

FORMULA SAE ITALY 2024

September 4-8 2024 Riccardo Paletti circuit Varano de' Melegari

# Handbook





# Formula SAE **Italy 2024**

**#FSAEItaly** 

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**FSAEItaly** 

### www.formula-ata.it

Formula SAE Italy is organized by ANFIA - Associazione Nazionale Filiera Industria Automobilistica www.anfia.it

# Table of contents

Introduction	•••••	5
In case of emergency		6
Organizing Committee		8
Awards		14
Site Plan		16
Official Schedule		18
Pits		21
Registration and information		22
Driverless		24
General Rules		26
Scrutineering		37
Static Events		45
Dynamic Events		47
Results		55
Protest		56
Offensive Behavior		56
Camping information		57
Staff		64

3



# Accelerate to zero

Our targets to reach net-zero greenhouse gas emissions in the value chain are validated and approved by SBTi.

And our bearing technologies for electric vehicles enable lower emissions throughout their full life cycle – from low carbon manufacturing to friction reduction in the end application.

Let's work together to accelerate the race to zero.



September, 4<sup>th</sup> - 8<sup>th</sup>

@ «Riccardo Paletti» racetrack - Varano de' Melegari (PR)

#### Official Handbook

#### Introduction

The Formula SAE Italy 2024 will follow the FS Rules 2024, with some exceptions and additions. The Formula Driverless 2024 will follow FSG rules with few exceptions. The Cost event will follow FSG rules and the Business Presentation event will follow the scheme tested in 2021 edition and shared with FS Austria with some updates. The additional regulations, valid for the Italian event, are the ones reported on the official Formula ATA web site (www.formula-ata.it under the "Information & Rules" section).

These guidelines are written with the only purpose to help competitors and guests during the event. In case of doubt, please refer to the event officials. Please remember that motorsport can be

dangerous, always take the maximum care during the entire event.

Formula SAE is an educational event where all the students have the possibility to learn while having fun

This also means keeping a good behaviour all time. Please be informed that, due to the ongoing of thefts occurred in the last years, this year both passive and active security measures will be reinforced and the surveillance service will be allowed to monitor everything that can be monitored.

Every kind of misappropriation (including graphics signage, road signs, circuit furniture etc.) will be legally prosecuted.

# Formula SAE Italy is organized by



In collaboration with





Read more at skf.com/sustainability

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# In case of emergency

In case of any emergency situation please refer to the officials/staff. During the dynamic events ambulance will be on site. In case of need, ask someone with a two-way radio.

In case of an emergency outside the event, call 112.

This number is free of charge.

#### Useful phone numbers are the following

General Emergency Number 112

Carabinieri Fornovo Taro office +39 0525 2114

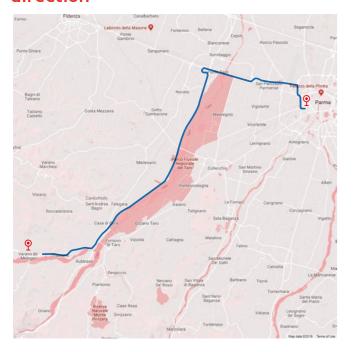
Parma Hospital +39 0521 702111 - 703111

-First aid service: +39 0521 703084

Borgo Taro Hospital +39 0525 9701

-First aid service: +39 0525 970216, ext. 4216

# Parma Hospital direction



#### Borgo Val di Taro Hospital direction



# WHAT SHOULD I DO IN CASE OF ELECTRIC SHOCK?

- Call for medical help. Ambulances are onsite for medical assistance.
- Push one of the emergency shutdown buttons and wait until the TSAL (Tractive System Active Light) is green. Don't act if light is red or turned off.
- Try to speak with the wounded and ask him/her about his/her health.
- Insulate yourself if you must move a wounded away from a live contact wear dry gloves or cover your hands with cloth and cover potential contact paths with the car with the HV isolation blanket.
- Watch your step to make sure that you do not slip or fall when trying to move the wounded.
- Do not move the wounded if there is a possibility of neck or spinal injuries unless it is absolutely necessary (for example from a path of live current).
- Cover burns with a sterile dressing. On the surface, electrical burns may not look serious, but the burn can be severe deeper in the tissue.
- Keep the wounded comfortable, warm and at rest, and monitor breathing.



Invented for life

# **Bosch Mobility**

As a diversified leading global supplier of technology and services, Bosch is involved in all key areas that shape mobility today and tomorrow. To this end, Bosch combines hardware, software and services to create complete solutions for connectivity, automation, safety, personalization and powertrain.

www.bosch-mobility.com



# **Organizing Committee**

#### **Steering Committee**



Claudio Annicchiarico

Head of Formula

Anna Maria

Costa

Event

Anja

Head of

Dynamics Selene

Organization

Hermann

**Praturlon** 



Giampiero Brusaglino

Electric Technical

Raffaele

Fregonese

Formula SAE

**Italy Director** 

La Tassa

Silvio

Head of Mechanical

Inspections

Roberto

Prete

Safety

Manager

Claudia

Rossi

Piero



Paolo Mario Coeli

Formula SAE **Italy Director** of Operations



Miriam Gangi

Organization and Communication



Francesco Laviola

Head of Formula Electric Italy



Francesco

Ristori

Head of Formula Driverless Dynamics



Mariangela Sciorati

**Fvent** Organization and



Massimo Rosaschino

Migliaccio

**Event Organization** and Responsible

for relations with

Dynamics Logistic Manage



Organization Paddock



Communication

#### **Executive Committee**



Giorgio Brunelli

Dynamics Security Responsible



Carlo Giorgioni





Business Presentation Manager

Scoring

Ciadamidaro

Responsible



Rebaudo

Giacomo Danisi

Head of Design



Nicola Rizzini

Volunteers Coordination Responsible

#### Media Group



Daniele **Bottallo** 

Photographer



Andrea **Napolione** 

Social Media Manager



Edoardo Piva

Photographer



**Fabrizio** Giuliano

Video Maker

Giuseppe

Pagano



Leonardo Floridia

Social Media Manager Junior



Giorgio **Perottino** 

Photographer



#### **Business Presentation Event Committee**

Assettati Giovanni	Italdesign	Ultra Low Series Project Development
Baronchelli Samuele	PwC	Director, responsible for automotive suppliers
Bassi Alberto	Dallara Group	Industrial Controller
Caldano Enrico	Valeo	Project Director
Caviglia Alberto	Plug and Play Tech Center - Motor Valley Accelerato	Ventures Analyst
Cillis Giuseppe	Robert Bosch	Key Account Manager
Costariol Matteo	Global Marketing Architecture	Senior Partner
Deitinger Laura	Assoknowledge	President
Dentamaro Chiara	Dumarey Flowmotion	Controlling
Duma Flavia	Dumarey (PUNCH Torino)	Group Marketing Officer
Garzulli Serena	ION Trading	Business Analyst
Grassi Luca	Danisi Engineering	Key Account Manager
Levantino Edoardo	Maccanica 42	Application Engineer
Loiodice Cinzia	Bricks4Kidz	Country Head
Rebaudo Enrico	Dumarey Group	Senior Account Manager
Reggiani Andrea	Fabbrica Dallara	Head of Sales Dallara Stradale
Romito Alessio	Dallara	Digital Innovation Manager
Salerno Andrea	Dallara	Design Engineer
Santantonio Ilaria	Piaggio	Product Marketing
Sciolari Alessandro	Assoknowledge	Scientific Director
Sperati Maurizio	Altair	VP Global Account management and automotive operations
Tardito Marcello	Podium Engineering	Business Development Engineer
Temporelli Valentina	Landi Renzo	Global OEM Sales & BD Director

### **Cost Event Committee**

Abdelrahman Amer	alBaraka Bank	Big Data Engineer
Amin Omar Mohamed		
Actis Enrico	Dayco	Global Manager Purchasing Capex, MRO and Indirect
Arnav Anand	RWTH Aachen University	Research Assistant
Barbiero Alvise	C&U EUROPE Gmbh	Sales Manager
Bertolino Luca	Dayco	New Technology Introduction Buyer (NTI Buyer
Boschetto Carlos	Dallara Group	Design Engineer
Cacopardi Aldo	Doc Finance	Marketing Manager
Carattini Sara	Dallara Compositi	Sales Specialist
Della Rossa Michele	Davide Campari - Milano NV	Commercial FP&A Specialist
Di Martino Gerardo	STEF ITALIA	ACCOUNTING SPECIALIST
Dondo Paolo	Polo Mesap	Technology Manager
Fazzoletto Emilio	Argotech	Head of Product Management & Head of Electronics Unit
Giglio Federico	SKF	Purchasing Manager - Automotive Powertrain & Drive Control
Giorgioni Carlo		Head of Cost Judges
Gonzalez Santiago	Dallara Stradale e Dallara EXP	Liaison Engineer/Design Engineer
Loparco Denis	Garrett	Validation Responsible
Lorenzon Francesco	Maserati	Vehicle performance manager
Marinelli Piermanuel	SFC COMPOSITI	Junior Composite Engineer
Monegatti Marco	DALLARA Automobili	Sales Specialist
Piccolillo Denis	DALLARA Automobili	Design Engineer
Pinto Valerio	BOSCH CVIT - Bari	Design DevelopmentmEngineer
Pongracic Klemen	Skylabs	Mechatronics systems developer
Prati Giovanni	Arix	Pricing & Control Specialist
Russo Carmela	Racing Bulls	Process Engineer

Russo Davide	Stellatis	Propulsion Electrical Drive Systems - 48V BSG Global Assistant Chief Engineer
Scarangella Filippo		System Engineer
Scicutella Nicola	FPT Industrial	Testing Engineer
Silatchom Fabrice	Kion Group	Senior Category Buyer
Suleman Shalom	Beamit Additive Manufacturing Technologies	Quality Assurance Specialist
Sureka Arihant	Schaeffler ByWire Technologie	Motorsports System Engineer & Data Analyst
Topini Giacomo	Automobili Lamborghini	Motorsport Procurement
Trumbic Niko	Rimac Technology d.o.o.	Gearbox Design Engineer
Uriati Federico	Beamit Spa	RD Manager
Vitrani Stefano	Italdesign	ADAS Function Developer
Vlahinic Alen	AVL	Senior Development Engineer Methodology

# **Design Event Committee**

Aimo Boot Marco	IVECO Group	Electrification Technologies - Advanced Engineering Manager
Allocco Alessandro	Centro Ricerche Fiat	Propulsion Control Engineer
Annicchiarico Claudio	Meccanica 42	Chief Executive Officer
Approsio Angelico	SKF	NVH Sr. Technologist Expert, R&D Global department
Ariola Amilcare	Valeo	Electrification Systems Product Leader
Babic Igor	Bugatti Rimac	Head of System Engineering
Badia Tiziano	Bugatti Rimac Italy	Project Lead Design
Battisti Emanuele	Ycom	Program Manager
Basilici Marco	Centro Ricerche Fiat	Innovation Project Leader
Bignotti Luca	Valkyr	CEO
Biffali Pierpaolo	Iveco Group	Head of Powertrain Product Engineering
Bordina Fabio	ANFIA	IATF Oversight manager, Quality manger, Training design manager
Calderini Daniele	Dallara Group	Performance Senior Engineer
Ceriello Giovanni	DTS SpA	Fuel sytem Chief engineer & validation manager
Cima Massimo	Valeo	R&D Manager
Cinà Alessandro Pietro	Stellantis	Vehicle Dynamics Performance Manager
Coeli Paolo	Stellantis	EE - Regional Planning - Cross-Carline & Diversity
Colombo Maurizio		Vehicle Expert
Concari Nando	Dallara Group	Vehicle Design Technical Advisor
Contardi Mattia	IVECO Group	eDriveline System Development & Application Manager
Cuomo Raffaele	Maserati	ADAS Design Release Engineer
Del Toro Paolo	IVECO Group	Head of Testing Operation & Prototype
Danisi Giacomo	Danisi Engineering	Chief Executive Officer
Di Pierro Simone	Automobili Pininfarina	Head of Software Integration
Esposto Daniele	Valkyr	General Manager
Esposto Filippo	DTS SpA	PRODUCT ENGINEERING STAFF
Ferrara Ferdinando	Stellantis	EE Propulsion Systems - Project Chief Management
Ferraris Alessandro	BeonD	CEO
Fregonese Raffaele	Maserati	Propulsion Systems - Electrified Architecture - Charging System Architecture Responsible
Gamberini Giorgio	Italdesign Giugiaro	Business Development & Communication Director
Gandini Devid	Ycom	Head of Vehicle Concept
Giannini Marco	Fast Charge Engineering	CEO
Guanti Giovanni	Robert Bosch	Technical Calibration Leader
Guccione Stefano	Automobili Pininfarina	Head of e-Powertrain Architecture and Integration
Impinna Fabrizio	FLAG MS	CMO & Co-CEO
Kaneb Charles	General Atomics Aeronautical Systems Inc	Staff Engineer, MQ-9 and MQ-1 Programs
Malatesta Davide	TII	Senior Engineer Software Platform

11

#### Formula ATA

Marrazzo Massimiliano	Mercedes AMG High Performance Powertrains	THERMOFLUIDS PERFORMANCE DEVELOPMENT AND DYNO TESTING ENGINEER
Masucci Antonio	ACC - Automotive Cells Company	Project Validation Leader
Mechi Marco	Dumarey Flowmotion	H2 DI Engineering Team Leader
Menarini Nicola	Dumarey	Director, Programs Execution
Miano Carlo		freelance performance engineer motorsport
Migliaccio Guido	Stellantis	Functional Propulsion System Quality Manager
Mirabella Valentino	Stellantis	Vehicle Dynamics Virtual Analysis Specialist
Monti Francesco	Podium Advanced Technologies	CEO
Nebbio Gianluca	Bosch Engineering	Project Manager
Palarchi Nicola	A2RL	Technical Director
Pozzato Alessandro	IVECO Group	Innovation System Engineer
Ravera Federico	Danisi Engineering	Head of Simulation
Razelli Eugenio	President of Motor Valley Accelerator	Automotive Companies Board Member
Ricci Claudio	Danisi Engineering	Head of Advanced Vehicle Dynamics (AVD)
Ricciardi Francesco	Bylogix	CEO
Rivieccio Claudio	Teoresi	Delivery Unit Manager - Automotive
Sacchi Matteo Eugenio	Stellantis	Vehicle Dynamics Global Performance Specialist
Sanchez Juan Sebastian	Bugatti Rimac Italy	EE Network Integration Lead Engineer
Short Evan	MERCEDES AMG PETRONAS Formula One Team	Trackside Electronics Leader
Trappella Stefano	FPT Industrial	Battery System Development Engineer
Tertulliani Nicola	Maserati	ADAS High Speed Team Leader
Tredozi Gabriele		Motorsport expert
Zaharia Daniele Simone	Bugatti-Rimac	System Integration Lead Engineer



We are Lamborghini

**OUR ESSENCE**: Driving Humans Beyond: it's our DNA. Barriers and obstacles only serve to make our resolve stronger. This is because everything we do serves one purpose only: we seek to drive and encourage people to always go beyond their limits. We want to inspire people more than everything.

**OUR ATTITUDE:** We want the automotive sector to evolve for the better, that's why we work to create value for society in our own way. We lead transformation by drawing our future. Turning our ideas into visionary creations is our mission. Sharing them is what makes us impactful.

JOIN US: We are looking for authentic, brave people, eager to go beyond their limits in a place that makes no distinction of gender, age or culture, working every day to value the authenticity of each person. We believe that everyone is unique and has their own potential. Show us yours and add your own colour to our iconic Brand!

#Lamborghini #DrivingHumansBeyond

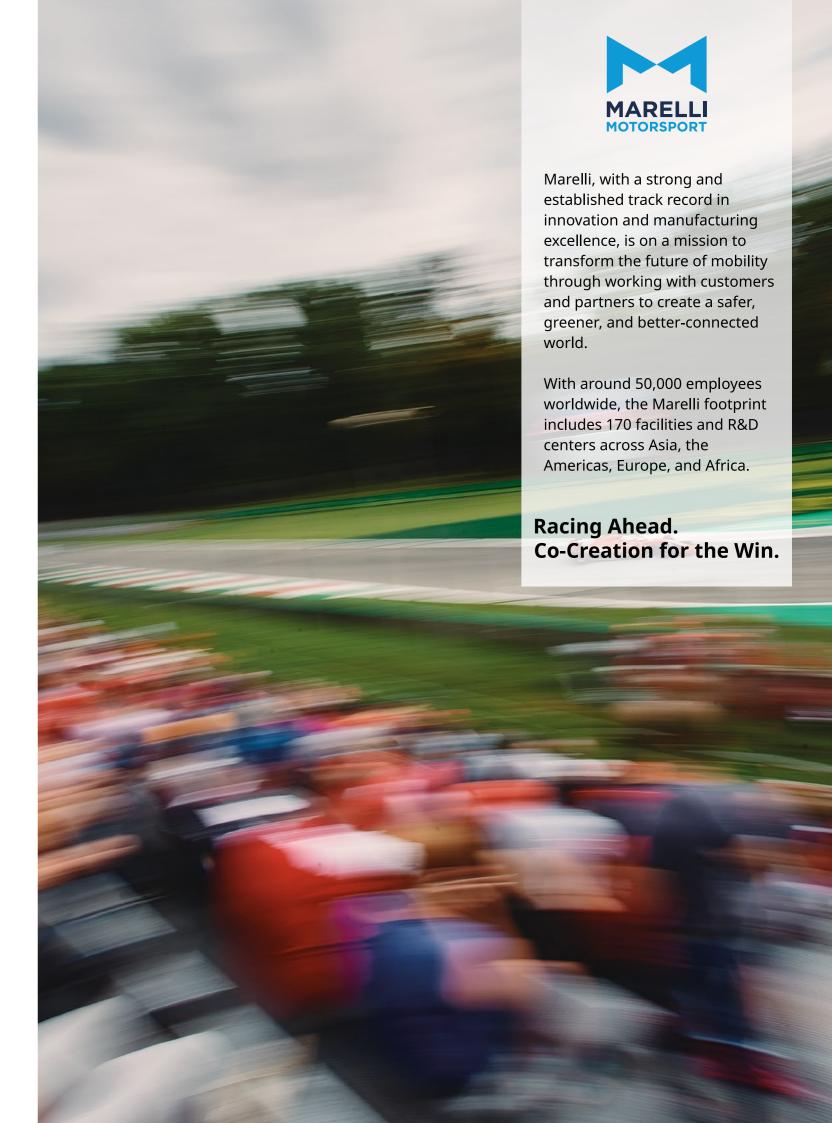
Visit our Careers Website!











### Formula SAE Italy 2024

**Sponsor Special Awards** 



#### Award for the best Car/Resources balance

Award presentation by a Dallara executive spokesperson

- Trophy
- Cheque of € 700

# **Ferrari**

#### **Endurance & Efficiency Award** (Classes 1EV and 1CV)

Award presentation by a Ferrari spokeperson

Ferrari Gift Bag



#### **Innovative Strategies for e-PWT System Control**

Award presentation by Andrea Sanguedolce -Managing Director FEV Italia & Bruno Vadalà -Managing Director eXaV

- Trophy
- No. 2 Hiring in FEV Italy
- No. 2 Hiring in eXaV
- No. 10 tickets for GP Italy Formula 1



#### Top Coating Award (best treated and painted bodywork in terms of quality and innovation)

Award presentation by Alessandro Di Lucrezia, Executive Director Advanced & Environmental Engineering and Alessandro Corbella, Advanced Engineer

6 months paid internship with possibility of placement



#### The most digital engineering

Award presentation by Aldo Cirilli, CEO Magna PT SpA

- Plaque
- Cheque of € 2,000
- MAGNA gadgets



#### Performance and Inclusion in **Sustainable Practices**

Award presentation by a Marelli Motorsport spokeperson

Trophy

14

Exclusive internship opportunity at Marelli for one of the chosen team members



#### **Podium Advanced Technologies Best Battery Award 2024**

Award presentation by Francesco Monti, CEO of Podium Advanced Technologies

Cheque of € 1,500

To the team who did the best job in putting together all the battery system project requirements and constraints and developed the most innovative



#### Sustainability at 360 degrees: stay tuned, embrace the change

Award presentation by Angela Toro, HR director SKF Automotive and Ezio Miglietta, EMEA **Automotive Sales Director** 

- 6 hours of technical consulting with SKF's experts
- A complimentary equipment kit or an equivalent voucher



#### Teoresi Award 2024 - Electronics development process: innovative controls, methods and architectures

Award presentation by Natale Gentile, Country Business Development Manager Automotive

Trophy + Intrepid Control Systems innovative tools for engineers in the vehicle networking, testing and embedded engineering fields

#### **Special Awards**



#### Best social networker on FSAE Italy 2024 App

Reward for the most active student on the Social Wall of FSAE Italy 2024 App

I-Pad

**Best Class** 

Trophy

**1CV Business** 

#### **Overall Event**

Most Friendly Team **Best Class 1CV** Trophy

Classified in the Cost Event Trophy

**Best Class 1EV Business Presentation Event Presentation Event** Trophy

**Best Class 1EV** Classified in the Cost Event Trophy

**Best Class 1DV Business Presentation Event** Trophy

**Best Class 1DV** Classified in the Cost Event Trophy

**Best Class 1CV Design Winner** Trophy

**Best Class 1DV Design Winner** Trophy

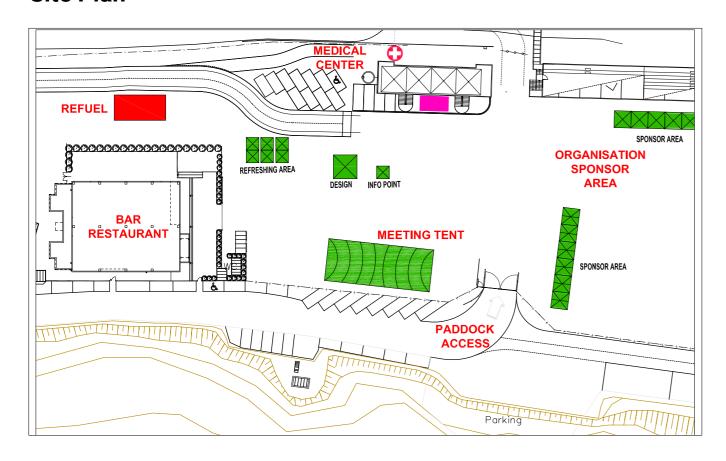
Other Special **Awards** 

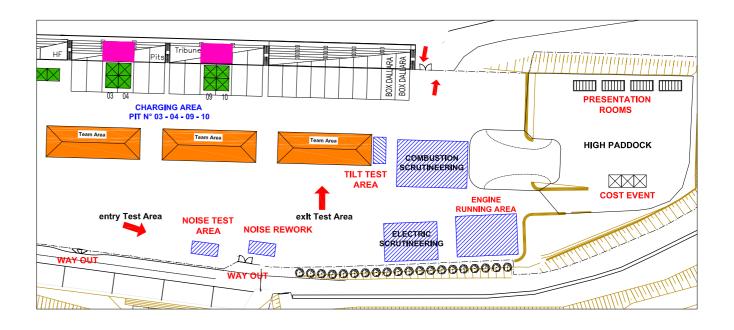


15

Best Class 1EV Design Winner Trophy

### **Site Plan**







# **Official Schedule**

# Tuesday, September 3

7:30	Site Opens
8:00 - 10:00	Registration for Class 1DV/1EV Team Leaders, Faculty Advisors, ESO/ASR & Drivers
	Registration @ Circuit entrance
	Energy Meters Delivery @ Circuit Entrance
	Registration for Volunteers, Technical Inspectors and Staff@ Circuit entrance
8:30 - 9:00	Briefing Volunteers & Technical Inspectors @ Entrance parking
9:00 - 13:00	Technical Inspections 1DV/1EV @ Entrance parking
13:00 - 14:00	Lunch Break*
14:00 - 18:30	Technical Inspections 1DV/1EV @ Entrance parking
15:00 - 19:00	Camping Check-in @ Camping
15:00 - 18:30	Pit set up
19:00	Site Closes

# Wednesday, September 4 - OFFICIAL FIRST DAY

8:00	Site Opens
8:30 - 12:00	Camping Check-in @ Camping
8:30 - 13:00	Registration for all Classes, Team Leaders, Faculty Advisors, ESO/ASR and Drivers
	Registration @ Entrance Registration Office, Pit set up
	Energy Meters Delivery @ Entrance Registration Office
	Registration for Volunteers, Technical Inspectors and Staff @ Paddock Registration Office
9:00 - 9:30	Briefing Volunteers & Technical Inspectors @ Scrutineering Area
9:30 - 13:00	Technical Inspections 1DV/1EV @ Scrutineering Area
13:00 - 14:30	Lunch Break*
14:00 - 19:00	Registration for all Classes, Team Leaders, Faculty Advisors ESO/ASR and Drivers
	Registration @ Entrance Registration Office, Pit set up
	Energy Meters Delivery @ Entrance Registration Office
	Registration for Volunteers, Technical Inspectors and Staff @ Paddock Registration Office
14:30 - 19:00	Technical Inspections 1CV/1DV/1EV @ Scrutineering Area
19:30 - 20:30	Team Leaders Briefing @ Meeting Tent
21:00 - 21:45	Opening Ceremony (with ANFIA presentation)
21:45	Welcome Party @ Varano de' Melegari party area (consult the poster displayed at the event)
22:30	Site Closes

### Thursday, September 5

7:30 8:00 - 10:00	
	Registration for Volunteers, Technical Inspectors and Staff@ Paddock Registration Office
	Energy Meters Delivery @ Entrance Registration Office
8:00 - 8:30	Briefing Volunteers & Technical Inspectors @ Scrutineering Area
8:30 - 13:00	Refuelling area opens @ Paddock Refuel Station
9:00 - 13:00	Technical Inspections 1CV/1DV/1EV @ Scrutineering Area
9:00 - 13:00	Tilt, Noise & Rain Tests 1CV/1DV/1EV @ Scrutineering Area
9:15 - 9:45	Business Presentation Judges Briefing @ Business Presentation Rooms
10:00 - 13:00	Business Presentation Event (All Classes) @ Business Presentation Rooms
12:00 - 13:00	Cost Judges Briefing @ Cost Event Area
13.00 - 14.30	Lunch Break**
14:00 - 19:00	Refuelling area opens @ Paddock Refuel Station
14:30 - 18:30	Cost Event (All Classes) @ Pits
14:30 - 18:30	Business Presentation Event (All Classes) @ Business Presentation Rooms
14:30 - 19:30	Technical Inspections 1CV/1DV/1EV @ Scrutineering Area
14:30 - 19:30	Tilt, Noise & Rain Tests 1CV/1DV/1EV @ Scrutineering Area
19:30 - 20:30	Business Presentation Finals 1DV @ Meeting tent
20:00 - 20:30	Tablet Users Briefing @ Business Presentation Rooms
20:30 - 21:00	Design Judges Briefing @ Meeting tent

21:15	Judges & Sponsor Welcome Cocktail Party @ Giorgione's Restaurant
21:30	Site Closes

# Friday, September 6

7.30	57. 0
7:30	Site Opens
8:00 - 12:00	Battery Charging Class 1DV/1EV @ Charging Area
8:00 - 8:30	Briefing Volunteers & Technical Inspectors @ Scrutineering Area
8:00 - 8:20	Design Judges Registration and Photo @ Paddock Registration Office
8:20 - 8:40	Design Judges Briefing @ Design Event Area
8:30 - 12:30	Technical Inspection 1CV/1DV/1EV @ Scrutineering Area
8:30 - 13:00	Refuelling area opens @ Paddock Refuel Station
9:00 - 12:30	Brake Test 1CV/1EV @ Brake Test Area
9:00 - 12:30	Tilt Noise and Rain Tests 1CV/1DV/1EV @ Scrutineering Area
9:00 - 13:00	Business Presentation Event 1CV/1EV @ Presentation Rooms
9:00 - 13:00	Cost Event (All Classes) @ Pits
9:00 - 13:00	Design Event 1CV/1EV @ Pits
9:30 - 12:30	Engine Running Area Open @ Scrutineering Area
9:30 - 12:30	Emergency Brake Test 1DV @ Straight before the hairpin
9:30 - 12:30	Design Event 1DV/3 @ Pits
9:30 - 12:30	Practice Area 1CV/1EV @ Practice Area
13:00 - 14:00	Drivers Briefing @ Meeting tent
13:00 - 14:30	Lunch Break**
14:00 - 14:30	Track Show @ Acceleration
14:00 - 18:00	Design Event (All Classes) @ Pits
14:00 - 19:00	Refuelling area opens @ Paddock Refuel Station
14:30 - 15:00	Business Presentation Event 1CV/1EV @ Presentation Rooms
14:30 - 16:30	Cost Event (All Classes) @ Pits
14:30 - 18:30	Acceleration 1DV @ Straight before the hairpin
14:30 - 19:00	Battery Charging Class 1DV/1EV @ Charging Area
14:30 - 19:00	Technical Inspection 1CV/1DV/1EV @ Scrutineering Area
14:45 - 19:00	Engine Running Area Open @ Scrutineering Area
14:45 - 19:00	Tilt Noise and Rain Tests 1CV/1DV/1EV @ Scrutineering Area
15:00 - 18:00	Transponders Delivery @ Scrutineering Area - Noise Test
15:00 - 18:30	Practice Area 1CV/1EV @ Practice Area
15:00 - 19:00	Brake Test 1CV/1EV @ Brake Test Area
16:30 - 17:30	Business Presentation Finals 1EV @ Meeting tent
18:00 - 19:00	Business Presentation Finals 1CV @ Meeting tent
19:15 - 20:00	Panoramic Photograph @ Acceleration
19:15 - 20:00	Design Judges Buffet
20:30 - 22:00	Design Finals - One to One @ Meeting tent
22:00 - 22:30	Design Finals Exhibit (Open Tent) @ Meeting tent
22:45	Site closes

# Saturday, September 7

27	
7:30	Site Opens
8:00 - 13:00	Battery Charging Class 1DV/1EV @ Charging Area
8:00 - 8:30	Briefing Volunteers & Technical Inspectors @ Scrutineering Area
8:30 - 9:00	Acceleration Show @ Acceleration
8:30 - 13:00	Refuelling area opens @ Paddock Refuel Station
9:00 - 13:00	Engine Running Area Open @ Scrutineering Area
9:30 - 13:00	Acceleration 1CV/1EV @ Acceleration
9:30 - 13:00	Brake Test 1CV/1EV @ Brake Test Area
9:30 - 13:00	Practice Area 1CV/1EV @ Practice Area
9:30 - 13:00	Skidpad 1CV/1EV @ Skidpad
9:30 - 12:30	Tilt, Noise and Rain Test 1CV/1DV/1EV @ Scrutineering Area
9:30 - 12:45	Feedback Static Events @ Meeting tent
13:00 - 14:30	Lunch Break*
14:00 - 19:00	Refuelling area opens @ Paddock Refuel Station
14:30 - 15:00	Autocross Course Walk @ Track Area

Engine Running Area Open @ Scrutineering Area
Battery Charging Class 1DV/1EV @ Charging Area
Skidpad 1DV @ Skidpad
Brake Test 1CV/1EV @ Brake Test Area
Practice Area 1CV/1EV @ Practice Area
Autocross 1CV/1EV @ Track Area
Team's photo @ Acceleration
Drivers Briefing @ Meeting tent
Site closes

#### Sunday, September 8

6:45	Site opens
7:00 - 14:00	Battery Charging Class 1DV/1EV @ Charging Area
8:30 - 13:00	Refuelling area opens @ Track Refuel Station
9:00 - 9:30	Course Walk @ Track Area
9:30 - 13:00	Autocross 1DV @ Skidpad
9:30 - 13:00	Engine Running Area Open @ Scrutineering Area
10:00 - 19:00	Endurance Event 1CV/1EV @ Track Area
10:00 - 19:00	Parc fermé Class 1CV/1EV @ Track Area
13:00 - 14:30	Lunch Break*
14:00 - 19:00	Refuelling area opens @ Track Refuel Station
14:00 - 19:00	Trackdrive 1DV @ Skidpad
20:30 - 21:30	Closing Ceremony
22:00	Track Area closes

\*The restaurant of the circuit will be opened from 11.45 to 14.30, in order not to be crowded inside.

\*\*On Thursday September 5th and on Friday September 6th, from 1:00 PM to 2.00 PM the tables of the restaurant will be reserved to Design Event judges, Business Presentation Event judges, Cost Event judges, Technical inspectors and Staff, due to their tight programme of the day. Please, plan to have lunch in other timeslots if you don't belong to these categories.

# This programme could be subject to changes

#### **Pits**

#### Pit number

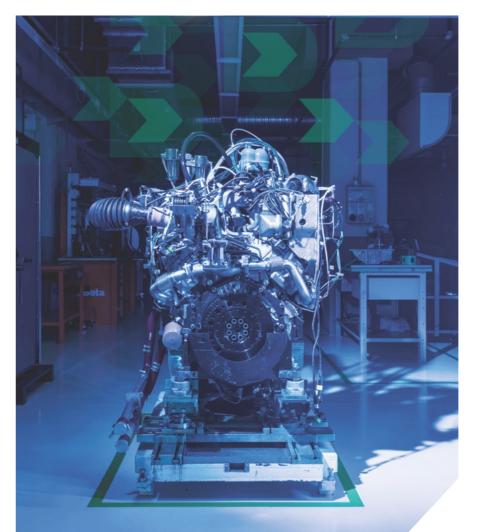
The pits of the circuit will be shared by two teams which will enter from the Pit Lane side or from the Paddock side. Some additional gazebos will be placed inside the paddock.

#### Pit set up

The pits set up will start on Tuesday, 3rd September 2024 for some electric teams and continue on Wednesday, 4th September 2024 for the rest of the participating teams.

All teams vehicles have to wait before entering the event site for unloading their cars and materials. Please follow the instructions of the officials. Walking speed is the maximum allowed speed in the venue.

ONLY 1 vehicle will be authorized to enter the paddock, but after the unload it shall be parked in the free parking area at the entrance of the Varano Circuit.



# **DUMAREY**

**World-leading propulsion systems** 

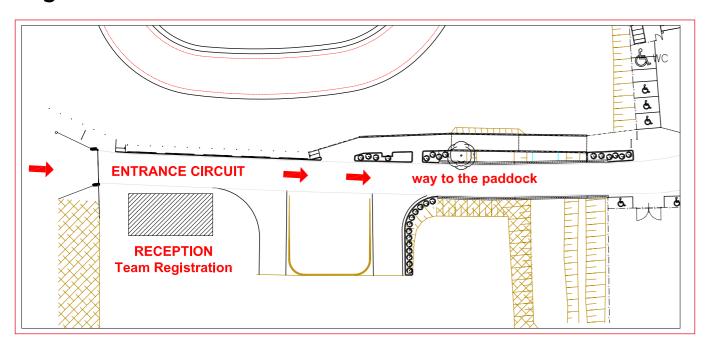
We are committed to enabling sustainable mobility for all.
We develop and provide world-class solutions as

- Engine and transmissions
- Energy storage
- Control systems
- Sub-assemblies and components



www.dumarey.com

### Registration and information



#### **Registration of team members**

Upon arrival at the Varano Circuit, the <u>Team Leader ONLY</u> must register the team at the Reception Desk by:

- Bringing the ANFIA Limitation of Liability and signing the list of signatures IN FRONT OF the ANFIA Staff to confirm the correctness and validity of all other members' signatures.
- b) Communicating any changes in the list of team members, previously submitted, and in that case, filling out all the necessary registration documents for every new member and bringing photocopies of his/her health insurance card, passport or ID.

Twelve previously invited electric teams will start their registration on Tuesday, 3rd September 2024, while the rest of the participating teams will register on Wednesday, 4th September 2024.

#### When:

- Tuesday, Sept.3rd, 8:00 - 10:00 and
- Wednesday, Sept.4th, 8:30-13.00 and 14:00
   - 19:00

#### Where:

Circuit Entrance

#### **Event Organization:**

Miriam Gangi - Selene Migliaccio - Claudia Rossi - Anna Maria Costa -Mariangela Sciorati

Then the Team Leader will receive badges for all the team members, additional team members, team guests, the dynamic area passes for drivers, which must be worn at all times.

No pass will be handed to any team member except the Team Leader. After the registration all the other team members will be allowed to enter the circuit.

#### **Energy meter delivery**

The energy meter will be delivered on Wednesday, 4th September, from 8:30 to 13:00 and from 14:00 to 19:00 and on Thursday, 5th September, from 8:00 to 10:00 at the Registration Office at the Circuit Entrance.

#### Trasponder delivery

The car transponders will be delivered on Friday 6th September, from 15:00 to 18:00 at the Scrutineering Area - Noise test. They will be picked up by the officers in the Parc Fermé after the endurance. In case the car will not participate in the endurance event, it will be Team Leader responsibility to return it back at the registration office (before the Closing Ceremony).

#### **Registration of Faculty Advisor**

Faculty Advisors are kindly requested to register at the Reception Desk on Wednesday, September 4th, from 8:30 to 13:00 and from 14:00 - 19:00 together with his/her team or on Thursday, September 5th, from 8:00 to 10:00.

#### **Drivers registration**

Every team must register at least 4 members as drivers.

Drivers will have to submit the R. Paletti Circuit release and waiver of liability completely filled out, together with the photocopy of a valid government issued driver's license.

The drivers of the 12 electric teams that will register on September 3rd are requested to submit those documents to the drivers' registration desk on Tuesday, September 3rd, from 8:30 to 13:00. All the other drivers have to do it on Wednesday, September 4th, from 8:30 to 13:00 and from 14:00 to 19:00 or on Thursday, September 5th, from 8:00 to 10:00. Drivers will receive a written briefing and will sign it for the receipt. Drivers will have to pass the egress test and the main hoop height test to be allowed to drive the car; as soon as they pass the tests, they will be handed a red wristband.

#### **ESO / ASR registration**

Electric teams, including driverless car equipped with electrical powertrain, must register at least 1 ESO (Electrical Safety Officer).

ESOs are requested to register at the Reception Desk on Tuesday, September 3rd, from 8:00 to 13:00, on Wednesday, September 4th, from 08:30 to 13 and from 14:00 to 19:00 or on Thursday, September 5th, from 8:00 to 10:00. ESOs will receive an orange wristband and an orange t-shirt/team, which must be worn during the team's dynamic events.

For driverless team, ESO will be registered also as ASR (Autonomous System Responsible).

ASR are requested to register at the Reception Desk on Tuesday, September 3rd, from 8:00 to 13:00, on Wednesday, September 4th, from 08:30 to 13 and from 14:00 to 19:00 or on Thursday, September 5th, from 8:00 to 10:00. ASRs will receive an orange wristband and an orange t-shirt/team, which must be worn during the team's dynamic events.

#### Certification of participation

A certificate of participation will be sent to the Team Leader for every team member after the event as a .pdf file.

#### **Parking**

At the entrance of Varano Circuit there will be a free parking area for all vehicles.

#### Visitors

Visitors are welcome during the 5 days of the event. Entrance is free in the public areas and grandstands while inside the paddock it is on payment. Tickets can be bought at the Registration Office and can be paid cash or by credit card or online:

https://www.ciaotickets.com/it/biglietti/formula-sae-italy-varano

TARIFFS	TICKET	TICKET REDUCED TICKET (ONLY FOR PERSONS AGED UP TO 18)		
ONE DAY	€ 12,00	€ 5,00		
TWO DAYS	€ 22,00	€ 8,00		
THREE DAYS	€ 33,00	€ 12,00		
FOUR DAYS	€ 44,00	€ 16,00		
FIVE DAYS	€ 55.00	€ 20,00		

GUIDED TOUR ONLY ON FRIDAY, SATURDAY AND SUNDAY (IN ADDITION TO THE REGULAR TICKET): € 08,00

Under-age participants must be always accompanied by an adult, who will be responsible for any dangerous action they will cause to themselves, other persons and facilities. Pets are NOT allowed, except guide dogs. It is highly recommended for spectators to wear closed-toe shoes.

#### Formula Driverless

Formula Driverless (class 1DV) debuted in Formula SAE Italy during 2018 edition, following the innovative technological trends of the automotive industry. It follows the FSG DV Rules with some exceptions which you can find in the Information & Rules 2024. The division between Static and Dynamic events is maintained. The cars will take part in all the dynamic events in autonomous mode only, without any human driver sitting inside. All the vehicles should allow for a human-driven mode according to the rules for performing the brake test. The minimum number of human drivers is 1 for each driverless team.

#### **Static Events**

1DV Statics Events are the same (Business, Cost and Design) of the other classes with a few differences. The Cost event will follow FSG model and a new rule for the Business Presentation event has been defined in 2021 in collaboration with FS Austria. Only one panel of judges is planned for the Design Event, that follows a precise list of evaluation items. The judgement of the design of the car isn't separated from the autonomous system judgement even if judges are focused on this latter. There aren't Design Finals for 1DV class.

#### **Track Marking**

DE6.3.1 The markings of all dynamic events will have the following characteristics:

- The track is marked with cones.
- The left borders of the track are marked with small blue cones.
- The right borders of the track are marked with small yellow cones.
- Exit and entry lanes are marked with small orange cones.
- Big orange cones will be placed before and after start, finish and timekeeping lines.
- If not defined otherwise in chapter D of the FSG rules, the maximum distance between two cones in driving direction is 5m. In corners, the distance between the cones is smaller for a better indication.
- The start, finish and time keeping lines as well as keep out zones around the time keeping equipment are marked with red, orange or pink paint.
- Additionally for skid pad, autocross and trackdrive, track limit lines on either side of the track and entry/exit lanes may be marked with yellow, green or white paint.
- There are no track limit lines for acceleration and Emergency Brake System (EBS)-test.

All lines chalk-marked.

#### **Dynamic Events**

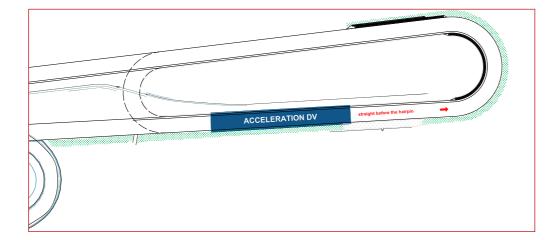
Driverless cars compete in the following Dynamic Events:

- Acceleration
- Skidpad
- Autocross
- Trackdrive

#### **ACCELERATION**

When: Friday 6th September, 14:30 -18:30

Where: @ Straight before the hairpin

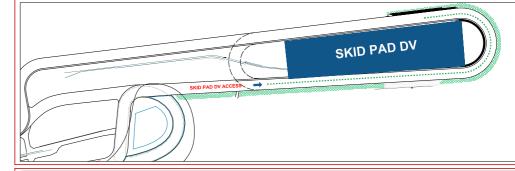


#### **SKIDPAD**

When: Saturday 7th September, 15:00 -

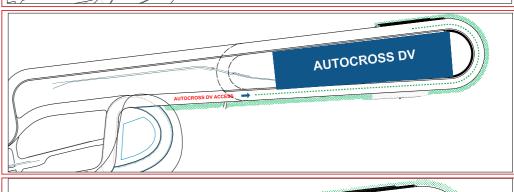
19:30

Where: @ Skidpad



#### **AUTOCROSS**

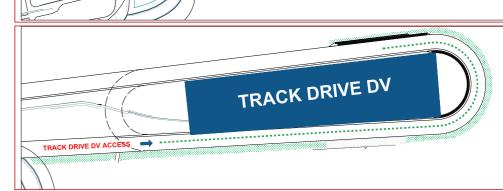
When: Sunday 8th September, 9:30 - 13:00 Where: @ Skidpad



#### **TRACKDRIVE**

When: Sunday 8th September, 14:00 -19:00

Where: @ Skidpad





#### HandBook

#### **General Rules**

Pits are located inside the garage of the Varano Circuit.

Inside the whole area of the Varano Circuit all the rules stated by the official Formula Student regulation apply. It is forbidden to walk on the gravel traps of the Circuit.

Team members must leave the Circuit during the night, within the scheduled time.

Ask questions If you have a question - ask!

If you have any questions about any part of the competition, schedule, procedures, rules or anything else, just ask to the Team's relation Officer.

Rules questions may be presented to the technical inspectors.

It all starts with asking and remember, there are no dumb questions.

Please: do not fear to fail by asking anything you need or clarify any doubt

you might have!

Ask for help If you need help - ask the officials.

Announcements requesting parts, tools or assistance can be made by the

announcer.

**Announcement** Although there are loudspeakers, it could be difficult for announcements

to be heard everywhere, especially close to a running engine. You can help us make sure everyone knows what's being announced by passing the announcements along to your teammates and other teams in your area.

This is important and we appreciate your help.

Two ways radios Two ways radio are used both by teams and by STAFF

Please, make sure to use CCTCS/DCS squelch and not to use the same

frequencies of the staff: **point penalties** may apply!

Be on time The schedule is included in the Student Handbook and posted online. Possible

modifications are communicated online and through announcements.

It's Team responsibility to be on time.

Be careful Don't take any risk when working on your car - follow safe working practices.

Bring your documentation

When Teams come to tech inspection must bring all the documentation and correspondence connected to SES submission, Impact Attenuator Data

Report and any Rules Questions submitted.

The inspectors do not have this material and Teams may need it to answer

questions about their vehicles design and construction.

The inspectors want you to pass tech, and pass it easily, but they need your

help to make it happen.

**Don't run** Running tells people there's an emergency. Don't run unless life is in danger.

**Event Closing Times** Remember that Acceleration and Skid Pad close at exactly the time

communicated by the officials.

Car must have crossed the starting line by that time or it can't run: it is

recommended to get in line early.

Keep the Officials Informed

Keep the officials informed if you run into any problems that need our

attention or might push your team against a time limit.

It is Team responsibility to verify that the information has been received by

the appropriate people.

Removing Cars Overnight Removing the car from the track overnight is forbidden.

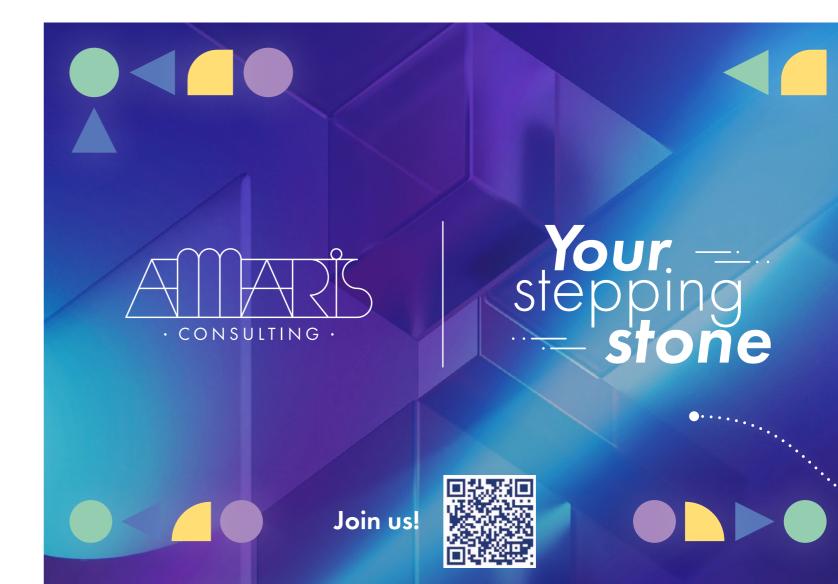
Weather Weather is the main thing Organizers cannot force or control.

It is good to be prepared for all weather types from sun to heavy rain.

Pack long and short sleeve apparel, sun block, raincoats and comfortable

closed-toe shoes.

# Have Fun, Drive Safe, Use Common Sense



# DRIVING ENERGIES GROWING TOGETHER

WE HAVE A CLEAR VISION OF THE ROAD IN FRONT OF US.

OUR DESTINATION IS THE FUTURE OF MOBILITY. OUR FUEL IS THE DESIRE TO GROW, TO IMPROVE AND TO LEAD THE CHANGE TO A MORE SUSTAINABLE FUTURE.

OUR ROUTE BEGINS WHERE THE UNIQUE STRENGTHS OF OUR BRANDS INTERSECT WITH THE UNIQUE QUALITIES OF OUR PEOPLE.

LET'S MAKE THE JOURNEY TOGETHER.



IVECO•GROUP WE GO BEYOND

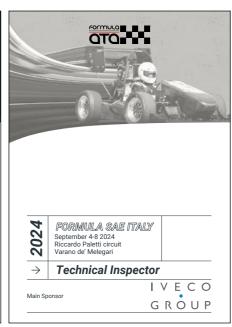




### **Passes and Allowed Areas**

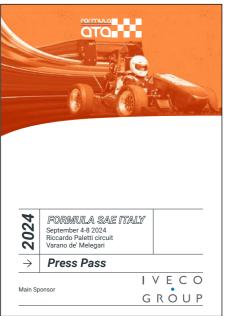
# Paddock Only



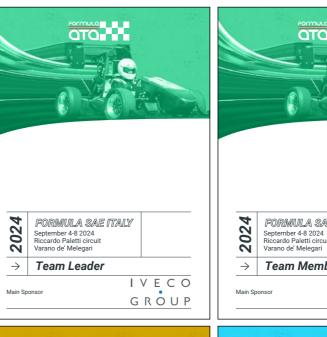


Paddock & Track

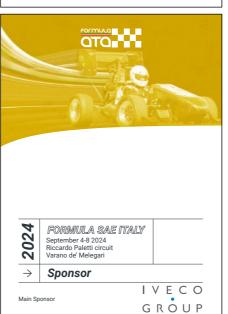


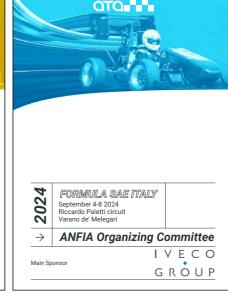


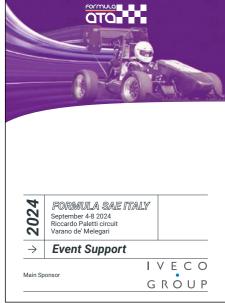




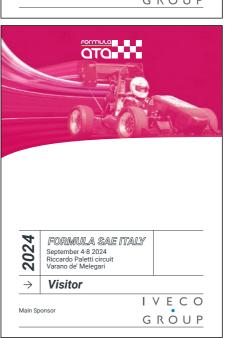












#### Bicycles, Skateboards, Rollers, Scooters and other similar vehicles

They are NOT allowed inside the paddock. Also push scooters are NOT allowed. Only fitting staff will be allowed to use them exclusively during facilities fitting days. The security service is allowed to take badge away from the team member, who will not comply with this rule. The badge return will be upon penalties to the team, depending on its gravity.

#### Alcohol

PLEASE NOTE: Alcoholic drinks are strictly forbidden inside the circuit during the event, under penalty of the team disqualification. Alcohol test can be done by any official at any time during the competition: 0.00 g/l is the allowable alcohol content during this event for everyone.

If ANY team member (driver or not) is found with an alcohol level higher than 0.00 g/l, the relevant team member will be immediately disqualified and the drivers of the team will be verified before any driving event.

#### Fires and Smoking

No open fires are allowed in the pits, track and engine running areas, cigarettes, camping stoves and microwave ovens included. Smoking is strictly forbidden in the pits, tracks, buildings and engine running areas.

#### **Photographers**

**Authorization** The staff is solely responsible for authorizing photographers/spotters to enter the dynamic event area. Photographers/spotters must be registered for the competition, sign all required waivers, read any required material, agree that they understand and have no questions regarding the policies and procedures for photographers, and agree to abide by these policies and procedures at the risk of being escorted from the dynamic area. Videographers are classified as photographers. Photographers must have photographic equipment - cell phones are not cameras. Photographers and spotters are explicitly restricted to photographic activities. University photographers / videographers, team members and all students in general are NOT allowed to use drones. Only the event official media team and the previously authorized journalists will be allowed to use them.

#### Limit and penalty

Limit and penalty - Each university is limited to one (1) photographer/videographer. Additional photographers must remain outside the dynamic event area. Unauthorized photographers will lead to a penalization of their team:

-1st time: 5 points: -2<sup>nd</sup> time: 10 points; -3<sup>rd</sup> time: 50 points.

#### Access Policy

Access Policy - Properly accredited photographers/spotters representing universities may only access the dynamic events area while their teams are actually running in an event. University photographers/spotters will not have access to the dynamic area without their team participating in dynamic events.

#### Fuel

Only the fuel provided by the organizer may be used at the event. No fuel may be brought to the event. Unleaded gasoline with an octane rating of 98 RON and E85 will be the only fuels available at the competition. Every team should have communicated to ANFIA the exact tank capacity. The official marshals have the right to check fuel compliance during the entire event. Refueling will be carried out at the Fuel Station, located in a Fuel Area subjected to the following prescription:

- Only one car may enter the Fuel Area;
- To reach the refueling area the driver must be seated in the cockpit wearing a full safety suit while being pushed in and out of the area;
- The refueller must be able to accomplish to his job without any part removed from the car;
- During the refueling the driver must stand out of the car at a safety distance following the instructions of the official marshals. No other team member can enter the Fuel Area.

Any other vehicle must be at least 5 meters away from the Fuel Area.

It is forbidden to make use of any device producing flames, sparks or smokes near the Fuel Area. No cell phone is allowed in the area. Open fuel containers are not allowed. As soon as the car is refueled for the first time, it must proceed with the engine turned off to the tilt table.

#### **Working on Electric Cars**

Any vehicle that has not passed E-Scrutineering needs to have HVD disconnected.

The team safety responsible and at least one more team member, who can intervene in case of emergency, must attend every activity on the tractive system. In absence of the team safety responsible, none is allowed to act on the tractive system. Anytime the tractive system is turned on, all driven wheels shall be lifted off the floor (and all parts, such as nuts, near wheels must be tightened). After any activity on the tractive system during which seals were broken an E-Scrutineering is mandatory.

For activities on the inactive tractive system the team safety responsible shall follow this procedure:

- Lock out the tractive system master switch.
- 2. Check for zero-potential.
- 3. Disconnect HVD.
- Install a green sign declaring the car as electrically secured (See image below). Sign shall include name of the safety responsible.
- 5. It is team's responsibility to expose the sign in A4 format near the car in a visible position.
- At the end of activity, remove immediately the sign.

It is recommended to lift driven wheels off the floor during any maintenance activity.

In case of measurements on the active tractive system or an activation of the tractive system in the pit for testing please follows this procedure:

- Be sure the team safety responsible is supervising the activity and a team member who is not involved in the activity is present and can intervene in case of emergency.
- Separate the car with a red or orange tape (not provided by the organization).
- Install a yellow sign declaring the high voltage hazard. (See the image below). The sign shall include the name of the safety responsible. It is team's responsibility to expose the sign in A4 format near the car in a visible position.
- Remove all driven wheels of the car and tighten all parts, such as nuts, near wheels. 4.
- 5. Wear compliant safety gloves and use appropriate tools.
- Be prepared to push an emergency button at any time. 6.
- Turn on the tractive system only for the shortest time needed. The activation of the tractive system or the spinning of motors in the pit is only permitted if the car is lifted off and the driven wheels are demounted.

Basic maintenance and testing activities for the accumulator container is allowed in the recharging area; in case a team needs to perform advanced maintenance activity (e.g. grinding, drilling, etc.), the team may get authorization by a scrutineer who checks safe conditions are met in the pit area.

A car not having passed the E-scrutineering yet, when moved around or taken to the static events MUST have the HVD disconnected.

When moving around an electric car, the tractive system master switch must be turned off and the key must be kept by the safety responsible, who must always stand near the car moved around. If any of the above-mentioned instructions are not respected, it may result in a deduction of points or disqualification.

The tractive system master switch must be locked, whenever the team safety responsible has to go away from the vehicle, even during nights.

# SAFETY FIRST



# THIS CAR IS ELECTRICALLY SECURED

SR

# **WARNING**



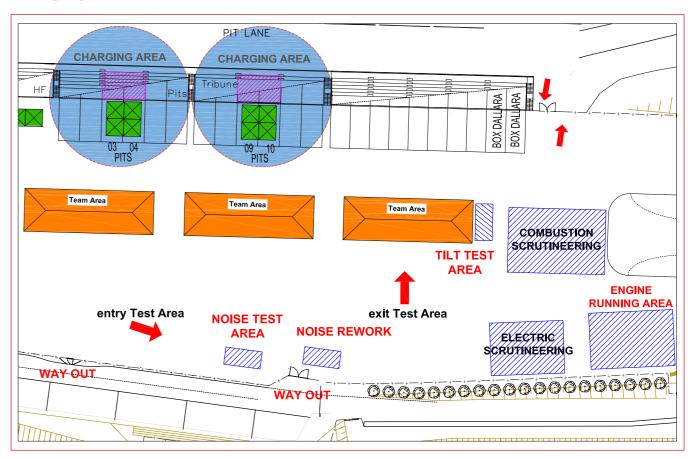
# HIGH VOLTAGE MAINTENANCE



ONLY AUTHORIZED TEAM MEMBERS CAN CROSS LINE

SR

#### **Charging Electric Vehicles**



Accumulators can be recharged exclusively in the two designated charging areas. No charging is allowed during the night.

Both the team Safety Responsible and at least one more team members have to be present during the charging.

Only two team members of each team are allowed in the charging areas. Accumulators must be removed from the car for charging within a removable accumulator container and placed on the accumulator container hand cart for charging.

While charging, the accumulator container has to report a label with the following information:

- Team number
- 2. Approximate time at which the recharge will end
- 3. Name of Safety Responsible

Charging will be allowed only after the electrical technical inspection.

The charging area is equipped with the following AC socket-outlets:

- Single-Phase 230V 50Hz 16A P+N+E Schuko
- Single-Phase 230V 50Hz 16A IEC 60309, 6h (180°), P+N+E (Blue 3 poles)
- Three-Phase 400V 50Hz 16A IEC 60309, 6h (180°), 3P+N+E (Red 5 poles)
- Three-Phase 400V 50Hz 32A IEC 60309, 6h (180°), 3P+N+E (Red 5 poles)

Each team must verify that the AC plug of their charger is compliant with one of the available socket-outlets. If not, the team has to replace it with a compatible one or bring compliant adapter.

Where: Charging Areas

HandBook Formula ATA

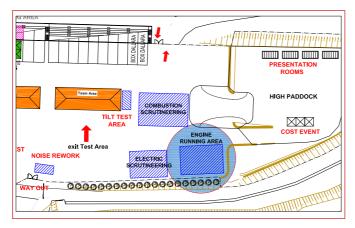
#### **Engine Running**

#### ENGINES CANNOT BE RUN IN THE PIT GARAGES.

Engines may be run ONLY in the designated "engine running area" in the paddock, provided that the car has passed technical inspections and the following conditions are satisfied:

- The car is on an adequate stand (NOT on coke crates, plastic boxes etc.).
- The drive wheels are at least 10.2 cm (4) in) off the ground or the drive wheels have been removed.
- A fire extinguisher must be at hand.
- Only the driver and 2 team members are allowed in the engine running area. If an electric car is running the Safety responsible must be in the area.
- The driver must be seated and belted in the cockpit, wearing a full safety suit.
- The gearbox must be in neutral or the CVT disengaged.

The exhaust system may be very hot, pay attention.



Where: Engine Running Area

### **Scrutineering**

Know the Rules - Read the rules again: rules understanding is critical to success!

#### **WELDING AND GRINDING PROCEDURES**

Welding and grinding will be permitted inside each team pit provided that the necessary safety aspects have been taken into account.

Safety glasses and gloves must be worn during those operations; same procedure may be applied to other tool usage at the discretion of the organizers.

A fireman must be present when welding, call for them every time you need to weld. We remind you that it will not be present an official welder on site.

#### DYNAMIC AREA ACCESS

from your performance?

All the Track Area of the Varano Circuit will be defined as "Dynamic Area".

Only the cars waiting to attend the specific test may enter the "Dynamic Area".

Only team members with a valid "Dynamic Pass" may enter the "Dynamic Area" to follow the corresponding car: four (4) "Dynamic Pass" will be given to each team.

At any time, no more than four team members may enter the dynamic area, including the driver (or drivers).

**REMEMBER: CLOSED-TOE SHOES!** 



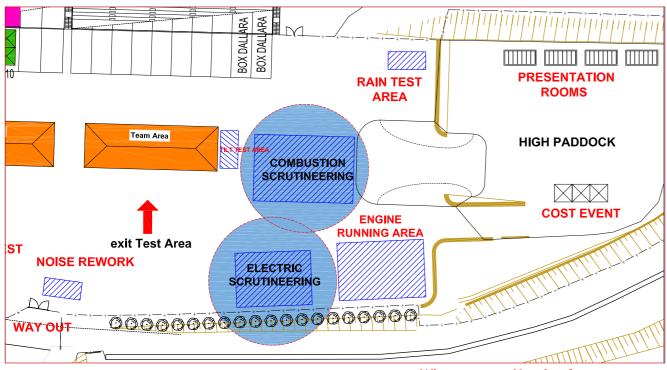








#### **Scrutineering**



When:

Wednesday 4th September, 9:30 - 13:00 and 14:30 - 19:30 Thursday, 5th September, 09:00 - 13:00 and 14:30 - 19:30 Friday, 6th September, 08:30 - 12:30 and 14:30 - 19:00 Where: Heads of event: Paddock Silvio La Tassa -

Silvio La Tassa -Mechanical Inspections

#### Pre-check the car.

During the registration, you will be informed about the order in which you will be scrutinized and, therefore, you will receive your technical inspection number: these numbers will determine the order of the queue for the technical inspections. Please fill the first part of the technical inspection sheet, regarding tires, before queuing and line up with everything you need.

#### What to bring to Tech. Inspections:

- Vehicle;
- Dry and wet tires;
- Driver's equipment including helmets, suits, gloves, eye protection, balaclava, socks, and shoes for all drivers (Note: This includes your arm restraints);
- Fire extinguishers;
- Push bar;
- Structural Test documents and supporting documentation or test pieces Technical Inspection form;
- EV only Data sheets for all used parts in the tractive system;
- EV only Approved technical document (ESF) signed by ESA;
- EV only Tools and protection equipment as defined in the FSE rules;
- EV only Spare accumulators;
- EV only Clear pictures of parts not reachable during inspection (HV fuse box, ...);
- EV only Spare samples of self-developed printed circuit with HV and LV;
- All of your team's drivers;
- Impact attenuator test piece;
- Monocogue test specimens if applicable;
- Tools to disassemble any parts of the car that the inspectors want to examine. This includes accessing
  your restrictor, removing body panels or any parts that are blocking inspection and to allow examination
  of your EV systems;
- Copies of your team's rules questions and Committee's answers;
- · Material to record the inspectors' comments.

The technical inspections will be held inside the scrutineering areas of the circuit.

The only permitted modifications are according to rule IN 1.5.1, otherwise the car must be re-scrutinized and reapproved.

If your car isn't ready when your number is called, you'll lose your place in the queue and you will have to come back to the end of the inspection line.

The Technical Inspectors wish every team to pass tech inspection as quickly and easily as possible. Many inspectors are former competitors, and they know the amount of time and effort Teams invested in completing their car and preparing it for the competition.

Technical inspections take longer when scrutineers have to explain noncompliant items and the process is quicker if everything complies.

Please make inspection easier for yourselves, and for organizers, by understanding the rules, preinspecting your car and being prepared.

E-technical inspectors will mark different approved parts (i.e. insulation monitoring device, accumulator containers, energy meter, tires, rims etc.).

The car can be disqualified from any dynamic event if it uses unmarked parts or substituting marked parts: parts with broken seals are equivalent to being unmarked and seals must only be replaced by a technical inspector.

# For E-cars, e-technical inspections will be held before the mechanical inspections to ensure everyone's safety.

However, Chiefs of Technical Inspection may allow exceptions to perform the mechanical technical inspection without having done the electric inspections, but only if the accumulator container is carried on the hand cart.

Car not passing e-tech will not be allowed to proceed with the other inspections and tests; moreover, the vehicle is not allowed to take part in any dynamic event if any of the e-tech seals is broken and until the IMD Test is passed again.

#### Device to be used for checking compliance to EV3.6.3 rule.

Regarding rule EV3.6.3 ANFIA will not use a special device to check the compliance to the temperature limits.

PLEASE NOTE: It is a team's responsibility to keep track of how quickly cars are going into Tech Inspection: It is suggested to have someone to keep an eye on how the numbers are progressing. No more than 3 cars will be allowed to queue.

If you miss your slot, you have to return your "old" tag and take a new number.

Before passing electrical inspection, the car may only be moved around on the event site with all master switches and shutdown buttons in off-position and the HVD disconnected. GLV-master switch, TS-master switch have to be turned off.

Please remember that the Safety responsible shall attend to E-technical inspection.

HandBook Formula ATA

#### **SMART HINTS**

Self-inspection - Teams must self-inspect their car and be sure that it complies with the Rules before bringing it to tech inspection: use the tech inspection form which you can find on the FSAE Italy Docs website during your self-inspection.

It's Team responsibility to properly prepare and self-inspect their car; if inspectors discover a large number of rules violations, or an incomplete self-inspection, then they may suspend their work and send Team back to its paddock to make corrections.

Rules Question Documentation - If a Team submitted a rules question and received an interpretation from the Rules Committee, it has to bring copies of both the question and answer to technical inspection: without this, the inspectors won't know the Committee's interpretation and might make their own. Impact Attenuator Test Piece - Bring the Impact Attenuator Test piece, "Impact Attenuator Data Requirement", and also copies of Impact Attenuator Data report and any related correspondence with the officials (IN5.1.1).

Monocoque Test Specimens - Monocoque builders must bring the test pieces required by Rule IN5.1.1 "Monocoque Laminate Testing."

Restrictor Check - During inspection Team needs to disassemble air intake system to allow a no-go gauge to be inserted into the restrictor: bring the tools required (CV1.7.3)!

If you do not pass the inspection, please write down the name of the responsible of your inspector's team, so that you will be able to ask for him/her later.

Inspectors' and Chief Technical Inspectors' decisions concerning vehicle compliance are final and are not a subject of any discussion or appeal.

#### **Energy Meter delivery**

The energy meter will be delivered during the registration and a deposit of 50,00€ will be asked to each team and returned at the end of the event, only if the EM will be delivered as it was originally.

The energy meter must be mounted on the vehicle before the technical inspection. During the technical inspection, the energy meter will be checked.

The energy meter responsible will read out data from time to time to determine if the 80kW limit was respected during the dynamic events: data used to calculate the efficiency scoring will be read in the parc fermé.

Any attempt to manipulate the intended function of the energy meter may lead to a disqualification from the entire event.

For any question about energy meters, ask for the energy meters' responsible at the reception desk.

Please be aware that the energy meters NEED TO BE RETURNED to the registration desk before the closing ceremony of the event.

#### When:

Tuesday, 3rd September, 8:00 -10:00 Wednesday, 4th September, 08:30-13:00 and 14:00-19:00 Thursday, 5th September, 08:00-10:00

Where:

Registration Area Heads of event: FLAG-MS

















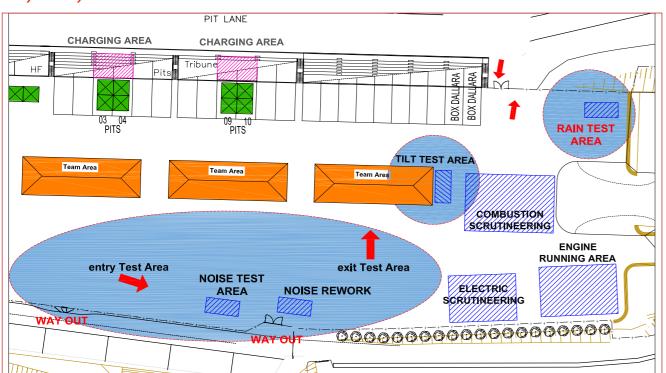








#### Tilt, Rain, Noise & Brake Test



#### TILT TEST

Before proceeding to the tilt test team must refuel.

Follow specific safety guidelines while in the fueling area:

- 1. Engines must be turned off; cars have to be pushed to and from fueling.
- 2. Only the vehicle push crew and the driver are allowed to enter the fueling station: the driver must be outside of the vehicle.
- 3. Only the driver, in a driving suit, with vehicle fire extinguisher in hand, is permitted in the area as fuel is dispensed.
- A permanent line mark must be used to indicate the "full" level.
   NO TAPE
- 5. The tank has to be filled to that level each time you refuel

No vehicle is permitted at this station until it has passed technical inspections. A maximum of four (4) team members with the dynamic pass, including the tallest driver, are allowed in this area; car must be completely filled with fuel, water and oils.

The tallest driver must be seated in the cockpit, completely dressed up (helmet, socks, gloves...) and belted in: if the test is passed another sticker is applied to the car.

#### RAIN TEST

The rain test is for e-cars only: vehicle will be rain-tested after having passed E-technical inspection, mechanical technical inspection and Tilt Test.

During the rain test, the tractive system has to be active and none of the driven wheels may be in contact with the ground.

It is not allowed to have a driver seated in the car during the rain test and no one is allowed to stand under the stream of water of the rain test during the test itself.

42

#### When:

Thursday, 5th September, 09:00-13:00 and 14:30-19:30 Friday, 6th September 09:00 - 12:30 and 14:45 - 19:00 Saturday, 7th September 09:30 - 12:30

#### Where:

Scrutineering Area

#### When:

Thursday, 5th September, 09:00-13:00 and 14:30-19:30 Friday, 6th September 09:00 - 12:30 and 14:45 - 19:00 Saturday, 7th September 09:30 - 12:30 Where:
Scrutineering Area

#### **READY-TO-DRIVE - SOUND -TEST**

Ready to drive sound test will be checked during the e-technical inspections. In addition to sound characteristic, inspectors check Ready-To-Drive signal is emitted only if all requirements are fulfilled (no fault for GLV system, brake pedal is pressed...).

#### When:

HandBook

Thursday, 5th September, 09:00-13:00 and 14:30-19:30 Friday, 6th September 09:00 - 12:30 and 14:45 - 19:00 Saturday, 7th September 09:30 - 12:30 Where:

Scrutineering Area

#### **NOISE TEST**

A car is allowed to noise test area once it has the scrutineering and tilt table stickers. In order to check the RPM value, every team must provide a tool to monitor RPM directly from ECU (i.e. dashboard, laptop). The car must be compliant to the Rules at all engine revs up to the regulated limit. Noise level can be measured at any time during the dynamic events: penalties may be assessed if the sound level exceeds the mandated maximum, and noise sticker can be removed by officials.

#### When:

Thursday, 5th September, 09:00-13:00 and 14:30-19:30 Friday, 6th September 09:00 - 12:30 and 14:45 - 19:00 Saturday, 7th September 09:30 -12:30

#### Where:

Scrutineering Area

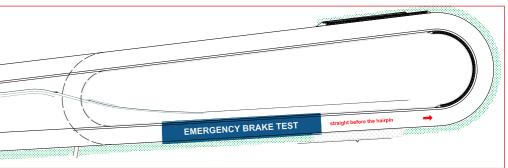
#### BRAKE TEST -Class 1CV, 1EV, 1DV

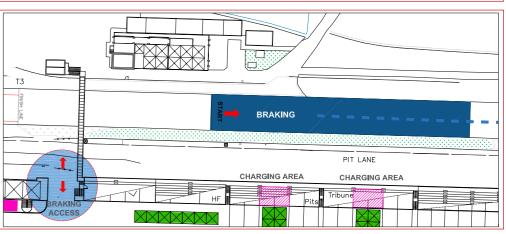
#### When:

Friday, 6th September, 09:00 - 12:30 and 15:00 - 19:00 Saturday, 7th September, 09:00 - 13:00 and 15:00 - 19:00

Where:

Brake Test Area





#### EMERGENCY BRAKE TEST -Class 1DV only

#### When:

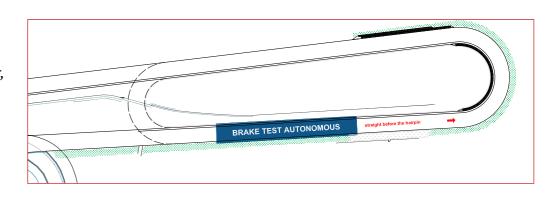
Friday, 6th September, 09:30 - 12:30

#### Where:

Straight before the hairpin

#### Head of event:

Francesco Ristori



43

HandBook Formula ATA

**COMBUSTION CARS** - A car is allowed to enter the brake test area once it has the scrutineering and the tilt table stickers.

The car must start its run and accelerate getting into the 2nd gear; as the car reaches the braking area the driver must brake strong enough to fully lock all four wheels.

If the vehicle passes the test, another sticker will be applied and the vehicle can then proceed to the practice area or to the dynamic events.

The brake test can be repeated every time an official deems it necessary, and it can be repeated if modifications are performed on the system or after an accident.

**ELECTRIC CARS** - A car is allowed to enter the brake test area once it has passed the scrutineering (both), tilt test, rain testing and ready-to-drive-sound-testing.

Each driver must be instructed as to the proper procedure for the brake test: if the vehicle passes the test, another sticker will be applied and the vehicle can then proceed to the practice area or to the dynamic events.

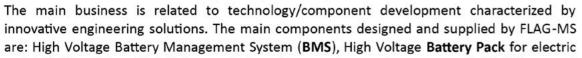
When braking, the tractive system has to be switched off by the driver and the brake pedal must be actuated as far as possible.

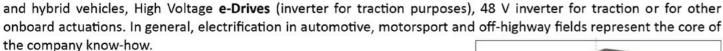
The brake test is successful if all four wheels lock and within 5 seconds the Tractive System Active Light goes off.

The brake test can be repeated every time an official deems it necessary.

Re-certification may be required if work is performed on the vehicle's braking system or if the vehicle is involved in an accident that results in vehicle damage.

FLAG-MS, founded in 2012 and based in Turin, is an innovative SME operating in the electrification field for automotive, motorsport and special vehicle sectors.





Design and construction of electric powertrains for vehicles of different sizes, from a few kW up to hundreds kW, represent the heart of the company's activities. The R&D department works mainly in the development of key components (battery pack, BMS and inverter) based on cutting-edge technologies for applications of different nature, proof of concept, vehicle prototypes, one-off car up to production applications where the customer (OEM or Tier1) is supported in the product development process starting from the samples A, B to the pre-series phases and SoP.





FLAG-MS is a Tier 1 for small series and one-off production, directly providing the components to be installed on the vehicle and has experience in manufacturing for high volume productions due to the support given to OEMs and Tier 1 customers involved in HV component production since 2016.

FLAG-MS e-Drives and power electronics component developments are based on SiC and GaN technologies to reach outstanding power density and efficiency targets, while the BMS solutions, both wired and wireless, are designed for the specific automotive or motorsport application, facing up to different kind of challenges.

FLAG-MS SW is developed according to ASPICE standard (level 2 can be certified).

#### **Static Events**

Teams that want to receive a feedback about their static events can ask directly to the judges on Saturday 7th September at the event venue: afterwards, no requests of feedback will be accepted.

#### **Design Event**

The design event will be held in each team pit. The winner of the Design Event will get 150 points.

Please, be on time and have all engineering documentation with you. Make sure the car is in race-ready condition and team members are well

For each team the design event will take up to 45 minutes.

First year cars: It is the teams' responsibility to prove to the judges that their vehicle is a first-year car: second year cars are not allowed.

If the structure of the frame is not obviously a completely new design from previous years, then photo documentation should be provided to prove that the car is new as defined by the rules.

How to prepare: Students should bring any and all information they feel is relevant (charts, graphs, parts, photos, video, etc.) to support their design efforts.

The judges will give more credit (higher Design score) to documented engineering than to word of mouth: simply showing up with a great car is not good enough.

A high emphasis is placed on the student team's ability to design, build, refine & validate, and understand their own car.

#### **DESIGN FINALS**

Design finals will be held according to the schedules in the Meeting Tent. The three best classified teams in Class 1EV and Class 1CV will be admitted. Finalist teams must attend to the finals with their cars and whatever they think is needed for an engineering discussion.

Design finals will consist in two phases: the first one to one with Judges and then the Design Finals Exhibit (Open Tent).

Friday, 6th September 09:00 - 13:00 and 14:30 - 18:00 Where: Pits

#### When FINALS:

When:

Friday, 6th September, 20:30 - 22:30 Where: Meeting Tent Head of event: Giacomo Danisi

#### **Cost Event**

The cost event will be held inside each team pit.

Team needs to show a printed copy of the Cost Report, plus one more printed or electronic.

The report will follow the guidelines set forth in the published rules. Teams have to present its vehicle at the designated time to the Cost Judges for Cost Report review; Team that miss cost appointment will potentially lose all cost points.

The schedule for these appointments will be in the registration packets. For each team the cost event will take about 30 minutes.

45

Thursday, 5th September, 14:30 - 18:30 Friday, 6th September 09:00 - 13:00 and 14:30 - 16:30 Where: Pits Head of event: Carlo Giorgioni

FLAG-MS S.r.l. www.flag-ms.com

#### **Business Presentation Event**

The business presentation event will be held inside the presentation rooms A, B, C and D according to the schedule assigned to each Team; Teams that don't arrive on time for their assigned time-slot won't be allowed to make their presentation and consequently will get zero points for the event. The presentation rooms will be located in the "Paddock alto" and will be equipped with 50-inch TVs with HDMI cable (Type A). It is the team's responsibility to make sure that their laptops are suitable for connection: if not, judges might assign lower score based on the effective performance of the team or exclude the team from the presentation.

Competitors must convince the judges that their project represents a profitable enterprise for the manufacturer/investor tiding together all the aspects needed: marketability, manufacturability, technical aspects and product appeal.

#### **BUSINESS PRESENTATION FINALS**

Business presentation finals will be held according to the schedules in the Meeting Tent. The three best classified Teams in Class 1DV, Class 1EV and Class 1CV will be admitted.

#### When:

Thursday, 5th September, 10:00 - 13:00 and 14:30 - 18:30 Friday, 6th September, 09:00 - 13:00 Where:

#### When FINALS:

Digital Platform

Class 1DV: Thursday, 5th September, 19:30- 20:30 Class 1EV: Friday, 6th September, 16:30 - 17:30 Class 1CV: Friday, 6th September, 18:00 - 19:00 Where:

#### Head of event:

Meeting Tent

Enrico Rebaudo and Valentina Temporelli

# **Dynamic Events**

#### GENERAL INFORMATION

The dynamics at Formula SAE Italy comply with the FS rules. The team will receive the car transponder on Friday 6th September, from 15:00 to 18:00 at the Scrutineering Area - Noise test.

To be allowed to compete in the dynamic events of the day, all drivers must sign the written drivers' briefing for receipt during the registration. Drivers must read carefully this document. In addition, they must attend an event's dedicated briefing (i.e. the Friday meeting for Acceleration, Skid pad and Autocross, the Saturday meeting for the Endurance).

Any driver who fails to attend the dedicated briefing will be excluded from the corresponding events. The 4 team members need to have the dynamic pass to enter the dynamic area.

If the dynamic event's captain declares damp or wet conditions, the announcements will be made at the dynamic area (at staging and alignment lines).

Closed-toed shoes are mandatory in all dynamic areas. Any team member with dynamic pass that fails to comply with this rule might not be allowed to enter the dynamic area.

After each dynamic event and before the following one, please check for leakages, broken parts and fasteners.





Our commitment elevates us, our goal drives us, our unity makes us unique.

Our asset: a cohesive team, sharing its passion for excellence. Our approach: constant innovation, never settling for simple progress. Our challenge: the Sustainable Paintshop, by June 2030.

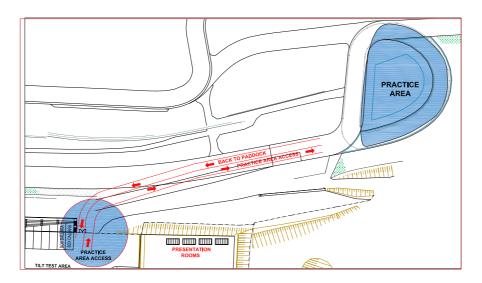
#### **Practice Area**

#### When and Where:

#### Class 1CV/1EV

Friday, 6th September - 9:30 - 12:30 and 15:00 - 18:30 Saturday, 5th September - 9:30 - 13:00 and 15:00 - 19:00

@ Practice Area



During the scheduled time, a practice area will be available. The practice area has the only purpose to check car's functionality and set it up, simulating the driving condition of the track, not to prove full performance of the car. If other vehicles are waiting, any team may not run more than 5 (five) minutes inside the practice area, then the team may line up in the queue again. Precedence will be given to teams running their first practice. Whenever the team moves its car, the following rules must be followed:

- Driver inside the cockpit, dressed up with a safety suit
- Fire extinguisher in the push-pull bar or accompanying the car
- The car must be pushed-pulled around.

The Practice Area will not be available on Sunday.



### Flags

The following is a brief description of the flags that can be used with their meaning. Any variations from this list will be explained at the drivers' meetings.

Black Flag - Pull into the penalty box for discussion with the Chief Marshall/ Director of Operations or other officials concerning an incident. A time penalty may be assessed for such incident.



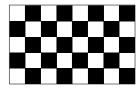
**Black Flag - With Orange Dot -** "Mechanical Black Flag" - Pull into the penalty box for a mechanical inspection of your car, something has been observed that needs closer inspection and that can be a fire that needs immediate extinguishing.



**Blue Flag** - Pull into the designated passing zone to be passed by a faster competitor. Obey the corner workers hand signals at the end of the passing zone to merge into competition.



**Checkered Flag** - Your session has been completed: exit the course where signaled.



Green Flag or Italian Flag - Your session has started, enter the course under direction of the starter. (NOTE: If you stall the vehicle, please restart and await another green flag as the opening in traffic may have closed.)





**Red Flag** - Come to an immediate safe controlled stop on the course. Pull to the side of the course as much as possible to keep the course open. Follow marshal's directions.



**Yellow Flag (Stationary)** - Danger, SLOW DOWN, be prepared to take evasive action, something has happened beyond the flag station, NO PASSING unless directed.



**Yellow Flag (Waved)** - Great Danger, SLOW DOWN, evasive action is most likely required, BE PREPARED TO STOP, something has happened beyond the flag station, NO PASSING unless directed.

**Red & Yellow Striped Flag** - Something is on the racing surface (e.g. oil) that should not be there. Be prepared for evasive maneuvers to avoid the dangerous situation.

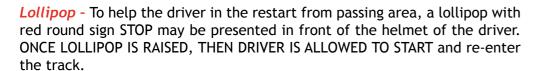


White Flag - There is a slow moving vehicle on the course that is much slower than you are: be prepared to approach it at a cautious pace.



#### **Additional Signs**

Fire on Board - Marshalls are warning driver about a fire or a severe risk of fire on his car, driver is required to stop as soon as possible off the track and close to a Fire Fighter or a Marshall.



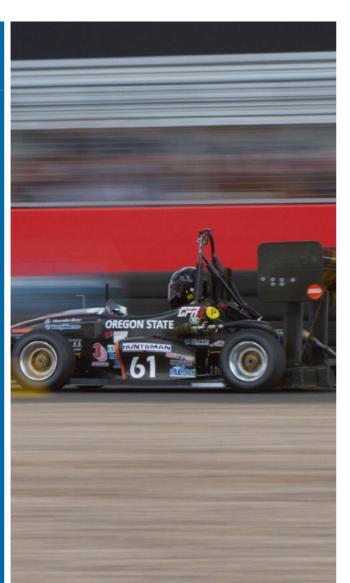




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#### **Weather Conditions**

WET: Teams must fit rain tires to their vehicle if the course is declared wet.

**DAMP:** Teams have the option of dry or rain tires if the course is declared damp.

Teams are allowed 10 minutes to change their tires in the driver change area if a dry track is declared damp, or if a dry or damp track is declared wet. If the tire change is happening at the same time as a scheduled driver change, the 10 minutes are in addition to the 3 minutes allowed for the driver change. Teams are allowed to change their rain tires to dry tires if the course is dry or damp. However, this change is not permitted during the driver change, and the time taken to change the tires is included in the team's total time for the event. The following chart summarizes the possible track condition changes, the team's options, and the time allotted for changes.

Track Initial Condition	Team's Current Tire Choice	Track Declared	Tire Change	Time Help	Allowed at Driver Change
Dry	Dry	Damp	Optional	10 minutes	Υ
Dry	Dry	Wet	Mandatory	10 minutes	Υ
Damp	Dry	Wet	Mandatory	10 minutes	Υ
Damp	Rain	Wet			
Damp	Dry	Dry			
Damp	Rain	Dry	Optional	Zero	N
Wet	Rain	Damp	Optional	Zero	N
Wet	Rain	Dry	Optional	Zero	N

#### **Acceleration Event**

Acceleration will run in parallel with the Skid Pad event. There will be 2 lanes, one for the first driver and one for the second driver.

The event WILL STOP at the scheduled time, no matter how long Teams have been in the queue and how long the waiting line is. Each driver can take the second run immediately after the first one without going back to the end of the queue.

The first driver line will have the priority over the second driver line.

The car must proceed slowly during the realignment for the second run.

Excessive speed will be cause for disqualification.

Only team members with "Dynamic Pass" may stay with their car on the waiting line.

Class 1DV:

When:

Friday 6th September, 14:30 - 18:30

Straight before the hairpin Head of event:

Francesco Ristori

Class 1CV, 1EV:

When:

Saturday, 7th September,

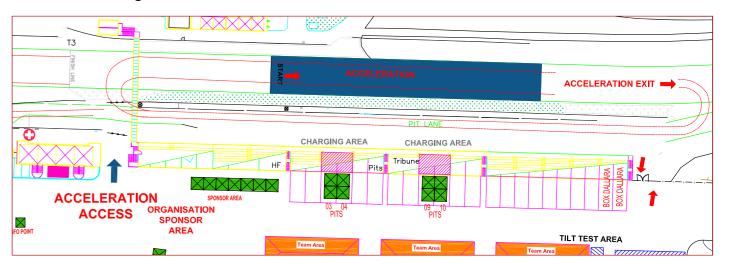
9:30 - 13:00

Where:

Acceleration

Head of event:

Nicola Rizzini



Class 1DV:

Saturday, 7th

15:00 - 19:30

Head of event:

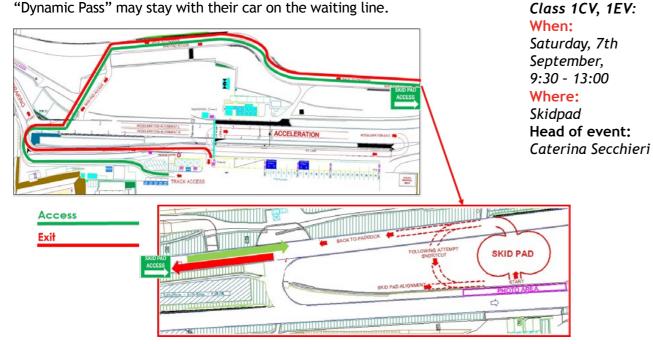
Francesco Ristori

September,

When:

#### **Skid Pad Event**

Skid Pad will run in parallel with the Acceleration event. There will be 2 lanes, one for the first run and one for the second run. The event WILL STOP at the scheduled time, no matter how long Teams have been in the queue and how long the waiting line is. Each driver can take the second run immediately after the first one without going back to the end of the queue. The first driver line will have the priority over the second driver line. Only team members with "Dynamic Pass" may stay with their car on the waiting line.





#### **Autocross Event**

The autocross event will be held on the racetrack.

There will be 2 lanes, one for the first driver and one for the second driver. The event WILL STOP AT 18:30, no matter how long Teams have been in the queue and how long the waiting line is.

Each driver can take the second run immediately after the first one without going back to the end of the queue.

The first driver line will have the priority over the second driver line. More than one car may be on the track at the same time; in case of delay due to yellow flag caused by other cars the run may be repeated immediately.

For safety reasons, at the Autocross start, one team member with "Dynamic Pass" and quick jack and fire extinguisher is allowed to assist the car, in case of need.

#### When:

Sunday, 8th September, 9:30 - 13:00

Where:

Skidpad

Head of event:

Francesco Ristori

#### When:

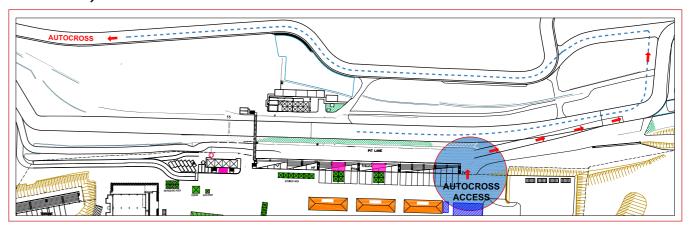
Saturday, 7th September, 15:30 -19:30

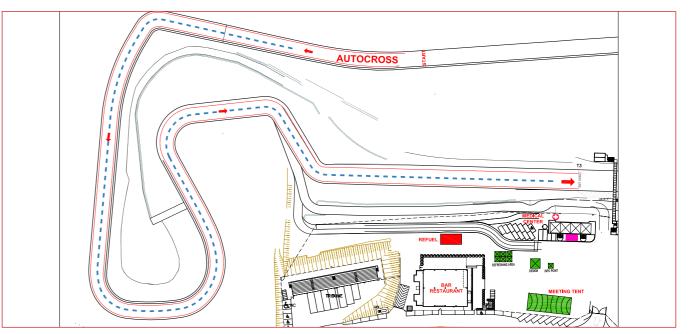
Where:

Track Area
Head of event:

Anja Herrmann Praturlon

#### Class 1CV, 1EV





#### Endurance Event & Parc Fermè Procedure

The starting order for the event will be based primarily on the Autocross event.

The start sequence will be from the slowest to the fastest autocross times. If a team did NOT score in the Autocross event, the vehicle will run at the beginning of the Endurance event, with the order based first on the finishing order of the Acceleration event, and then on the finishing order of the Skid Pad event.

Teams without a score in any event used to determine the run order will run in the order established by the race direction.

Teams must run in the assigned heat- morning or afternoon.

The circuit of the endurance event is shown in the following picture.

Only team members with a "Dynamic Pass" may follow their car up to the staging area.

Spectators may follow the event from the grandstands.

Following the established starting order, the starter will instruct the vehicles to be ready and line up at the entrance of the track.

An official will perform a safety check of the vehicle and of the driver restraint system.

The starter will stage the vehicle's front tires on a starting line.

When there is an opening on the track the starter will wave a flag signaling the go-ahead for the driver to start.

If vehicle stalls, the driver must wait for another flag before being allowed on the course.

When:

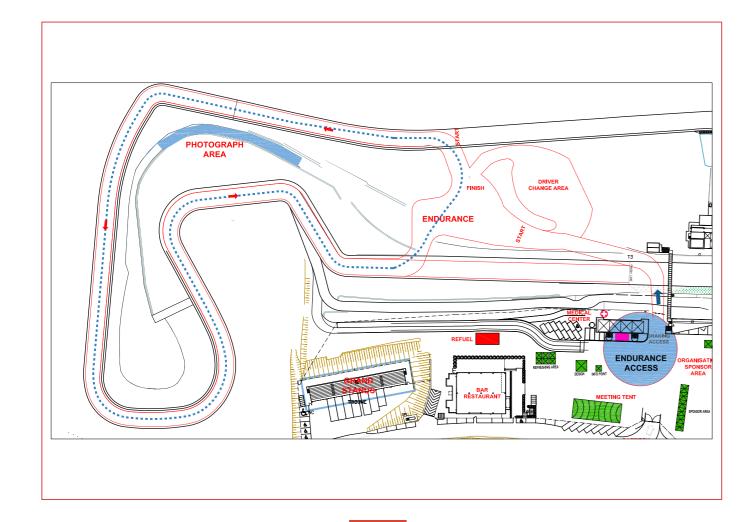
Sunday, 8th September, 10:00 - 19:00

Where:

Track Area

Head of event:

Anja Herrmann Praturlon



# PLEASE NOTE: IF THE VEHICLE CANNOT BE RESTARTED WITHOUT EXTERNAL AID, THE CAR WILL BE DEEMED DISABLED AND DISQUALIFIED FROM THE EVENT.

The vehicle is expected to be ready for competition with 1st driver at team's start time. If the endurance event is running late, the vehicle is still expected to be ready when its run order position is reached. If the vehicle is not ready when the official starter motions the vehicle to the starting line, a two-minute penalty will be assessed and the team will lose their time slot to run the event.

There will be more than one car on the track, so please pay attention to all the flags shown by the marshals and officials otherwise you may be penalized or disqualified.

On the last lap of the first driver, a checkered flag will be displayed and the vehicle directed to the driver change area.

It is the driver's responsibility to exit the track; any person directing the car off the course is an additional aid only.

Only three people (including drivers) are allowed in the driver change area at once. After the vehicle arrives in the driver change area, the team has three minutes to get the second driver belted in and rolling out of the driver change area.

Only adjustments to fit the second driver may be performed on the vehicle. No other work is allowed.

During driver's change, car and safety equipment (i.e. suits and belts) will be checked by technical inspectors; only after this check the 2nd driver is allowed to enter the track.

In addition to Rule D7.5, the team of Electric Vehicle is not allowed to reset any control unit during Driver Change nor power cycling GLVS master switch.

In case vehicle requires power cycling GLVS master switch in order to activate tractive system, the team needs to request during technical inspection an exception for operating GLVS master switch during Driver Change.

PLEASE NOTE: NO REPAIRS OR WORK MAY BE PERFORMED ON THE VEHICLE DURING THE EVENT (with the exception of tire changes due to weather conditions).

If a blue flag is shown to your car YOU HAVE TO MOVE INTO THE SLOW LANE and slow down. Before entering the track again, YOU HAVE TO WAIT FOR THE GREEN FLAG or other sign (e.g. lollipop) being shown at the end of the slow lane: not respecting this flag/sign may lead, further to a time penalty, to serious accidents with injuries for you, for the other drivers and for the marshals! Be responsible!

All the cars that end the Endurance event will be taken directly at the refueling station. No team member except the driver may enter that area: after the fuel consumption measurement, all the cars will be conducted directly to the Parc Fermé.

Team members are not allowed to enter the Parc Fermé before Officials communication.

#### **Additional Endurance Penalties**

The Chief Marshall/Director of Operations may disqualify a vehicle if, for any reason including driver inexperience and mechanical problems, it is too slow or being driven in a manner that, in the sole opinion of the event officials demonstrates an inability to properly control the car.

#### **Results**

The results of the static events will be published on FSAE Italy website (www.formula-ata.it) at the end of the statics without revealing the order of the first 3 classified teams. They will also be published at the circuit, near the Registration Office.

The results of each dynamic event will be published as soon as they are ready near the Registration Office.

#### **Protest**

If a team has a question about any official action, it must be brought to the staff's attention for an informal preliminary review before a protest can be filed.

Any team intending to protest decisions or results must present a written issue to the Formula SAE Italy 2024 organizers.

The protest may occur only in case something happened that they feel has caused harm to their team or has had a significant effect on their score.

Teams may not protest for rule interpretations or actions that have not caused them any damage. In order to have a protest considered, a team must post a twenty-five-points protest bail which will be forfeited if their protest is rejected.

The protest period expires 30 minutes after the score has been published. Protest must be in written format and handed only by the team leader.

A team member's failure to comply with a decision specifically addressed to that team or team member will result in a twenty-five-point penalty.

#### Offensive Behavior

Any offensive behavior will be penalized with a penalty from 25 points to the exclusion from the competition.



# Welcome on board, talents!



Glickenhaus 007 LMH: designed, developed and built by Podium Advanced Technologies - 4th & 5th overall at Le Mans 2021

podium-tech.com

### **Camping information**

Please be informed that the only vehicles admitted inside the campsite are the motor caravans.

#### **ADDRESS**

Via Guglielmo Marconi, Varano de' Melegari (Parma).

# CAMPING CHECK IN

It is scheduled on Tuesday, 3rd September 2024, from 15:00 to 19:00 and Wednesday, 4th September 2024, from 8:30 to 12:00.

It is MANDATORY for all teams to comply with the timetable. Please take the FINAL camping list with you, to report any changes on the already submitted list.

In order to avoid any difficulties in the registration management, at the campsite, the Team Leader only (or one team member only) will be allowed to register the team and will also be informed about their reserved area, which will be assigned by the organization team. It will be no longer possible to choose the camping spot, as it used to be in the past.

# ARRIVAL AND DEPARTURE

- Teams' arrival: Tuesday, 3rd September 2024 from 15:00
- Teams' departure: Monday 9th September 2024 by 14.00.

At their arrival team members will be given wristbands for camping, which MUST be worn for the whole period.

# CHARGE AND DISCHARGE OPERATIONS

Vehicles (cars and small vans; no trucks) are allowed to enter in the campsite to unload all equipment. After discharging operations, vehicles MUST be parked in the free authorized parking areas, located in the Municipality of Varano de' Melegari (Authorized parking areas). Only ONE vehicle will be allowed to enter in the campsite during the 6 days of the event to charge and discharge materials and must be parked outside right after. Only one green P will be given to all teams during the registration on September 4th, 2024.

# AVAILABLE SERVICES

- Toilets and showers
- Electricity
- Free parking area
- Security service 24 hours a day
- Night medical assistance
- No camper service. In the town of Collecchio (about 20 km in Parma direction) there are 3 areas with camper services

Please note that also inside the paddock of Varano circuit, there are showers, toilets and sinks that teams can use during the event.

Please use sinks when possible (i.e. dishwashing) to avoid overcrowding toilets.

# **Camping Rules**

Please pay attention to some behavior rules, in order to assure everyone's safety, peace and calm during the stay.

Therefore, everyone needs to comply with the following points:

#### 1. RESPECT THE VENUE AND THE FACILITIES

The Municipality of Varano gives hospitality to all the FSAE Italy participants during the event, allowing them to use its football ground and inside facilities, so please leave the venue as you found it. Everyone needs to respect its own delineated space and the escape routes.

#### 2. KEEP THE VENUE CLEAR OF ALL LITTER AND WASTE

Please use the appropriate dustbins available inside the campsite.

#### 3. PARKING

All vehicles must be parked outside the campsite in free authorized parking areas, located in the Municipality of Varano de' Melegari. If a vehicle will be parked in a non authorized area, it will be fined or removed by the municipal local police.

#### 4. NOISE LEVELS

Since the campsite is located next to private houses, please keep noise levels under control. After midnight till 7.00 am please lower your voice and turn off the music.

#### **5.OPEN FIRES**

No open fires are permitted. Please use the appropriate barbecue equipments only in the two reserved areas and with a fire extinguisher at your fingertips.

If you have gas bottles, please keep them upright, away from sunlight and heat sources.

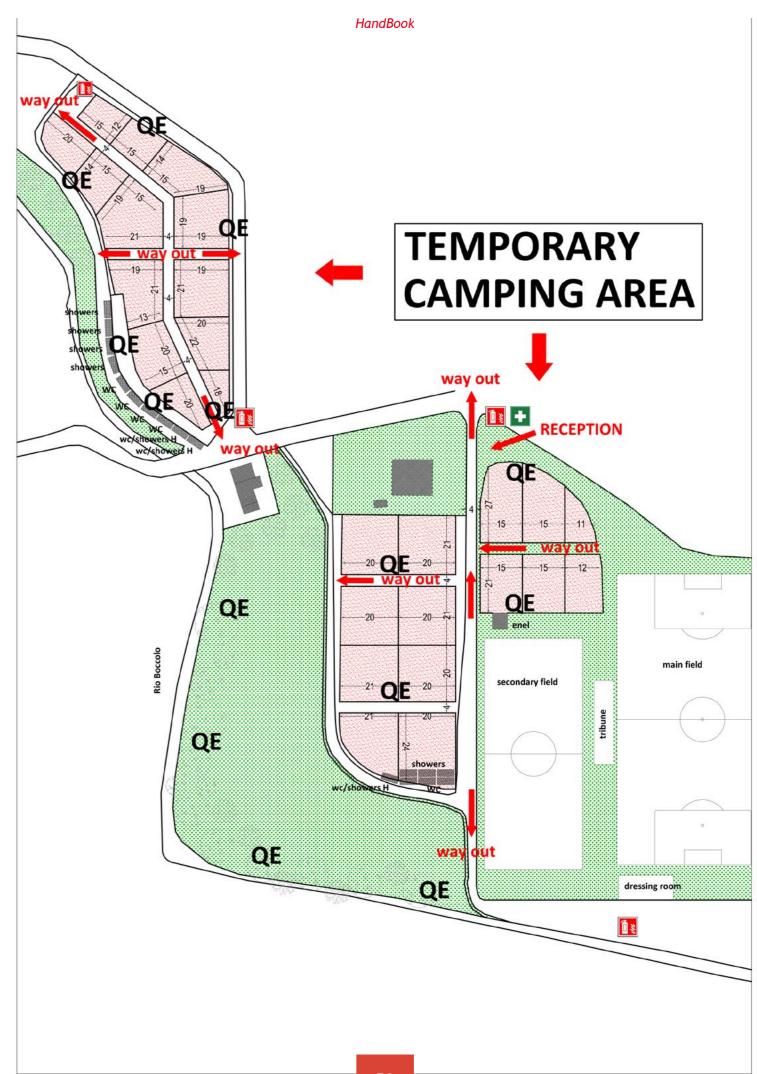
#### 6.ELECTRICITY

Please be sure to take some useful electrical equipment for the connection to the electrical boards; i.e. industrial plugs, electrical extensions.

#### 7. DANGEROUS BEHAVIOURS

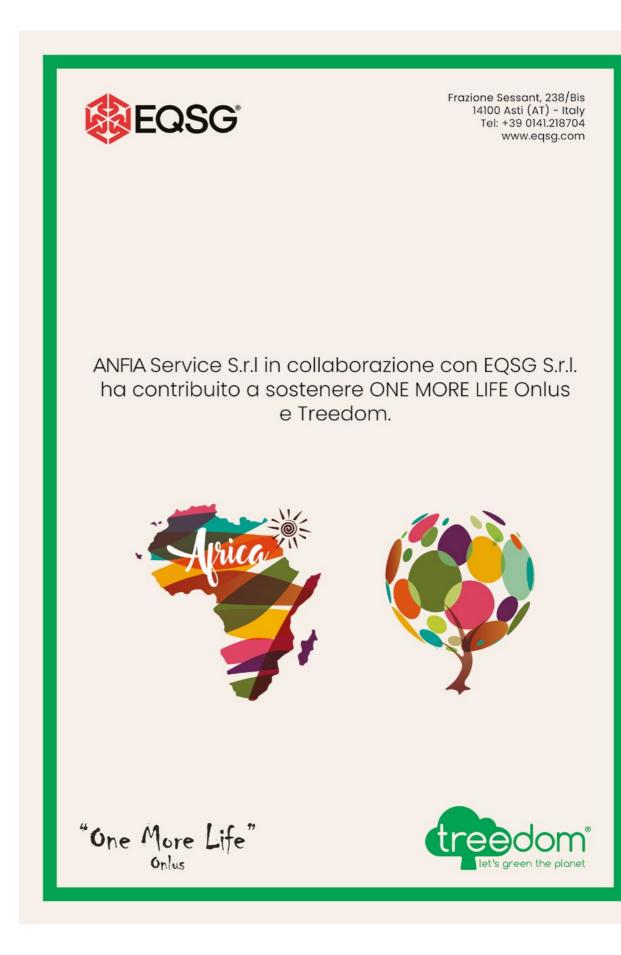
Please consider that dangerous behaviors and alcohol abuse may cause you and other people serious harms.

Rule-breaking behaviors can lead to penalties that will compromise the result of your team





Note			



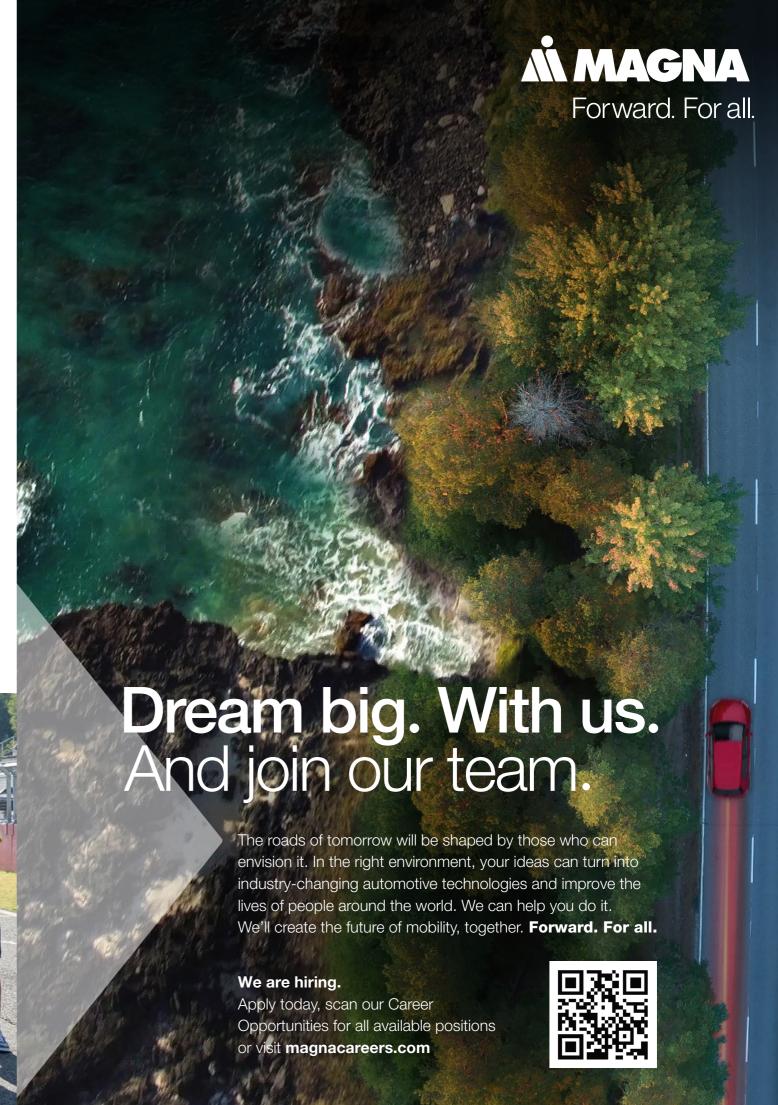
#### Staff

Nineteen years of event, thousands of engineering students from all over the world, hundreds of experts coming from F1, motorsport and automotive industry offering time, skills and experience for free: this is the Formula SAE/Student spirit!

Without you this event wouldn't be possible! Thank you!

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