a list of what can be modified.

CATERING

SILVERSTONE

Pit Stop Café

Offering hot food including burgers, jacket potatoes, pizzas and daily specials, including a roast on Sunday! Located opposite garages 1-6.

Thursday – Saturday 07:00 – 20:00

Sunday – 07:00 – 19:00

Paddock Diner

Offering fast food and a licensed bar for burgers and beer* on the go! Located in central paddock, between garages 6 and 7.

Wednesday - Sunday 07:30 – 20:00

Wood Fired Pizza

Enjoy the authentic taste of Naples from the Wood Fired Pizza van, located opposite Garage 12.

Saturday – Sunday 08:00 – 18:00

Ice Cream

Fingers crossed for sunshine! The ice cream van will have all of your childhood favourites including the classic 99 Flake! Located adjacent to Paddock Diner, between garages 6 and 7.

Thursday – Sunday 08:00 – 18:00

****Drink responsibly and not during competition hours.***

All units accept cash or card, including contactless payments. Please note, cash payments may be made in STERLING only.

LOCAL

The White Horse public house in Silverstone Village is offering 10% discount on all food (not drinks) between 11 – 15 July when you show your accreditation wristband to staff at time of ordering.

Opening hours: 12:00 – 23:00 daily

CLASS 2

Class 2 teams will be based in the Pavilion for their Design & Cost judging.

Teams will be allocated booth space approximately 2 metres wide x3 metres deep. Cost and Design judges will visit teams at their booth space according to the judging schedule.

Access to the Pavilion is as follows:

	Teams with Design and Cost Judging Thursday	Teams with Design and Cost Judging Friday	Teams participating in Friday STEM Day
SET UP	From 07:00 Thursday 12 July*	From 07:00 Thursday 12 July*	From 07:00 Thursday 12 July*
DE RIG	From 18:00 Thursday 12 July**	From 17:00 Friday 13 July	From 17:00 Friday 13 July

*Please note that gates do not open until 07:00

**After Class 2 Team Photo

Due to an event taking place in the Pavilion on Friday 13 July, de-rig will not be permitted outside of these times but all Class 2 teams **MUST** move out of the Pavilion by 17:00 Friday.

The Pavilion will be in use for a STEM event on Friday 13 July with 150 school children attending. Class 2 teams are welcome to leave

their projects in situ and form part of the overall experience for the children.

Business Plan Presentation judging will take place at the Silverstone UTC (see also 'Business Plan Presentation').

Class 2 awards presentations will take place at the evening Awards Ceremony on Saturday 14 July in the Pavilion (refer to event timetable for confirmation of times).

CLOTHING

Team members are encouraged to wear their branded uniforms and clothing but must adhere to the following safety requirements for the safety of themselves and others:

DO

- In hot areas (where cars are running) ensure arms and legs are covered at all times
- Wear fully enclosed shoes. We recommend safety shoes / boots to protect feet and ankles
- Dress for British weather! Ensure you can protect yourself from heat / sun, wind and rain by having hats, sunglasses and water/wind proof layers
- Wear any Personal Protective Equipment (PPE), issued to you by your University or by event officials, appropriate for working on cars or car parts
- Refer to EV 9 in the Formula Student Rules 2018 for specific requirements relating to those working on electric vehicles

DON'T

- Wear shorts, vests, short sleeved tops in hot areas or whilst working in or around vehicles
- Wear flip flops or sandals in hot areas or whilst working in or around vehicles
- Forget sunscreen!

COST & MANUFACTURING FINAL

The Cost & Manufacturing Final is a closed event and will take place on Saturday evening in the Scrutineering Bay. Refer to the event timetable for confirmation of time. It is for Class 1 teams only. Timings and preparation requirements will be communicated to all finalists directly. The results will be announced at the Awards Ceremony on **Sunday**.

DECAL POSITIONING ON CARS

Please refer to UK Supplementary Rule T.11.1 and T.11.4 regarding all cars to accommodate the IMechE and Scrutineering approval decals. The car weight label will also be affixed in this area.

Running cars need to allow an 8cm x 8cm space on the right side of the cockpit for the driver activity check, which is used for the dynamic events.

DRIVERS BRIEFINGS

The Clerk of the Course Safety Briefing will take place at the following times:

Friday 13 July 07:45 Pavilion All Drivers and Team Leaders to attend

Subsequent driver briefings for the Dynamics activities will take place at the following times:

Saturday 22 July 07:45* Pavilion Acceleration, Skid Pad and Sprint (All Drivers to attend)

Sunday 23 July 07:45* Pavilion Endurance (Endurance Drivers only)

**Refer to the event timetable for confirmation of times.*

Attendance is mandatory. Drivers will be issued with a different wristband following each briefing, on departure from the Pavilion, as confirmation of attendance.

STRICTLY No briefing wristband = No drive!

It is recommended that all drivers familiarise themselves with marshal flags in the 2018 MSA Yearbook (the 'Blue Book') prior to event.

DRIVERS PERSONAL PROTECTIVE EQUIPMENT (PPE)

Refer to T12.3 in the Formula Student Rules 2018 and Rule T12 in the FSUK Supplementary Rules in the FSUK Supplementary Rules for full list of Drivers' equipment requirements.

DRONES (UNMANNED AERIAL VEHICLES - UAVS)

The use of Unmanned Aerial Vehicles, or drones, is strictly prohibited by the venue operators, Silverstone Circuits Ltd. Anyone found to be in breach of this may be ejected from the venue, unable to continue with the competition and, in extreme cases, subject to prosecution for breach of the Civil Aviation Authority's Air Navigation Order 2016.

See also 'Filming'.

DYNAMIC EVENTS

Note where these are located and the times these activities are operating. Refer to the event timetable for confirmation of times.

All activities will close at the time defined in the official event timetable and you will not be permitted to run after these times, **even if you are in the queue.**

Please note: Weather and other conditions may alter the activities open times, amended only at the discretion of the event officials. Updates will be posted on the Official Noticeboard and communicated via Public Address (PA) announcements where possible. Timings posted on the Official Noticeboard rule.

In the event of any dispute between the online and master timetable, then the master timetable displayed on the Official Noticeboard at Race Control / Information Point will be taken as the correct timetable.

Teams will be given their running order for the Endurance based upon their time recorded in the Sprint event. This running order will be determined by event officials and announced no later than one hour before the timetabled start time for the Endurance event, on the Official Noticeboard and via PA announcement.

For all dynamic activities, access to the assembly area is restricted to 1 driver + 3 team members (which may include a second driver) per team. Only Team members with Team Hot Area tabards will be permitted access to the dynamic areas.

ELECTRIC SUPPLY

Please note that power adapters will not be available to hire from event officials. The power adapters needed for the garages are '16A C-Form Single Phase Outlet' which are readily available online.

ELECTRIC / HYBRID / FUEL CELL INSTRUCTIONS

See also 'Fires'.

EV teams should refer to the EV Protocol document which will be distributed to all teams prior to event.

EMERGENCY RESPONSE

Any incident, however minor, **MUST** be reported to event officials at Information Point immediately.

If you discover something more serious, report to your nearest event official immediately. In the current global climate, it is important to prepare ourselves to deal with possible occurrences at events open to the public:

- Fire

Refer to Rule T12.4 in the Formula Student Rules 2018.

Only attempt to fight fires if you are trained and confident in doing so. On discovering a fire, alert event officials immediately. A dedicated Fire Tender will be on site during event operating hours.

- Unattended item

Should you discover an unattended bag or package, consider HOT characteristics:

Hidden – does the item appear to have been concealed from view or hidden?

Obvious – is it obviously suspicious? Does it look like a device of some sort or is it emitting smoke or a strange smell? If it is a vehicle, does it look abandoned?

Typical – is the item something you would expect to see in the area?

Try to establish quickly and calmly if it belongs to anyone in the vicinity. If the owner is not identified, move away from the item and alert event officials. Do your best to keep passers by at least 100m distance from the item or 500m from a vehicle. Do not use mobile phones within 15m of the item.

- Medical emergency

If you, or someone close by, requires emergency medical assistance e.g. a severe burn, collapse or choking, **NOT** wasp sting, small cut or stubbed toe, alert an event official immediately. Calmly and clearly communicate the nature of the concern and the location assistance is required.

For all walking wounded or minor medical complaints, report to event officials at the Information Point.

ENERGY METERS

Energy Meters will be issued to all Class 1 EV Team Leaders at EV Scrutineering.

All Class 1 EVs must be fitted with one of these and under no circumstances can teams fit their independently sourced energy meters and connection components.

ENGINEERING DESIGN FINAL

The Engineering Design Final is a closed event and will take place on Saturday evening in the Scrutineering Bay. Refer to the event timetable for confirmation of time. It is for Class 1 teams only. Timings and preparation requirements will be communicated to all finalists directly. The results will be announced at the Awards Ceremony on **Sunday**.

ENGINE & ELECTRIC MOTOR RUNNING

See also 'Vehicle Movement'.

Engines and electric motors must only be run in the following areas, between the hours of 09:00 and 18:00

- Scrutineering (as directed by Scrutineers)
- Engine running area (between Garages 6-7)
- Brake test
- Noise test
- Practice area
- Dynamic events

Engines may be run in the **engine running area** (between Garages 6-7) provided the car has passed **the chassis, safety and tech inspections** and the following conditions are satisfied:

1. The car is on an adequate stand.
2. The drive wheels are at least 10.2 cm (4 in) off the ground, or the drive wheels have been removed.

No work should be undertaken underneath the vehicles while the engine is running and a hazard triangle **must** be in place to warn pedestrians.

Fire extinguishers **must** be close by the vehicle and readily accessible at all times.

- **All team members must be trained in the correct use of fire extinguishers**
- A fire extinguisher **must** accompany the car, carried alongside it, **wherever** it is moved in the paddock.
- A team member **must** hold a fire extinguisher ready **whenever** the engine is running in the engine running area.

FIRES

See also 'Emergency Response' and also 'Electric / Hybrid / Fuel cell Instructions'. Also refer to T12.4 in the Formula Student Rules 2018.

Open fires are not permitted anywhere on the event site, including BBQ grills, oxy-acetylene torches, heaters, cigarettes, etc.

If you require welding services, you **MUST** use the free service, provided by Silverstone UTC, available to all teams at Scrutineering.

FILMING & PHOTOGRAPHY

There are various film crews and photographers working on behalf of the IMechE and our partners and sponsors. If you do not wish to be filmed, please advise event officials in the Information Point underneath Race Control.

University photographers or camera operators will be issued with one tabard per team at registration, permitting access to the Team Press Area. have one pass per team for the Team Press Area. See also 'Press & Media'.

The official photographers of Formula Student will be providing a professional photography service to all of the competing teams. The photos will not be on sale but will be on the IMechE website shortly after the event to download free of charge.

The use of Unmanned Aerial Vehicles (UAVs or drones) is strictly prohibited by the venue operators, Silverstone Circuits Ltd. See also 'Drones (UAVs)'.

FIRST AID

See also 'Medical'. For medical emergencies, please see 'Emergency Response'.

If you require First Aid, please report to event officials at the Information Point, or to your nearest Marshal.

The venue's Medical Centre is open between 08.30–18.00. Mobile paramedics are on duty between the hours of 18:00-23:00. Paramedics will also be on duty at the campsite overnight, based at the medical tent.

FORMULA STUDENT ARTIFICIAL INTELLIGENCE (FS-AI)

A demonstration event showcasing autonomous Formula Student cars will take place at FS2018. A series of static and dynamic events will be held from Thursday – Sunday. Please refer to the event timetable for confirmation of events and timings.

An opportunity for Faculty Advisors and Team Leaders to discuss the future of FS-AI will be available at the Faculty Advisors and Team Leaders Reception held on Friday evening (see event timetable).

FUEL

A free supply of fuel, for FS car entries, will be on site all four days of the competition, supplied by Anglo American Oil Company. FS cars which need to be drained at the end of the event prior to transportation must be taken to the Fuel Station by the deadline of 1 hour after the end of the Endurance event on Sunday 15 July. No open fuel containers are allowed and all fuel containers must be DOT approved. Waste oil, etc., is to be taken to the fuel station for disposal.

Once at the competition site, the Formula Student cars can only be fuelled at the FS Fuel Station.

GARAGE ALLOCATIONS

All teams with running cars have been allocated their garage space according to the judging schedule (see also Judging Schedule). This will be published online at <http://www.imeche.org/events/formula-student/team-information>

Each double garage will accommodate a maximum of 8 teams, with space divided into 6m deep x 4m wide pits for each team.

Access to the garages will be available from 14:00 on Wednesday 11 July on a controlled first come, first served basis from the collecting area in Car Park 49. Teams will be allocated a reasonable amount of time to unload at their garage before support vehicles need to leave the paddock. **All cars must be in garages before 20:00 on Wednesday 11 July, when all support vehicles must have vacated the paddock and be parked in the team parking area.**

INFORMATION POINT

This will be located in the garages underneath Race Control and will be manned by event officials during the following times:

Wednesday: 14:00 – 18:00

Thursday – Sunday: 07:30 – 19:30

Services include:

- PA announcement requests
- Judging schedule information
- General enquiries
- Results enquiries
- Accredited media sign on and bib return
- Team Press Area bib return (Sunday)
- Team Hot Area bib return (Sunday)
- Transponder return
- Energy meter return
- Official protests / appeals

INSURANCE AND PERMIT

The event is operated under Certificate of Exemption 106640 permit issued by the UK governing body for motorsport, the Motor Sport Association (MSA). The event is insured by the MSA's master policy, public liability insurance held by the Institution of Mechanical Engineers and event insurance held by Goose Live Events.

In accordance with FSUK 2018 Supplementary Rule A4.6, teams should hold adequate insurance for participation in the event, including but not limited to personal accident insurance and public liability insurance. Teams from outside of the EU are also required to hold medical insurance suitable.

JUDGING SCHEDULE

All teams are allocated times for their static events (Business Plan Presentation, Engineering Design and Cost & Manufacturing) via the judging schedule. This will be published prior to the event at <http://www.imeche.org/events/formula-student/team-information>

It is your responsibility to **know where you need to be and when**. A master copy of the Judging Schedule will be held at the Information Point underneath Race Control.

Remember to allow 30 minutes prior to your Business Presentation

event to factor in walking time and arriving 5-10 minutes ahead of your scheduled presentation time. See also 'Business Plan Presentation'.

The Engineering Design and Cost & Manufacturing judges will visit Class 1 teams in their garages. We recommend considering the best way to present your pit garage space, such as bringing display boards (each pit is 6m deep x 4m wide).

All 8 cars in every garage will be judged at the same time. Teams will not be able to work on their car whilst their garage judging is in progress as no noise will be allowed for the judging hour that your team is allocated to.

Please also be advised that there will be a **limit of 6 team members** present during the Cost and Design judging sessions, so some of your team may be asked to leave the garage during this time.

Class 2 Cost and Design judging will all take place in the Pavilion.

MATHWORKS CLOSING PARTY

The Closing Party, sponsored by our Partners MathWorks, will take place on Sunday 15 July immediately following the Closing Ceremony.

MEDIA LINKS

Please use our social media channels to follow and post what is happening at the event.

- www.formulastudent.com
- www.facebook.com/formulastudent
- www.youtube.com/fsimeche
- www.flickr.com/photos/fsuk
- Twitter: @FormulaStudent

The current hashtags are #formulastudent, #fsuk and #fs2018

MEDICAL

See also 'First Aid'. For medical emergencies, please see 'Emergency Response'.

If you require First Aid, please report to event officials at the Information Point, or to your nearest Marshal.

The venue's Medical Centre is open between 07:00-18:00. Mobile paramedics are on duty between the hours of 18:00-23:00.

Paramedics will also be on duty at the campsite overnight, based at the medical tent.

OPENING CEREMONY

It is **mandatory** for all team members to attend the Opening Ceremony scheduled for **19:15 on Wednesday 11 July in the Pavilion.**

OFFICIAL NOTICEBOARD

Refer to FSUK 2018 Supplementary Rule A6.11

There will be an Official Noticeboard at Race Control / Information Point where teams can find master timetable, announcements and bulletins.

In the event of any dispute between the online and master timetable, then the master timetable displayed on the Official Noticeboard at Race Control / Information Point will be taken as the correct timetable.

Paddock Patrol

Event officials will operate paddock patrols during the hours of event operation each day.

Teams must adhere to any and all instructions issued by event officials.

PARKING

Vehicles can be parked free onsite. Teams must park in the Team Support car park and visitors can park in the public car park. Please note that no support vehicles will be allowed in the paddock area between 20:00 Wednesday 11 July and until advised by Officials following the end of the Endurance event on Sunday 13 July. Therefore, once a team has unloaded their FS car and equipment to the garage, the support vehicle will not be permitted to re-enter the paddock until Sunday 15 July. Teams wishing to leave prior to this time may push their cars (with driver in cockpit) to the team's support vehicle.

Personal vehicles and trailers must be parked in designated areas only. Only FS competition vehicles or official vehicle will be allowed in the track areas.

Motorcycles, bicycles, rollerblades, skateboards, hoverboards etc are prohibited.

D11.7 The use of self-propelled pit carts, tool boxes, tire carriers or similar motorized devices in any part of the competition site, including the paddocks, is prohibited.

PARTNERS AND SPONSORS

We are pleased to welcome many of our Partners, Sponsors, Supporters and Media Partners to Silverstone. Many of them will have a physical presence in the paddock with marquees, demonstrations and displays along with giveaways, competitions, tech talks etc.

Many of our Partners and Sponsors are looking to recruit the best and brightest young engineers. That's you, by the way! Make sure you visit them all to discuss your future prospects and keep in touch with them by sharing your contact details via your RFID tagged accreditation wristband!

PAVILION

Pavilion is the giant structure in the space between Brooklands and Woodcote hospitality suites. This is where the Opening Ceremony, Driver Briefings, Class 2 Cost & Design judging, Business Plan Presentation Final, Awards Ceremonies and Closing Ceremony will take place.

PHOTOGRAPHER

See 'Filming & Photography' and 'Team Photograph'.

PRAYER ROOM/PLACE OF QUIET

This is located in the Race Control building on the first floor. Please speak to event officials at the Information Point underneath Race Control if you require assistance or directions.

PRESS AND MEDIA

Media accreditation is available to affiliated members of the press only and by prior arrangement with IMechE Press Office via media@imeche.org or +44 (0)20 7973 1261. After signing on, an individually numbered tabard will be issued which should be worn at all times so that you can be identified by Marshals.

For team photographers wishing to get closer to the action, we will have a Team Press Area for you to have access to whilst your car is on the Sprint and Endurance track. A tabard will be issued to teams at Sign On and Registration at Driver Sign On on Wednesday (see 'Sign On & Registration'). There is a strict limit of one pass per team, however this is interchangeable amongst team members provided it is only used by one person at a time. Access to this

exclusive area is only available to those wearing a tabard and will be strictly controlled by event officials. Please follow instructions from event officials at all times.

Don't forget to upload your photos to social media using #FS2018.

PROHIBITED ITEMS

The following Formula Student Rules 2018 and FSUK 2018 Supplementary Rules apply:

A6.6.1 Formula Student Rules 2018

A6.6.2 FSUK 2018 Supplementary Rules

The use of motorcycles, quads, bicycles, scooters, skateboards, rollerblades or similar person-carrying devices by team members and spectators in any part of the competition area, **including the paddocks, is prohibited.**

Smoking, including e-cigarettes and vaping, is prohibited in all competition areas.

You may smoke in the medical car park – see map at the back of this handbook for reference.

REGISTRATION

See 'Sign On & Registration'.

RESULTS, PROTESTS AND FEEDBACK

Results

Results will be posted at the Official Noticeboard underneath Race Control. An announcement will be made over the PA system when these are available.

In the event of any dispute between the online and master Results, then the master Results displayed on the Official Noticeboard will be taken as the correct version.

Protests

Please refer to Formula Student Rules 2018 and FSUK 2018 Supplementary Rules A3.7 for clarification of the protest protocols. If you wish to lodge an official protest regarding the published scores, please visit the Information Point and state the event result(s) you wish to protest. Info Point staff will then contact the relevant official.

Feedback

Cost and Manufacturing, Engineering Design and Business Plan Presentation feedback will be provided in the following ways:

Business Plan Presentation: Teams will be given verbal feedback immediately after their presentation. A written copy of this feedback will be made available once all scores are finalised.

Teams are strongly encouraged to attend the Business Presentation Final on Saturday as this will allow you to watch the top 3 – 5 Class 1 presentations and will answer many common questions.

Cost and Manufacturing: Feedback will be emailed to all teams after the event.

Engineering Design: Teams will be provided, as far as possible, with verbal feedback at the Judging session. Individual Design Score Sheets will be emailed to teams after the event: the timing being dependent upon volunteer's work commitments.

RULES OF CONDUCT

A special note must be made of the 'Rules of Conduct' in Formula Student Rules 2018 and FSUK 2018 Supplementary Rules A3 as detailed under the Formula SAE regulations and the Formula Student specific Rules. **Any violation of these Rules by a team member may lead to disqualification from the competition of that participant's entire team.** Any person considered to be contravening the Rules banning the use of alcohol, illegal drugs, weapons or other illegal material will automatically be expelled along with their entire team.

SCRUTINEERING

Scrutineering will begin on Thursday with the queue order published on the Official Noticeboard outside Race Control / Information Point by 14:00 Wednesday. It is the **team's responsibility** to leave Scrutineering if there is a clash with a scheduled static event. If you have to leave then please inform the Scrutineering queue monitor so that your re-entry to the Scrutineering process can be managed when you return.

Scrutineering is split into the areas described below, teams will be directed which area to head to from the queue and after they pass through each area.

Electric Vehicles: For EVs only, EVs must have their accumulators removed from the vehicle before attempting scrutineering for the first time. The accumulator must only be reinstalled to the vehicle when given permission to do so by the EV Scrutineering team.

Safety: Conducted by the on-site MSA Scrutineers. Driver's Equipment, Steering, Suspension, Brakes and Driver's Harnesses are all inspected here.

Chassis: Vehicle is weighed and then checked to confirm that it is built as described in the team's SES and IAD submissions. Don't forget to bring any relevant physical test samples or receipts for purchase.

Tech: The vehicle is checked for compliance with all other technical Rules, some items covered in Safety or Chassis scrutineering may be reinspected. Driver Egress checks are also completed in this section, on Thursday at least this will be for the tallest driver only.

Once all of the above sections are passed the team may attempt the remaining scrutineering areas in the order described below.

Fuel (IC only): All IC vehicles must proceed to the fuelling station before entering Tilt.

Tilt: The vehicle rollover stability is checked, during which there must be no fluid leaks from the vehicle.

Noise: The exhaust noise level of IC vehicles and the ready to drive sound for EV vehicles are checked here.

Brake: The braking performance of all vehicles is checked here.

Once scrutineering for all of the above areas have been successfully completed the vehicle is then eligible to attempt the Dynamic Events.

SHIPPING

Crated cars can be stored and collected from the Medical car park from 14:00 Wednesday 11 July. If you require a fork lift truck, please instruct your courier to call Neil Carr-Jones: 07876 181215, thirty minutes before arrival at the venue.

The organisers (IMechE) will **not** be responsible for any charges incurred by teams during the shipping process. Please be advised that teams are solely responsible for coordinating the delivery and collection of their cars and equipment.

We will **not** accept any deliveries before 09:00 on Tuesday 10 July.

SIGN ON & REGISTRATION

This will take place in the Pavilion on Wednesday 19 July from 14:00. Teams will be allocated time slots to attend sign on prior to event.

All Faculty Advisors, Team Leaders and Drivers **MUST** attend, **at the same time**, during their allocated time slot in order to register

their attendance, collect accreditation and (drivers) present their driving licenses for inspection by event officials.

Teams will be sent their indemnity forms, which must be completed and signed by all Faculty Advisors, Team Leaders and Drivers, and returned to the Formula Student team at the IMechE prior to event. This will then be cross checked when Drivers present their driving licenses during Driver Sign On.

- **All non EU team drivers need to show proof of their medical insurance at registration**
- **Drivers must show their driver's license at registration**
- **Drivers will receive a driver wristband once signed on**

At Driver Sign On & Registration, Team Leaders will receive:

- Transponders (see also Transponders)
- Energy meters (see also Energy Meters) Class 1 EV teams only
- Accreditation* for all team members registered and paid for to attend Silverstone

**Accreditation is required from Thursday onwards to gain access to the venue*

SITE ACCESS / OPENING TIMES

Teams

Wednesday 11 July – 14:00 – 23:00

Thursday 12 July – Saturday 14 July – 07:00-23:00

Sunday 15 July – 07:00-00:00

The site will be manned by Security Staff 24 hours a day. All team members **must** be off-site by the advertised closing time each night.

Please keep your wristband on at ALL times, from Thursday 12 July. Access to site is only available to those with accreditation wristbands or spectator ticket holders (Friday-Sunday only for spectators).

Spectators

Friday 13 – Sunday 15 July – Gates open at 08:00 – 18:00 (last admission 17:00).

Spectator tickets are available to purchase in advance of the event from <http://www.silverstone.co.uk/events/formula-student/> or from the Ticket Office outside the circuit's Main Entrance Friday 13-Sunday 15 July (subject to availability).

Sponsors

As per 'Teams' but with earlier access on Wednesday 11 July, according to specific communications.

SMOKING AND E-CIGARETTES/VAPING

Smoking, including e-cigarettes and vaping, is prohibited in all competition areas.

You may smoke in the medical car park – see map at the back of this handbook

SPONSORS

See 'Partners and Sponsors'.

TAXI COMPANIES

Deano's: 01327 359113

Towcester Taxis: 01908 263263

M B Cars: 01327 352483

Sadies Cars: 01327 358484

TEAM PHOTOGRAPH

See also 'Filming & Photography'.

The FS2018 Official Photograph will take place on Friday 13 July at 18:30 approx. (refer to the event timetable for confirmation of time). welcome to be part of the Official Photo.

There will also be a Class 2 only photo in the Pavilion on Thursday evening (approximately 18:45).

TICKETS (SPECTATORS)

See also 'Accreditation'.

Everyone wishing to access the venue will require either an accreditation wristband or a spectator ticket.

Tickets are retailed by Silverstone Circuits Ltd and are available here: <http://www.silverstone.co.uk/events/formula-student/>

Spectator tickets are only available for Friday 13, Saturday 14 and Sunday 15 July.

Under 16s can attend free of charge, but must be accompanied by a full paying adult.

TIMETABLE

The official event timetable is published online at <http://www.imeche.org/events/formula-student/team-information> and a master copy will be displayed on the Official Noticeboard at Race Control / Information Point.

In the event of any dispute between the online and master timetable, then the master timetable displayed on the Official Noticeboard at Race Control / Information Point will be taken as the correct timetable.

TRANSPONDERS

Transponders will be issued to all Class 1 Team Leaders at Sign On & Registration (see also 'Sign On & Registration') from 14:00 on Wednesday 11 July.

Faculty Advisors will be required to sign for the transponder and they must be returned to the Information Point within 30 minutes of the close of the Endurance event on Sunday 15 July. None return will incur a fee of £500 + VAT.

TYRES

Hoosier Tyres are the official tyre supporter for Formula Student UK. They will be onsite for the duration of the event, offering their services and advice to all teams. Find them in the paddock from Thursday 12 July.

VEHICLE MODIFICATIONS

No unapproved modifications are allowed after your car has been scrutineered. Refer to 'Car Set Up Alterations' for approved modifications.

VEHICLE MOVEMENT

See also 'Engine & Electric Motor Running'.

Refer to Formula Student Rules 2018 A6.7 with particular reference to A.6.7 Vehicles must not move under their own power anywhere other than the practice or competition tracks.

See also 'Engine and Electric Motor Running'.

Driving off-site (out of the paddock) is absolutely prohibited. Teams found to have driven their Formula Student car at an off-site location during the period of the competition will be excluded from the competition.

WATER

Drinking water is available onsite from the Pit Stop Cafe, please stay hydrated! Where possible, please try to use refillable water bottles to reduce the impact of plastic waste on our environment.

WELDING

We have a dedicated welding facility, kindly provided by Silverstone UTC, at Scrutineering which is available 09:00-18:00 Thursday – Saturday and 09:00-15:00 Sunday.

If you require welding services, you **MUST** use this free service. Welding in garages is **NOT** permitted.

WET WEATHER RUNNING

The British weather can be unpredictable and it is possible that we will have to run some or all of the Dynamic events in wet conditions. The Rules for tyre selection will follow the Formula Student Rules 2018, D3.

WI-FI

Wifi is available at the event via The Cloud.

APPENDIX 1: UNIFORM GUIDE



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White shirts featuring FS logo identify Formula Student Organising Committee members.

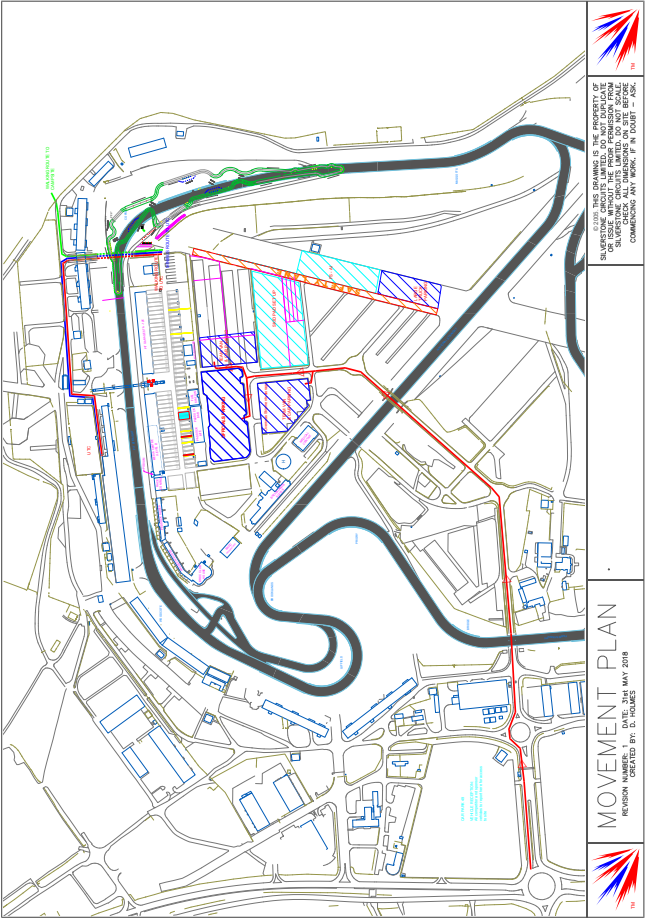
APPENDIX 1: UNIFORM GUIDE

Pink Tabards = Team Hot Area (max 4 per team)

Yellow Tabards = Team Press Area (max 1 per team)

Orange Tabards = Media Volunteers





FORMULA STUDENT

Institution of
MECHANICAL
ENGINEERS

SILVERSTONE
11-15 July 2018
www.formulastudent.com

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uk.linkedin.com/in/formulastudent



VENUE MAP

NATIONAL CIRCUIT



JUDGING
LOCATIONS



CATERING



TOILETS



TIMEKEEPING
AND COMMENTARY

