



ARISTURTLE

ARISTOTLE UNIVERSITY RACING TEAM
ELECTRIC & DRIVERLESS

powered by



protergia



The Team

Aristotle University Racing Team Electric & Driverless, also known as **Aristurtle**, is a student research team from Aristotle University of Thessaloniki that designs, develops and manufactures **electric and driverless race cars**. The team belongs to the School of Electrical and Computer Engineering and is composed of **undergraduate students** from various fields, from Electrical Engineering, Mechanical Engineering to Physics and Economics. Working under the pressure of demanding deadlines, the members of the team are shouldered with duties that require full use of their **theoretical and practical skills** in order to be confronted successfully.

The faculty advisor, responsible for the representation of the team in the academic community, is **Mr. Minas Alexiadis**, Assistant professor of the School of Electrical and Computer Engineering at Aristotle University. Manufacturing of electric race cars is executed according to the rules and standards of **Formula Student**. This process is guided by three Electrical Systems Advisors, PhD graduates from the Electrical Machines Laboratory. The team is divided into eight subteams that work in different parts of the vehicle and cooperate according to their needs. The Chief Executive Officer is responsible for the coordination of all the subteams, in order to achieve a fully consolidated and perfectly functional result.

Goal

Aristurtle's goal is to design and manufacture excellent electric race cars and take part in international Formula Student competitions against academic institutions from all around the world.



Electra

Electra is the team's first race car and the beginning of a new era in Greek motorsport.



Iris

In mythology, Iris was the Gods' messenger. In our reality, Iris is the Aristurtle's third electric race cars.



Thetis DV

A new era in both Thetis' and the team's course began when it was transformed to an autonomous vehicle, the first in Greece.

Eve

It was the one who determined the standards for the future philosophy of the team's race cars.



Thetis

The awards and international podiums during the 2018-2019 season have established Thetis' place in history.



Nemesis

Designed with a pretty different approach in comparison to its predecessors, Nemesis built the foundation for a new mindset in Aristurtle's vehicles.





ELECTRICAL

Autonomous
High Voltage
Low Voltage

MECHANICAL

Aerodynamics
Frame & Composites
Suspension

OPERATIONS

Finances
Promotion
Static Events



The function and organization of Aristurtle is based on **specialization**. The team splits into 3 subgroups and additional specialization in them is selected. One of them is the **Operations** team. The object of the operations is the **best possible representation** of Aristurtle having the **overall care for the image of the project**. Its subgroup aims at **high performance in 2 of the 3 static events** which are the Business Plan Presentation and the Financial Analysis of the car in the global Formula Student competitions. The goal is also to find **financial resources** to meet the needs of a Formula Student racing team but also to achieve the **best promotion** for both the team and its sponsors in every possible way.





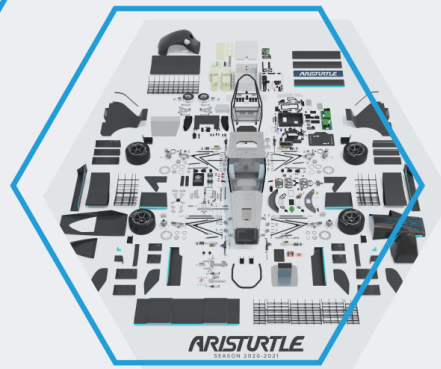
PROMOTION



Graphic Design

The Graphic Designers of the team shape the visual identity of the project, giving style to it. Their main concern is the creation of visual and graphic promotional content, the editing of various presentations, choosing the appropriate colors and fonts, but also their design, and the creation of 3D content.

Within these responsibilities, it is necessary to use design programs such as Adobe Illustrator and Adobe Photoshop.





Social Media

Social media is one of the main ways to promote the team. Finding the best communication strategy, promoting the team, as well as developing new trends, are the main responsibilities of the Social Media Manager. The main goal is to create original and intelligent content daily, to highlight the progress and the whole activity of the group.

Through active participation in various social media platforms (Facebook, Instagram, LinkedIn, YouTube) the adoption of a type of corporate image profile is achieved.

Web Development

The purpose of the web developer is the development and the constant renewal and maintenance of the official website of the team. Some of the responsibilities are setting up the website, and its user interfaces, as well as optimizing the appearance and layout of the material.

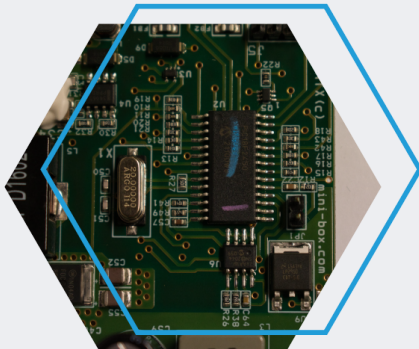
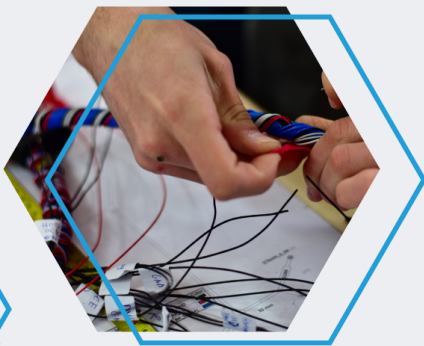




Film and Photography

Photos and videos are two of the main ways to create promotional material. The production of this material is achieved through various thematic photoshootings, photos from the workplaces, competitions, and track days, but also from the various events in which the team participates.

On a second level, the development of knowledge about photography, as well as the use of editing programs such as Adobe Photoshop, Adobe Lightroom, and Adobe Premier is important.





Events

The participation of Aristurtle in various events is necessary for its promotion. Therefore, every year the members of the team are present at various events throughout Greece, always aiming at the dissemination of its work and its promotion.





STATIC EVENTS



Business Plan Presentation

The Business Plan team is properly prepared to present a comprehensive business plan to the competition. More specifically, during the competition, the team is presented as a construction company and is invited to present a comprehensive business plan to attract investors, who take the form of judges. This static event is based on understanding the operation of a business and the management of financial resources for growth and financial gain. It requires excellent financial analysis of all sectors but also the relevant research which will determine the growth rate of the business. This race makes up 75 of the total 1000 in the Formula Student competition.





Cost and Manufacturing

The Cost and Manufacturing team carries out the financial analysis and cost of a part of the car or even the whole car. This includes the economic analysis of all factors of production such as human resources or machinery and even the materials used and the construction methods. At the same time, the study of the conversion of the car from concept to mass production is required. This static race makes up 100 of the 1000 points of the Formula Student competition.





FINANCES



Economic Resources

To meet the financial, construction, and research needs of a Formula Student team to complete the construction of each car, Aristurtle relies on domestic and multinational companies (Protergia, dSpace, Beta, ABB, Bosch). All of these companies, and many more, are part of our team of more than 150 companies, which provide financial support, services, components for the car and the processes for its construction, and even knowledge and innovation in collaboration with ours.

Logistics

A smooth database and logistics management are required for the smooth and continuous operation of Aristurtle. The main function of this person is to provide in every possible way to the team the necessary raw materials and services, at the right time to complete all the work. Ideally, it should organize bulk orders, loading, transportation but also find services (e.g. water cuts, welds).



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Το μέλλον της ενέργειας



Aristotle University of Thessaloniki



RESEARCH COMMITTEE
ARISTOTLE UNIVERSITY OF THESSALONIKI



SCHOOL OF
ELECTRICAL &
COMPUTER
ENGINEERING



FACULTY OF ENGINEERING
ARISTOTLE UNIVERSITY OF THESSALONIKI





CFT
CARBON
FIBER
TECHNOLOGIES



GWF

GP
COLORS

drive
park

C
L
C
n
V

INTERAMERICAN

MEKY



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IPROM

EJET

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Elevating your World.

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ΕΙΔΙΚΑ ΚΑΛΩΔΙΑ

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VECTORNAY

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ENGINEERING
EXCELLENCE



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vision

ACS

GATS

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&
COMPOSITES

NGM
Χ. & Δ. ΟΡΦΑΝΙΔΗΣ Α.Β.Ε.Ε.
ΜΗΧΑΝΟΥΡΓΙΚΗ ΒΟΡΕΙΟΥ ΕΛΛΑΔΟΣ

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INTERNATIONAL

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graphics

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Manufacturing

GRI
PUMPS

ARCON hellas

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TECHNOMECHAN
ΜΗΧΑΝΟΠΕΡΙΟ
ΓΑΙΤΑΝΙΑΣ ΤΑΒΒΑΣ & ΥΙΟΙ Ι.Κ.Ε.

