

The purpose of this document is to inform of the local rules that shall apply to 2017 Student Formula Japan. Any additional local rules that become necessary shall be posted on the JSAE website as they become available. These local rules are valid for Student Formula Japan 2017 only.

Student Formula Japan 2017, Rules Committee

For both Japanese and Overseas Teams, both ICV and EV Classes

J2017-31 Submission Items for Business Logic Case (refer to rules 11 and 12 of SFJ 2017 and rule S3.3 of 2017-18 FSAE®)

The Business Logic Case shall be submitted as electronic data using the SFJ format that can be downloaded from the team page on the website. In some cases, submissions in other formats may not be accepted for entry into the Presentation event.

Note that the font size in the Business Logic Case format shall be 10-point for both Japanese and English entries, and no changes to the number of pages shall be accepted.

J2017-32 Document Screening for Cost and Manufacturing Event (refer to rules 11 and 12 of SFJ 2017)

Even if the Cost Report is submitted prior to the due date, teams may not be permitted to participate in the Cost and Manufacturing Event if the Cost Report is determined to be unacceptable in the document screening procedure. In this case, the Cost and Manufacturing Event score shall be minus 100 points. In addition, teams that are unable to enter in the Cost and Manufacturing Event during the competition shall be judged as “unable to participate” and shall be awarded zero points under the Cost, Accuracy, and Real Case items.

Typical unacceptable cases determined in the document screening procedure:

- If any items for submission to the Cost and Manufacturing Event as defined in J2017-33 are omitted (e.g., the Bill of Material (BOM), cost calculation data for each part, and corroborative materials).
- If the BOM is incomplete.
- If the cost calculation data for each part is incomplete.
- If the corroborative materials are at least 50% insufficient.
- If the contents of the electronic data and printed materials are not consistent.

J2017-33 Submission Items for Cost and Manufacturing Event (refer to rules S4.9 and S4.13 of 2017-18 FSAE®)

The Cost Report shall consist of the items below, which shall be submitted in both electronic data (CD-ROM) and printed formats.

(1) BOM

This consists of a sheet or sheets for calculating the cost of one whole vehicle unit. These sheets shall be submitted using the FSAE_eBOM.xls format that can be downloaded from “2017 FSAE Cost eBOM” on the FSAE website (<http://www.fsaonline.com/>). In some cases, submissions in other formats may not be accepted for entry into the Cost and Manufacturing Event.

* File name and file format: carnumber_schoolname_SFJ_CR_BOM.xls(x)

(2) Cost calculation data for each part

This consists of a sheet or sheets for calculating the cost of each assembly or part. These sheets shall be submitted using the FCA_Inputs.xls format that can be downloaded from “2017 FSAE Cost Inputs” on the FSAE website (<http://www.fsaonline.com/>). In some cases, submissions in other formats may not be accepted for entry into the Cost and Manufacturing Event.

* File name and file format: carnumber_schoolname_SFJ_CR_FCA.xls(x)

(In the same way as the FSAE rules, the BOM and cost calculation data for each part may be submitted as “CR_BOM” in a single Excel file.)

(3) Supporting documentation for cost calculation

These are materials that provide evidence to support the accuracy of the figures required to calculate the costs of each part. Any format is acceptable.

* File name and file format: carnumber_schoolname_SFJ_CR_Supplement.pdf

The supporting materials shall include the following materials as a minimum requirement.

- a. Three-view drawings or materials equivalent to three-view drawings of parts defined as “Made” in rule S4.13 of 2017-18 FSAE® (see the Cost Tables, APPENDIX S-3 of 2017-18 FSAE®, and Local Rule J2017-36 below).
- b. For composite parts, the material, composition and manufacturing method of individual parts.
- c. Wiring diagrams

Please note that Excel files submitted as electronic data must not be converted to pdf. Any BOM or cost calculation data for each part converted into pdf and submitted as electronic data will not be accepted.

J2017-34 Requests for Additional Items to Cost Tables (refer to rule S4.14 of 2017-18 FSAE®)

The first version of the official Cost Tables for the SFJ will be released at the beginning of April 2017. In the event that a “Bought” part, fabrication method, or the like adopted for the vehicle is not included in these Cost Tables, the team shall submit an “Add Item Request” via the “Cost Table Add Item Request Q&A” page of the Q&A system. The completed “Add Item Request” Excel file (to be specified separately) and supplement materials shall be compressed using the .zip or .lzh format and submitted by 14:00, May 12, 2017, Japan time. The final version of the Cost Tables incorporating this information shall be issued at the beginning of June, and their details shall be frozen at this time.

In the event that cost information shown in the final JSAE Cost Tables differs from that in the FSAE® Cost Tables, the JSAE version shall be given priority, even if the FSAE® Cost Tables feature an additional part.

If the Add Item Request could not be completed before preparation of the Cost Report and parts not listed in the Cost Tables need to be entered in the report, the team shall appraise the cost of these items and identify them clearly in the Cost Report (e.g., through the use of colored cells). Cost judges will assess again and there are cases where penalty points are given according to need.

J2017-35 Addenda to the Cost Report (refer to rule S4.17.1 and APPENDIX S-5 of 2017-18 FSAE®)

Addenda reflecting design changes implemented after the submission of the original Cost Report shall use the SFJ format (posted on the team page). Addenda submitted in any other format shall not be accepted.

For both Japanese and Overseas Teams, EV Class Only

J2017-36 Organized List of EV Systems and Assemblies (refer to APPENDIX S-3 of 2017-18FSAE®)

In the cost report, dedicated EV parts shall be categorized following the list of system 4) Electrical – EL as described below.

4) Electrical – EL

- Motor, Tractive
- Battery, Tractive
- Accumulator Container
- Wiring HV
- Conduit
- Electronic Control Unit (ECU)
- Chassis Control Module (CCM)
- Accumulator Management System (AMS) (Battery Management System (BMS))
- Motor Controller (MC)
- Power Distribution Module (PDM)
- Tractive System Active Light (TSAL)
- Isolation Monitoring Device (IMD)

J2017-37 Submitted Items for EV Cost Report Review (refer to rule S4.22 of 2017-18FSAE®)

On the day of the Cost Report review, if requested by a Cost Report Judge, photographs of dedicated EV parts that are not visible due to enclosure within a sealed structure or the like shall be submitted as evidence of the cost calculation for those parts.

Teams unable to submit photographs on request shall be penalized a maximum of 20 points.

J2017-38 Exceptional item on Cost Report (refer to rule S4.23 of 2017-18FSAE® and Local Rule J2017-21)

The Ready-To-Drive-Sound (Tractive System Active Sound (TTAS)) does not have to be included on the Cost Report.

For both Japanese and Overseas Teams, both ICV and EV Classes

J2017-39 Document Screening for Presentation Event (refer to rules S5.1.6, S5.2.2, and S5.6.3 of 2017-18FSAE®, rules 11 and 12 of SFJ, and Local Rule 2017 J2017-31 above)

Even if the Business Logic Case is submitted prior to the due date, the pre-screening procedure may determine this item to be unacceptable for the Presentation event to be held during the Competition. In this case, the team shall be awarded a Presentation event score of zero points. In addition, points shall be deducted as appropriate if the contents of the submitted Business Logic Case are judged to be insufficient. In this case, the points deduction shall be applied to the score awarded for the Presentation event. However, if the point deduction results in a negative score for the Presentation event, a score of zero points shall be awarded for the Presentation event.

J2017-40 Document Screening for Design Event (refer to rule S6.9 of 2017-18FSAE®)

Even if the Design Report and Design Spec Sheets are submitted prior to the due date, the pre-screening procedure may determine these items to be unacceptable for the Design event to be held during the Competition. In this case, the maximum Design score shall be restricted to 20 points.

J2017-41 Submission Items for Design Event (refer to rules S6.2 and S6.11 of 2017-18 FSAE®)

Since the time limit of the Design event in SFJ is 30 minutes, pre-screening of the design documents is emphasized to ensure that the event is productive. The relevant rules shall be fully understood to ensure submission of design documents with a high degree of completion.

The font size on the text pages of the Design Report shall be no smaller than 8-point in the desktop publishing (DTP) software for both English and Japanese characters. The margins at the top, bottom, left, and right of each page shall be 10 mm or more. The spacing between characters shall not be too narrow.

The following dimensions shall be included on the three-view drawings as a minimum requirement: overall length, overall width, overall height, wheelbase, front and rear track, and minimum ground clearance

J2017-42 Procedure for Design Event (refer to rules S6.2, S6.11, and S6.12 of 2017-18 FSAE®)

The procedure for the Design event is described in “FSAE Design Judging, A Student Guide to Understanding the Process”, which is available on the FSAE website.

The time allotment is as follows (total 30 minutes): Setup (introduction of specialist fields of Judges, 2 minutes), Introduction (explanation from team, 3 minutes), Questioning (Q&A, 22 minutes), Closing (simple comments, 3 minutes).

During the setup and Introduction steps, team members other than those presenting the vehicle shall be permitted to film or take photographs of the general scene from outside the judging area.

Filming, photography, or sound recording by team members presenting the vehicle within the judging area shall be prohibited. All filming, photography, and recording shall be prohibited from the Questioning step.

Scoring shall not be carried out at the judging site. Score sheets shall be sent to the teams after the Competition has ended and shall not be handed over at the judging site.

Judging shall take place in two stages: the Design event for all teams, and the Design Final for between two to four teams selected in the Design Event.

J2017-43 Interpretation of Insufficient Redesign (refer to rule S6.15 of 2017-18FSAE®)

Cars that retain and improve upon sophisticated concepts resembling designs in previous years shall not be penalized for insufficient redesign, and shall be awarded points equivalent to wholly new designs.

However, copy and pasting of content from a previous year’s Design Report, or expressions that closely resemble previous content shall result in the corresponding components being defined as insufficiently redesigned, and points shall not be awarded.

J2017-44 Addresses for Submission Items for Static Events (refer to rule 11 of SFJ 2017)

Login from the team page: <https://tech.jsae.or.jp/formula/2017team/login.aspx>

Postal address: Attn.: Ichiro Yoshida and Hideyuki Iijima, Secretariat of Student Formula Japan
2017, 10-2 Gobancho, Chiyoda-ku Tokyo, 102-0076 Japan (tel.: 03-3262-8214)

Email: formula@jsae.or.jp

*NOTE: We cannot accept your any questions on the phone. Teams have to send above email address or use Q&A system anytime you want to ask, because we have to leave an evidence of the conversation.