

General Requirements (Applicable to all Classes)

3.1 Pre-event submissions

3.1.1. Deadlines, definitions and late submission penalties

11-15 January 2010:	Initial Registration Forms accepted
15-22 January 2010:	Registration Selection Process
22 January 2010:	Invited teams listed on website
22-29 January 2010:	Final Registration Form submitted with payment and car number (no refunds will be given)
29 January 2010:	Confirmed teams listed on website
1 March 2010:	Class 1 SEF
1 March 2010:	Class 1A SEF
26 March 2010:	Class 1A Risk Assessment
26 March 2010:	Fuel order for E85
26 March 2010:	Helmet and drive suit approval requests (via FS Question Database)
6 April 2010:	Class 1 Impact Attenuator
6 April 2010:	Class 1A Impact Attenuator
30 April 2010:	Class 1A Sustainability Materials requests
30 April 2010:	Team/Car Profile
May 2010:	Additional Item Requests for Online Cost Reports
21 May 2010:	Cost Report
21 May 2010:	Class 1A Sustainability Report Deadline
21 May 2010:	Final Team Member Details (all classes)
21 May 2010:	Emergency Contact Form (all classes)
21 May 2010:	Additional Member Payments (all classes)
1 June 2010:	Design Report & Spec Sheet (all classes)
4 June 2010:	Accommodation Booking Form (application & full payment)
15-18 July 2010:	FS2010 Competition

To meet these deadlines, submissions must be uploaded to the Formula Student website no later than 17.00hrs, co-ordinated universal time (UTC), on the deadline day. The website will show a clock indicating the official time for submission. To convert UTC to your local time you may use following website:

www.timeanddate.com/worldclock/converter

A confirmation email stating the time of your upload will be sent to your primary team contact (the Team Leader who completed your FS2010 registration form) after each submission.

The penalties for failing to submit any reports/required documents on time and in the correct format are as per the relevant FSAE Rules, unless otherwise specified below.

Penalties for late/non submission of Team/Car Profiles will be 10 points per day with a maximum of -50 points, which will be added to the overall score.

FSAE Design Event Rule C5.8 will be modified slightly as follows:

C5.8 Penalty for Late Submission or Non-submission

Teams that do not submit a Design Report and/or a Design Spec Sheet by the specified deadline will not be eligible for points in the Design Event. They will receive 0 (zero) score towards the overall event score. However such entrants will be judged like any other at the event in the Design competition and will receive the same feedback. At the sole discretion of the Design Event Head Judge such entrants may receive a grading indicating their potential had they in fact submitted the Report and/or Specification Sheet by the deadline.

3.1.2 Design Reports – formatting and other requirements

For the convenience of the judges, Design Reports must be a minimum of 10 point black fonts (preferably Arial or Times New Roman), formatted for A4 **portrait** paper size, with text in **one** column per page (i.e. no newspaper style columns) and with a maximum word count of 2500 words. This word count must be declared at the end of the text section of the Report. Text pages must be text only, i.e. without graphics integrated within the body of the text. The optional page (FSAE Rule C5.5.2) can be used for graphics (referenced from the main text) if necessary. This optional page cannot be used as a continuation of the text pages if this would take the total number of text pages above the 4 page limit also specified in FSAE Rule C5.5.2.

Design Reports must, for Classes 1 and 1A be submitted fully in accordance with the FSAE Rules regarding file names. Note the car must be numbered using 3 digits e.g. car 2 labelled 002. Class 2 should follow the same requirements except replace "carnumber" with "Class2" as appropriate. Please note it is anticipated that the webserver will, as in 2009, automatically allocate the filename in the correct format: only the latest upload will be assessed as a valid submission.

To further encourage teams to pay full and proper attention to the Design Report, the Design event score (150 points in all classes) will be split such that 10 points are allocated for the pre-submitted Report and the remaining 140 points for the at-event judging. These points (0-10) will be allocated by the judges prior to the event and will be based entirely on the technical content of the report and how well that content meets the design event objective (as defined in FSAE Rules).

Penalties for formatting errors will be applied separately, to the overall event score, as follows (maximum -20 points):

Page Layout:

More than a total of 8 pages (including cover sheets etc.) - 15 points

Over 4 pages text – 2 points

Newspaper style columns – 2 points

Integrated graphics – 2 points

File name format:

Incorrect file name or format – 5 points

Report Structure:

Minor errors e.g. all drawings on 1 page, no word count – 2 points

Serious errors e.g. no drawings – 5 points

3.1.3 Design Spec Sheets – formatting and other requirements

As per all similar competitions DO NOT CHANGE THE SPEC SHEET FORMAT from the 2010 FS template provided. The Spec Sheets must be completed in SI units (with dual Imperial or other units if needed for clarity of specification of standard components) in understanding of the European customer.

Design Spec Sheets must, for Classes 1 and 1A be submitted fully in accordance with the FSAE Rules regarding file names. Note the car must be numbered using 3 digits e.g. car 15 labelled 015. Class 2 should follow the same requirements except replace "carnumber" with "Class2" as appropriate. Please note it is anticipated that the webserver will, as in 2009, automatically allocate the filename in the correct format: only the latest upload will be assessed as a valid submission.

Penalties will be applied as follows (**maximum -20 points**):

Incorrect Form or Alterations

Failure to use correct (FS specific) form - 10 points

Reformatting/changes to form layout – max 5 points depending on scale of errors

Non SI units:

Minor errors e.g. 1 or 2 items in Imperial (except items universally accepted as Imperial) - 1 point.

Serious errors e.g. all Imperial - 5 Points

File name format:

Incorrect file name or format – 5 points

3.1.4 Design Event and the IA report assessment

The IA report will be assessed and moderated before the event. Reports that are considered to be poor will incur a penalty of up to 10 points which will be applied to the design score. The method of grading the report is defined in the following document:

[IA Report Grading](#)

Once graded, the grade will be converted into a Design event penalty using the following scaling:

- A no penalty
- B no penalty
- C -1 point
- D -5 points
- E -8 points
- F -10 points

If a report scores an F then the impact attenuator design will also be judged to be a Fail and therefore the car will not be issued with a scrutineering sticker until the report and associated data is improved to achieve a Pass. Any reports that are late will receive an automatic F and the associated penalty, however if the report contents are adequate then a Pass will be issued. If a report is initially graded F then the -10 point penalty will remain even after improvements have been submitted.

3.1.5 Other Cost and Presentation Event requirements

Addenda to the cost reports can be taken into consideration to cover any necessary corrections or changes made in the car. These addenda will only be accepted at team sign-on at the event, and must be in the format prescribed by the official Cost Addendum Sheet (available via the Important Dates & Documents page). It is unlikely that addenda will reflect major changes.

For the convenience of the Presentation event judges, in all Classes, teams giving a PowerPoint or similar style presentation are required to hand a paper copy of their slides, preferably in colour, to the judges at the end of the Question and Answer session. LCD projectors or screens will be provided by the organisers (no OHPs will be provided), but teams should bring their own laptop computers and may use their own projectors if they wish.

Teams are not required to assume a production rate of 1000 cars per year. It is therefore open to teams to suggest a proposed market size and corresponding manufacturing volume / production run targets. The important element is that teams demonstrate the logic behind their assumption / proposal and are also able to demonstrate that it can support a viable business model for both parties.

3.2. Dynamic events

3.2.1. Fuels

Only unleaded gasoline fuel and E85 (bio-ethanol and gasoline blend) will be available at the event. The unleaded gasoline will have the octane rating, 99 RON (UK Research Octane Number). Any team wishing to use E85 fuel must declare that intention in advance (by 27 March at latest). No other fuel will be available.

Details of how to obtain limited quantities of E85 prior to the event, for engine development/testing, are available from the FS Organisers.

3.2.2. Car Numbers

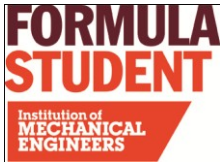
Each car will be allocated a number at the time of its entry in the competition. Class 1 numbers one to ten will be reserved for the teams that finished in the previous year's Class 1 top ten. All teams can request a particular number at the time of entry. Class 1 entries must have a number of between 001 and 199, inclusive and display this as required by the FSAE rules. Class 1A entries must have a number between 500 and 599, inclusive and follow Class 1A number regulations.

Also, each car will be required to append a Formula Student logo, 20 cm x 20 cm, marking on the nose of the car (supplied by the organisers at event sign on). No sponsor or other markings will be permitted to encroach on these areas.

Alternatively, teams may incorporate the Formula Student logo into their own colour/graphics schemes, providing the logo meets the size and location requirements above. The logo is available in various formats on the Use of Logos webpage.

3.2.3. Scrutineering

To take part in any of the dynamic events, cars must pass technical and safety scrutineering. For the safety of all competitors, officials and spectators, Formula Student is run under permit granted by the Motor Sport Association (MSA), the governing body for all motor sports events in the UK. To grant a permit, MSA have stipulated the following requirements, which therefore also form part of the



Formula Student Supplementary Regulations: As well as complying with all relevant current FSAE rules for running vehicles, teams must comply with the following additional requirements:

- The battery earth lead, if not otherwise readily distinguishable, must be identified by a yellow marking.
- Remould or retread tyres are prohibited.
- Extended or composite wheel studs are prohibited.
- Aluminium wheel nuts may be used, but they must be hard anodised and in pristine condition
- Helmets to comply with SA2000, SA2005, SA2010, BS 6658 Type A/FR, FIA 8860-2004. Non-UK teams may also use helmets that comply with their own sanctioning body, but these helmets must also be permitted by the FSAE Rules. Use of alternative helmets to those listed above must be sought from formulastudent@imeche.org no later than 26 March.
- Overalls to comply with FIA 8856-2000, FIA 1986 Standard, BS 6249 part 1 index A or B (not C), BSEN533, Pr EN533 1995 Index 3. Non-UK teams may also use driver's suits that comply with their own sanctioning body, but these driver's suits must also be permitted by the FSAE Rules. Use of alternative driver's suits to those listed above must be sought from formulastudent@imeche.org no later than 26 March.