

FORMULA EAST

STUDENT

20TH TO 23RD JULY



elringklinger

handtmann
Ideen mit Zukunft.

STATIC EVENT RULES

WHO IS READY?

VERSION 1.0.1
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1. INTRODUCTION

Formula Student East® (hereafter “FS East”) is a FSAE style Formula Student engineering competition in Hungary, organised by Engineers for the Automotive Higher Education Association from 2016.

Formula Student East will allow to participate vehicles with conventional combustion engine (gasoline or E85 fuelled) and electric powertrain vehicles, which will directly compete against each other.

This rules document contains the FS East Dynamic Events rules. These specific rules are an addition to the Rules 2017 document (hereafter “Rules 2017”), which was published by FS Germany. In case of a conflict between the Rules 2017 and the 2017 FS East rules, the 2017 FS East rules supersede the Rules 2017.

8. STATIC EVENTS

8.1 BUSINESS PLAN PRESENTATION (75 POINTS)

8.1.1 EXECUTIVE SUMMARY

Judging will begin with the inspection and analysis of the priorly submitted Executive Summary, which is the principal document of the Business Plan Presentation. The Executive Summary must be uploaded in Adobe Acrobat® format (*.pdf file) to the team account on the FS East website no later than the given deadline. The executive summary must not exceed one (1) page. The team name and car number for exact identification must be written in it.

SPECIFIC FS EAST RULE ADDITION

In the summary one (1) outstanding, innovative business model idea (why is your BP better?) and one (1) outstanding car technical feature have to be listed with the anticipated production costs of the car.

PENALTIES FROM THE FINAL BPP SCORE

Up to five (5) points can be deducted from your final Business Plan Presentation Score:

- Team name and/or Car number missing: -1 or -2 points
- One innovative business model idea and/or one technical highlights missing: -1 or -2 points
- Vehicle costs missing: -1 point

In case that the Executive Summary is not compliant with the rules and corrected as asked by the starting day of the FS East 2017 the received penalty points will be deducted from the final BPP score.

8.1.2 BUSINESS PLAN PRESENTATION WRITTEN COPY

SPECIFIC FS EAST RULE ADDITION

All teams must submit their printed out version of their presentation.

Changes can not be made to the printed out version, if needed only the color (for ex. black to white) can be changed!

Please take the written copy into account at the preparation of your presentation.

8.1.3 DEEP DIVE TOPIC

SPECIFIC FS EAST RULE ADDITION

All teams will receive a specific Deep Dive Topic from the organizer’s prior to the competition, which has to be part of the ten minute presentation. The task will be uploaded on the FS East website, further information will be published later.

8.2.4 DATA PROJECTION EQUIPMENT

Plasma display/LCD Monitors will be provided by FS East. These displays will have VGA+HDMI Input Connectors. The organizers will not provide any other presentation equipment (for ex. laptop). Teams planning to use other equipments as a part of their presentation, are responsible for bringing, or otherwise arranging for their own equipment. All teams must take care that only Schuko sockets (CEE 7/3) will be provided.

8.2.5 JUDGING SEQUENCE

At FS East the Business Plan Presentation judging will consist of two parts:

- I. Initial judging of all teams
- II. Final judging of top teams (the number of top teams will be decided by judges on-site) in the Business Finals

8.2.6 BUSINESS PLAN PRESENTATION SCORING FORMULA

The scoring of the event is based on the average of the two or three presentation judging forms. There is a maximum of seventy-five (75) points from the FS East Business Plan Presentation Judging Form.

NOTE: If rounding - down or up - the average is needed, will be decided by Judges themselves on spot.

NON FINALIST

Presentation Event score = $(P_{YOUR} / P_{MAX}) \times (75-n)$

WHERE:

"P_{MAX}" is the highest score awarded to any team not participating in the finals

"P_{YOUR}" is the score awarded to your team

"n" is the number of finalists

FINALISTS

"n" th Place 75 - (n-1) points

It is intended that the scores will range from near zero (0) to seventy-five (75) to provide good separation.

NOTE: All categories as mentioned in FSG Rules 2017 will be evaluated, but the score-sheet structure and the content of it will differ from FSG Rules 2017, as it will be prepared by the FS East organisers prior to the Event.

8.3 ENGINEERING DESIGN EVENT (150 POINTS)

8.3.1 JUDGING SEQUENCE

At FS East Engineering Design Judging will consist of two parts:

- I. Initial judging of all teams
- II. Final judging of top teams (the number of top teams will be decided by judges on-site)

Teams participating the Engineering Design Final will be informed about their participation during the event.

8.3.2 ENGINEERING DESIGN REPORT AND DESIGN SPEC SHEET

The Engineering Design Report (EDR) and the Design Spec Sheet (DSS) must be uploaded to the FS East website no later than the given deadline.

Without submitted documents (both documents are required) a team will not be allowed to take part in the Engineering Design Event and will be given a score of 0 (zero) for the whole event.

In case of formatting and naming errors in the documents penalty can be applied up to a maximum of -10 (minus ten) points (-5 points for each document), which will be deducted from the Engineering Design Score after the Engineering Design Final.

Filename nomenclature:

Engineering Design Report: CAR#_EDR_FSEAST17.pdf (e.g. 01_EDR_FSEAST17.pdf)

Design Spec Sheet: CAR#_DSS_FSEAST17.xlsx (e.g. 01_DSS_FSEAST17.xlsx)

8.3.3 ENGINEERING DESIGN REPORT (EDR)

The Engineering Design Report must be submitted in a single Adobe Acrobat® (*.pdf) file.

The documents must be prepared according to the Formula Student Rules 2017 Article S3.2.

The EDR must not exceed eight pages, consisting of not more than five pages of content (text, which may include pictures and graphs) and three pages of drawings. The three EDR drawings (no renderings) must show the vehicle from the front, the top and the side. Each drawing must appear on a separate page. Pay attention to the quality of the drawings. For further formatting directives see Formula Student Rules 2017 Articles S3.2.2 - S3.2.8.

The size of the document must not exceed 5MB. A properly sized document will be much smaller than 5MB in file size. Please ensure that graphs and photos within the Acrobat file are of an appropriate resolution.

8.3.4. ENGINEERING DESIGN SPEC SHEET (DSS)

The Design Spec Sheet must be submitted in Microsoft Excel® Format (*.xlsx file). The format of the file must not be altered. The FS East Design Spec Sheet corresponds with FSAE Design Spec Sheet. The DSS templates are available on the <http://www.fsaonline.com/> website. The template must not be altered or reformatted prior the submission. In the DSS metric units must be used only.

8.4 COST, MANUFACTURING AND SUSTAINABILITY EVENT (100 POINTS)

8.4.1 COST, MANUFACTURING AND SUSTAINABILITY EVENT SPECIFIC FS EAST CHANGE OF FORMULA STUDENT RULES 2017 V1.1

The Cost, Manufacturing and Sustainability Event of FS East consists of Cost Report Documents, Discussion, Real Case and Sustainability Presentation. The FS East 2017 Sustainability task will be released along with the Real Case task prior to the event.

8.4.2 COST, MANUFACTURING AND SUSTAINABILITY EVENT PROCEDURE

During the competition, a discussion with the judges will take place, next to the team's Vehicle. The discussion is split into two parts:

PART 1 "BILL OF MATERIALS (BOM) DISCUSSION"

A discussion to evaluate the team's ability to prepare an accurate engineering and manufacturing BOM for the complete vehicle. The team must prove the following:

- The specification of the vehicle in the CRD accurately reflects the vehicle brought to the competition
- The costs within the Costed Bill of Materials (CBOM) part of the BOM are correct and realistic.
- The manufacturing feasibility of the vehicle.

Without submitted electronic or written copy any of the Cost Report Documents a team will not be allowed to take part in the corresponding events (Discussion, Real Case, Sustainability Presentation) and will receive a score of 0 (zero) for the Cost, Manufacturing and Sustainability event.

PART 2 – REAL CASE & SUSTAINABILITY PRESENTATION

The teams must be prepared to discuss in detail the "Real Case & Sustainability" scenario published prior to the competition. The materials will include more specifics about the goal and details of the scenario.

8.4.3 COST REPORT DOCUMENTS

The Cost Report Documents consist of the following documents:

- Bill of Materials (BOM)
- Costed Bill of Materials (CBOM)
- Supporting Material
- Cost Explanation File

Without submitted electronic or written copy any of the Cost Report Documents a team will not be allowed to take part in the corresponding events (Discussion, Real Case, Sustainability Presentation) and will receive a score of 0 (zero) for the Cost, Manufacturing and Sustainability event. All CRD documents must be printed by the team and brought as a hard copy to the event discussion. The printed documents must be submitted at the Event Control on the 20th of July.

8.4.4 ELECTRONIC COPY

Prior to the competition, four Cost Report Documents (CRD) must be submitted to the competition website no later than the given deadline.

For the creation of the BOM, the teams are expected to use the CBOM tool available on the www.formulastudent.de website. Later this tool will provide a printable pdf version of the BOM.

All the four CRD should be uploaded as separate documents in .pdf file. For submission pack all the CRD files in ONE ZIP file.

Filename nomenclature:

CAR#_CRD.zip (e.g. 01_CRD.zip)	for the zip archive.
CAR#_BOM.pdf (e.g. 01_BOM.pdf)	for the Bill of Materials.
CAR#_CBOM.pdf (e.g. 01_CBOM.pdf)	for the Costed Bill of Materials.
CAR#_SUP_MAT.pdf (e.g. 01_SUP_MAT6.pdf)	for Supporting Material.
CAR#_COST_EXPL.pdf (e.g. 01_COST_EXPL.pdf)	for the Cost Explanation.

Note: Incomplete submissions (e.g. only the BOM) will be counted as not submitted. Only with all four parts accomplished the submission of the Cost Report is complete. A team can decide not to submit a Supporting Material at the price of losing points, in which case they should upload an empty .pdf with the correct nomenclature.

Note: Failure to meet the nomenclature requirements results in a maximum of -2 (minus two) points.

Note: An addendum for the CRD is not possible and changes will not be permitted after the given upload deadline.

8.4.5 WRITTEN COPY

The written copies must be identical to the electronic copies (the full report). The written copy must be presented during the discussion part of the Cost, Manufacturing and Sustainability Event. In case of differences between the written copies and the electronic copies the team will be penalized with maximum -15 (minus fifteen) points depending on the differences. All CRD Written Copies must be handed in one or more ring binders, labelled as follows:

	
Cost Report Written Copy	
University Name:	XXXXXX
Team Name:	XXXXXX
FS East car Number:	XXX

Do not send the Written Copy by mail; it must be submitted at the FS East Event Control.

8.4.6 COSTED BILL OF MATERIALS (CBOM)

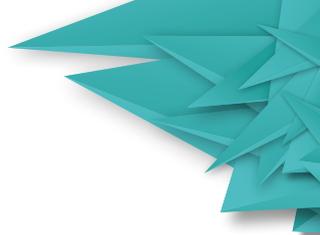
For FS East 2017 a CBOM for the "Suspension System" must be submitted.

8.4.7 SCORING FORMULA

- 5 Format and Accuracy of Documents
- 5 Knowledge of Documents and Vehicle
- 30 Content and Completeness of the BOM
- 10 Realism of the CBOM
- 50 Real Case & Sustainability Presentation

8.4.8 FINAL REVISION

At the end of the Event Day (21th of July) the judges will review all cost reports and given scores. In case of debatable/questionable situations the final decision falls within the competence of the Cost, Manufacturing and Sustainability Event Leader. The same rule applies in case of complaints.



CHANGELOG

Version	Date	Modification	Page
1.0.0	24th May, 2017	Initial release	-



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