

FORMULA STUDENT EAST

20TH TO 23RD JULY



elringklinger

handtmann
Ideen mit Zukunft.

DEADLINES AND PENALTIES

WHO IS READY?

VERSION 1.0.3
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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 General 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.

3. DEADLINES, PENALTIES, AND ADDITIONAL INFORMATION REGARDING DOCUMENTATION

MISSING A DEADLINE RESULTS IN PENALTIES AS SPECIFIED BELOW.

Note, that for the penalties regarding late submission of documentation, 1 day exactly equals 24h. For further details see “Official Time”.

- Teams, which upload obviously unusable information just to pass a deadline can be de-registered from the event in case of recurrence. Affected teams receive a warning in advance.
- Late submissions will be penalized with 10 (ten) points for each overdue day.
- A late submission to a request from the FS East Officials later than 7 days will be penalized with 10 (ten) points for each overdue day.
- A 3rd rejection of a document will be penalized with an extra 50 (fifty) points.
- A 4th rejection of a document will be penalized with an extra 75 (seventy-five) points.
- A 5th, and any further rejection of a document will be penalized with an extra 100-100 (hundred per occasion) points.
- Failure to submit Engineering Design Report, or Design Spec Sheet, or Cost Report Documents- Electronic Copy, or Executive Summary - Electronic Copy documents will automatically result in zero points for the given Event.

FORMULA STUDENT EAST WILL APPLY **MAY 5TH, 2017, 23:59 CEST** AS A DEADLINE FOR THE FOLLOWING:

Document:	Required for:	Maximum applicable penalty points:
Electronic Throttle Control - Notice of intent	ETC system	-
Team Member Designation and Health Insurance Certificate	All events	-
Structural Equivalency Spreadsheet (SES) / Structural Requirements Certification Form (SRCF)	Dynamic events	no limit
Impact Attenuator Data (IAD)	Dynamic events	no limit

FORMULA STUDENT EAST WILL APPLY **MAY 28TH, 2017, 23:59 CEST** AS A DEADLINE FOR THE FOLLOWING DOCUMENTS:

Document:	Required for:	Maximum applicable penalty points:
Electrical Systems Form (ESF)	All events	no limit
Electronic Throttle Control - FMEA (ETC FMEA)	Dynamic events	no limit
Electric System Officer(s) Form	All events	no limit
Engineering Design Report and Design Spec Sheet	Engineering Design	100 out of 150 (Engineering Design)
Executive Summary - Electronic Copy	Business Plan Presentation	75 out of 75 (Business Plan Presentation)

FORMULA STUDENT EAST WILL APPLY JULY 7TH, 2017, 23:59 CEST AS A DEADLINE FOR THE FOLLOWING DOCUMENT(S):

Document:	Required for:	Maximum applicable penalty points:
Cost Report Documents (electronic copies)	Cost, Manufacturing and Sustainability Event	100 out of 100 (Cost, Manufacturing and Sustainability)

FORMULA STUDENT EAST WILL APPLY JULY 20TH, 2017, 17:59 CEST (ON THE EVENT SITE) AS A DEADLINE FOR THE FOLLOWING DOCUMENT(S):

Document:	Required for:	Maximum applicable penalty points:
Business Plan Presentation - Written Copy	Business Plan Presentation	75 out of 75 (Business Plan Presentation)
Cost Report Documents	Cost, Manufacturing and Sustainability Event	100 out of 100 (Cost, Manufacturing and Sustainability Event)

3.1 STRUCTURAL EQUIVALENCY SPREADSHEET (SES)

3.1.1 SUBMISSION OF SES + 3 DIMENSIONAL CAD MODEL

All teams must submit a SES. The FSAE SES spreadsheet form is supplied on the www.fsaonline.com website.

Additionally, all teams must provide a 3 dimensional CAD model of the frame / monocoque including all members of the primary structure in "IGES" file format. The size of the "IGES" file is limited to 40MB.

For electric vehicles: The accumulator container(s) and attachment method must also be included.

Neither a signed SES approval nor an approval by any other official FSAE competition will be counted as an official approval.

In case of any question regarding SES documentation please contact ses@fseast.eu.

3.2 IMPACT ATTENUATOR DATA (IAD)

All teams must submit an IAD form containing the test results, description of the test setup, the used test equipment and photo documentation of the IA structure before and after the test. A template of this IAD form is supplied on the www.fsaonline.com website.

The completed IAD form must be uploaded to the FS East website.

In case of any question regarding IAD documentation please contact iad@fseast.eu.

3.3 [IC VEHICLES ONLY] ELECTRONIC THROTTLE CONTROL (ETC) NOTICE OF INTENT

ETC Notice of Intent must be sent to etc@fseast.eu. A template will be available on our website, www.fseast.eu

Late submission of Notice of Intent will require the team to revert to a mechanical throttle arrangement.

3.4 [IC VEHICLES ONLY] ELECTRONIC THROTTLE CONTROL (ETC) FAILURE MODES AND EFFECT ANALYSIS (FMEA)

A template will be available on our website, www.fseast.eu

The filled template (FSG 2017 Rule CV 1.6.12) must be uploaded to the FS East website.

Late submission of FMEA will be penalized as it is written at the beginning of FS East 2016 Rule 3.

3.5 [IC VEHICLES ONLY] FUEL TYPE ORDER

The teams must inform FS East of the type of fuel they intend to use. The fuel type can be chosen after registration at FS East website. The fuel types provided are expected to be 98 octane (ROZ 98) gasoline and E-85.

3.6 [ELECTRIC VEHICLES ONLY] ELECTRICAL SYSTEM FORM (ESF)

All electric teams must submit an Electrical System Form.

A template of this form is supplied on the www.fseast.eu website.

THE ESF MUST CONTAIN THE DATASHEETS OF THE FOLLOWING SAFETY RELATED COMPONENTS:

- Motors (FSG Rules 2017 EV2.1)
- Motor controller (FSG Rules 2017 EV2.1)
- Accelerator Pedal Position Sensor (APPS) (if not self-made) (FSG Rules 2017 T10.2)
- Brake system encoder (FSG Rules 2017 EV2.3)
- Battery cells of tractive system accumulators (FSG Rules 2017 EV3.2)
- Accumulator isolation relay (FSG Rules 2017 EV3.6)
- Accumulator management system (if not self-made) (FSG Rules 2017 EV3.7)
- HV disconnect (if not self-made) (FSG Rules 2017 EV4.7)
- HV and LV wiring (FSG Rules 2017 EV4.8)
- Discrete components of pre-charge and discharge circuits (FSG Rules 2017 EV4.12)
- Master switches (FSG Rules 2017 EV5.2)
- Shutdown buttons (FSG Rules 2017 EV5.3)
- Brake-over-travel-switch (FSG Rules 2017 T5.2)
- Fusing (HV, LV, cell fuses) (FSG Rules 2017 EV6.1)
- Chargers (FSG Rules 2017 EV7.1)

3.7 [ELECTRIC VEHICLES ONLY] ELECTRICAL SYSTEM OFFICER(S) QUALIFICATION FORM

All electric teams must submit an Electrical System Officer(s) Form.

Please note the responsibilities of the ESO in A4.8 of the FSG 2017 rules. BSc or higher academic diploma is also accepted.

A template of this form is supplied on the www.fseast.eu website. Also include the copy of the qualification papers.

3.8 ENGINEERING DESIGN REPORT AND DESIGN SPEC SHEET

All teams must submit the Engineering Design Report and the Design Spec Sheet on the FS East website prior the deadline. (Both are required.)

3.9 COST REPORT DOCUMENTS

3.9.1 ELECTRONIC COPY

The upload of the Cost Report Documents (BOM, CBOM, Cost Explanation File, Supporting Material) to the FS East website must be done according to the Formula Student East Static Rules 2017 by the deadline mentioned above. Once all steps have been completed, the submission of the cost report is complete.

3.9.2 WRITTEN COPY

Do not send the Written Copy by post; it must be submitted at the FS East Event Control. (See the deadline above.)

3.10 BUSINESS PLAN PRESENTATION

3.10.1 EXECUTIVE SUMMARY-ELECTRONIC COPY

The Executive Summary must be uploaded on the FS East website not later than the above specified date.

3.10.2 BUSINESS PLAN PRESENTATION - WRITTEN COPY

The Business Plan Presentation Written Copy must be submitted at the FS East Event Control at the above specified date.

3.11 TEAM MEMBER DESIGNATION AND HEALTH INSURANCE CERTIFICATE

Participating team members must be designated prior to the event.

To designate a team member, please visit the FS East website.

In case the health insurance data of one or more team members is missing or incorrect, FS East will decline the designation of the team member(s) in question. Only designations of team members with complete and correct health insurance information will be accepted.

Team members that were declined can be registered again after their health insurance data has been corrected.



CHANGELOG

Version	Date	Modification	Page
1.0.0	7th April, 2017	Initial release	-
1.0.1	10th April, 2017	3.7 - Position name modification (ESO)	4
1.0.2	26th April, 2017	3 - Document upload deadlines changed	2
1.0.3	26th May, 2017	3.7 - ESO - Qualification papers needed	4



Engineers for the Automotive
Higher Education Association

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