

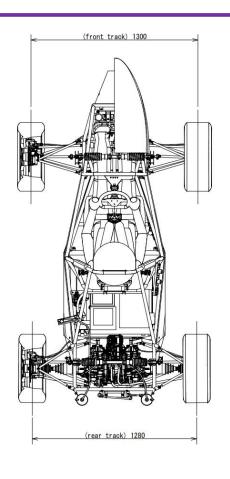
# Tohoku Univ. Formula Team

# 2020-2021 Report of activity

7/12/2021 (Tue) 2020-2021 Project Reader Tatsuya Kubo

### About Us





We build our own **racing cars** according to the rules and We are participating in **Formula SAE Japan** Competition.

### About "Formula SAE Japan"

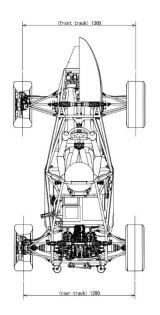


- The purpose of this competition is to develop students' manufacturing skills through the development of racing cars.
- 62 teams from Japan participated in this event.

# About "Formula SAE Japan"

#### Two aspects of competition







OStatics Event
Compete with the various reports

ODynamic Event
Compete for lap time of various tracks

The Competition were cancelled in 2020 and held only static event online in 2021.

### Activities of our Team

~2020~

Mar : built and completed 2020 car

and suspend activities

Aug. : Launching the team for 2021

Sep~Nov: Previous year vehicle test run

and new vehicle design

Dec. : Design and manufacture of new vehicles

12/27 : Ceased face-to-face activities

and abandoned development of new vehicles



### Activities of our Team

#### ~2021~

Jan~Jun : Document Production (Online)

6/19 : Resumed face-to-face activities

6/29~7/25: Previous year's vehicle test run

7/30: Changed the format of the tournament to online only.

Aug : Document Production

 $8/25\sim31$  : Competition

# Review of the competition

Events		Score	Ranking
Static Event	Cost	23.47/100	26th/61th
	Design	63.00/150	34th/61th
	Presentation	57.25/75	14th/61th
late submission penalty of cost		-20	
Overall		123.72/325	27th/61th (Our best result)

### Cost Event (26th/61th)

#### **Result**

2021	26th	23.47/100pt
2019	25th	34.5/100pt



#### **Event Details**

Report on the manufacturing cost of the machine and evaluate its consistency.

#### **Efforts**

Check and manage the progress of each part on the cloud service.

Rookie students also worked as mainstays to create materials.

#### reflection points

- · Rookie students were Proficient.
- Lack of management of schedule double checking and Evidence of cost.

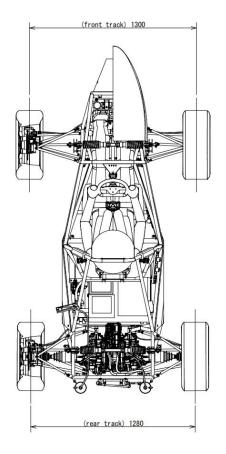
# Design Event (34th/61th)

#### Result

2021	34th	63/150pt
2019	66th	43/150pt



The process and rationality of the design are examined from various fields such as structure, maintainability, and aesthetics.



#### **Effort**

- · Clear the machine concept
- Enhancement of drivetrain part
- Rookie students also worked as mainstays to create materials.

#### reflection points

- Gain the score of drivetrain part
- Rookie students were proficient
- Lack of quantitative design goals, performance evaluation

# Presentation Events (14/61th)

#### **Results**

2021	14th	57.25/75pt
2019	65th	32/75pt



#### **Event Details**

In a hypothetical sale of a team vehicle, the team makes a presentation to the judges.

#### **Efforts**

- Support the rule changes
- Repetition of presentation practice

#### reflection points

- well-reasoned content
- Easy to understand of presentation
- · Lack of novelty of the business model
- Unclear of target volume

# In closing

We have received a lot of sponsorship this season. Thank you very much for supports.

