



中国大学生方程式系列赛事
FORMULA STUDENT CHINA

COMPETITION HANDBOOK

2024

Version 1.0



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1. General Information

1.1 Event Information

Formula Student China (FSC) was founded in 2009 and is a non-profit social welfare competition dedicated to building a public platform for the cultivation and selection of elite automotive talents in China.

FSC 2024 will have three class: CV (FSCC) , EV (FSEC) and AV (FSAC).

Hybrid vehicles are included in the combustion class.

FSC 2024 will be held two competition. FSCC will be held in Xiangyang City, Hubei Province from October9-13, and FSEC&FSAC will be held in Hefei City, Anhui Province in the last week of October or the first week in November.

Teams participating in FSC must be registered on the FSC website.

Links to Chinese Website : www.formulastudent.com.cn

Links to English Website: <http://formulastudent.sae-china.org/>

Participating Teams

2024 FSC has no limit on the number of teams, with 87 EV, 58 CV and 36 AV have registered as of March 28, 2024

- 2024FSAC will not open to international teams, please wait further notice.

Registration on Site

Before arriving at the site, Teams needs to upload the scanned passport first page of not more than 25 team members and the instructor to the corresponding project of the FSC system in the "List of participants" in the FSC system.

In general, FSC does not accept teams that do not carry a car and only compete in static events. In exceptional cases, if a team is unable to bring a vehicle to the race for special reasons (such as customs, epidemic, nature disaster and so on), they will be allowed to participate in static event without a vehicle.

Upon arrival at the site, teams needs to complete the registration at the Secretariat, and the team leader needs to bring the passports of all the team members to register and get the member's chest card. Upon registration, teams will receive a race package containing the race manual, inspection form and other items, as well as five vests and wristbands.

Items need to get:	Chest Card	Items need to hand in	Disclaimer (Driver's signature required)
	Manuals (Race manual & Rules manual)		Identifications for all members
	Inspection background sticker		Diver license for all drivers
	Vehicle No. Sticker		Photos for all

			members (3.5*5.3cm)
	Logo of China SAE		Welding Certification*2
	Inspection Form		ESO Certificate*2 (only EV)
	Vests*5		
	Wristbands		

About Wristbands:

Welding Wristbands: Team's welding members are required to show welding qualification or certification stamp by school or above in order to obtain at least one but no more than two wristbands, and only the members with the bracelet can perform welding operations in the Maintenance Area.

(EV only) ESO Wristbands: Teams are required to display an ESO certificate (CALB or FSG-recognized certificate) to receive no more than two ESO wristbands. If you do not have a certificate, you can also show applications stamped by the school or above.

1.2 Datalogger

The team needs to use the power meter and timer provided by the official, and the relevant information will be published on the official website later.

2. Track

Unfortunately, neither the FSCC nor the FSEC were able to determine the track at an early stage. A new handbook will be released to inform the team after the venue is confirmed.

3. Rules & Guidelines

3.1 Official Rules

The official Rules are 2024 FSC Rules, consider that there are no official English rules have been published for 2024, **we will allow international teams to design their cars according to FS Rules specially .**

The links of FS Rules:

<https://www.formulastudent.de/fsg/rules/>

Scoring

Regardless of whether teams design their vehicle according to FS Rules or not, the scoring system of the FSC will be in accordance with FSC Rules.

	CV&EV
Static Events	Total 325 points
Engineering Design	150 points
Bussiness	75 points

Cost	100 points
Dynamic Events	Total 675 points
Acceleration	75 points
Skid Pad	75 points
Autocross	100 points
Endurance	325 points
Efficiency	100 points
Over all	1000 points

3.2 Documents Upload

All documents need to be uploaded through the FSC system and penalties for late or missed submissions will be announced before the game. We doesn't assume any responsibility if files cannot be uploaded on the last day of the submission deadline due to system crash or other reasons.

File name:

The race system has an automatic naming function, and the teams do not need to be named according to format.

Deadline:

The deadline for submission of all documents is 24:00 Beijing Time on the requested date.

4. Technical and Safety Inspection

4.1 General

Teams have to go through a series of inspections to make sure vehicles safety and conformed all rules before they are allowed to compete in dynamic events.

All vehicles need to pass the following inspections.

CV	EV
Driver Egress	
Mechanical Inspection	Accumulator Inspection
	Mechanical Inspection
	Electrical Inspection
Vehicle Weighting	
Tilting Test	
Noise Test	Rain Test
Brake Test	
Dynamic Test	

Vehicles will be inspected in order according to the Vehicle number, and if the team is unable to submit all the documents before the race, the inspection will be placed last.

5. State Events

5.1 Business Event

Business Plan Presentation Event

The purpose of the business plan presentation is to assess the ability of the fleet to build and present an integrated business model that can convince external investors to invest in the team's proposed program, **taking into account social responsibility and sustainable development.**

Presentations are limited to 12 minutes. The presentation of the business report will take 10 minutes, the presentation of the team's operating concept and typical marketing cases will take 2 minutes, and any presentation beyond the 12-minute time limit will be interrupted by the referee.

Business promotion assessment (15 points)

When the overseas team participates in the commercial defense, an extra 2 minutes will be provided for the team to introduce and display the relevant activities and results of the commercial promotion practice, and the referee will give a subjective score according to the "Competition Commercial Promotion Practice Ability Score Calculation Table".

5.2 Cost and Manufacturing Event

Documents: Teams are required to submit CR documents (BOM, FCA, Real Case) in the system before competing.

Statements:A discussion will be made by the referee at the side of the car. This not only assesses the cost of vehicles, but also the team's ability to accurately estimate manufacturing costs.

Real Case:Students must prepare according to the case questions published before the competition, analyze and present on the field, and answer questions on the cost of the car manufacturing process.

5.3 Engineering Design

The parameter sheet and design report must be submitted to the system before the competition.

Design Report should contain the cover, content, and three views of the vehicle, and the total number of pages should not exceed 8 pages.

Scoring:

Category	Points
Suspension/Steering/Braking	35 points
Aerodynamic/Styling	20 points
Engine/Transmission/Electrical (Only CV)	40 points
Accumulator/Transmission/BMS/Electrical (Only EV)	40 Points
Ergonomic/Safety	25 points
Team management/Test	15 points

Report Document	15 points
Overall	150

6. Dynamic Events

6.1 Captains and Drivers Briefings

The Team Captains briefings will be held on Day1 and Day2. Driver's briefings will be held on each day before track is open. All drivers for that day and Captains must attend.

A minimum of four and maximum of six drivers are allowed for each team. Drivers must be registered and show a valid driving license.

6.2 Dynamic Events

Acceleration

Timing will start when any part of the vehicle crosses the start line. Once the vehicle passes the start line, the run has been officially attempted and cannot be re-started. Each team has four runs, driven by two drivers with two runs each. Each drivers has the option to make a second run immediately after his first run.

Skid Pad

Each team has four runs, driven by two drivers with two runs each. Each drivers has the option to make a second run immediately after his first run.

Autocross

Each team has four runs, driven by two drivers with two runs each. Each drivers

has the option to make a second run immediately after his first run.

Endurance

Starting order is based on autocross qualification. Only two team members, alongside the two drivers, are allowed in the staging area for the vehicle.

The post event technical inspection must be passed score points in the endurance event.

Efficiency

Detailed efficiency test calculations can be found in the FSC Rules.

(CV only) Officially designated gasoline is 98 Ron (If not available locally, 95 Ron May be used), and FSC will not supply E85 or other types of fuel.

(HY only) The electric energy consumption of hybrid cars is not included in the efficiency test.

7. Contact Info

Organizers	Responsibility	Contact
Zheng Hao	General,Scrutineering, Team Contact	zhenghao@sae-china.org
Cao Yifan	Secretariat	cyf@sae-china.org

In order to facilitate the communication of overseas teams, we have set up an international team group on Whatsapp, which can also contact FSC officials (Zheng Hao +86 15726636895) directly through Whatsapp in addition to email.