



STEM RACING
World Finals
Singapore 2020



STEM Racing – Where Imagination Meets Innovation

Formerly F1 in Schools

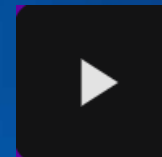
Motivating and Inspiring future engineers and innovators

About STEM Racing

What It Is: A global STEM competition where students design, build, and race miniature Formula-style cars.

New Identity: Formerly F1 in Schools — now STEM Racing, emphasizing broader innovation and inclusivity in STEM education.

Mission: To ignite passion for science, technology, engineering, and mathematics through hands-on learning and teamwork.



Why It Matters

- **Brings STEM to life:** Students apply classroom learning in real-world scenarios.
- **Future-ready skills:** Prepares participants for careers in engineering, design, computing, and beyond.
- **Empowerment:** Builds confidence, leadership, and innovation.
- **Impact:** Alumni have gone on to work in motorsport, automotive design, and tech companies.



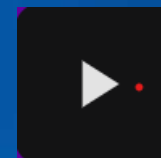
Kyriakos Theofanidis: We spoke with Kyriakos from Thessaloniki who works on Mercedes engines for F1

Kyriakos Theofanidis talks to Car and Driver about starting his journey from the F1 in Schools and Formula Student competitions, which took him to Brixworth, at the premises of the Mercedes-AMG F1 Team.

The Challenge

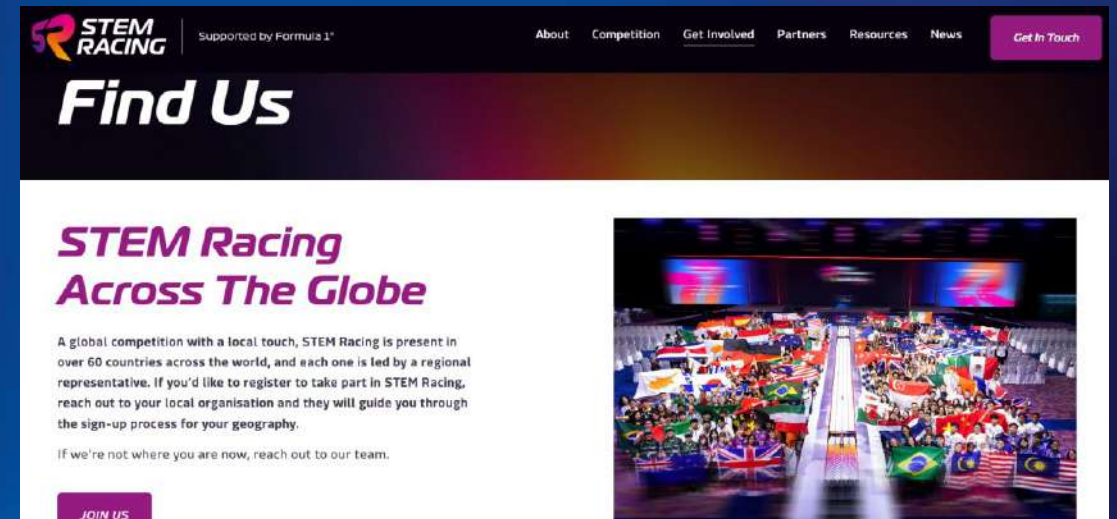
Students take on the roles of:

- Engineers and designers
- Project managers
- Marketers and innovators
- With entrepreneurial mindset



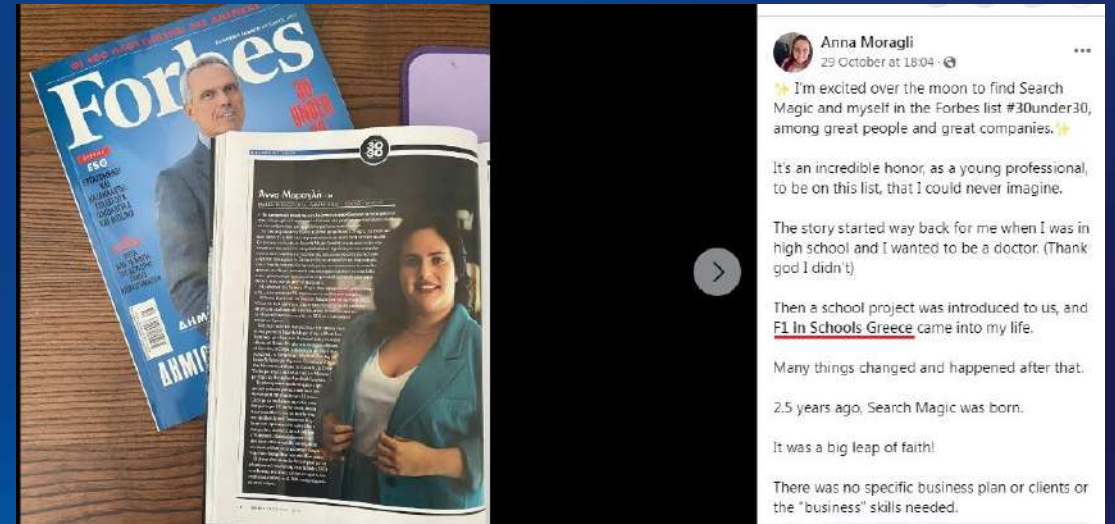
Global Recognition

- STEM Racing is part of an international network of competitions across 60+ countries.
- Provides Equal Opportunities to all students.
- Teams advance from regional and national finals to the World Finals, showcasing their work to global industry leaders.



More Success Stories

- *“It’s not just about cars; it’s about building futures.” – Former participant*
- *“it’s offering a more comprehensive real-world simulation.”*



Natasha Andritsaki

"Every F1 in Schools day isn't a boring school day, but a day which will bring you closer to your dreams."



Akis Gkirgkis

"I view F1 in Schools as a turning point in my life and for that I will always be grateful"



How Schools Can Join

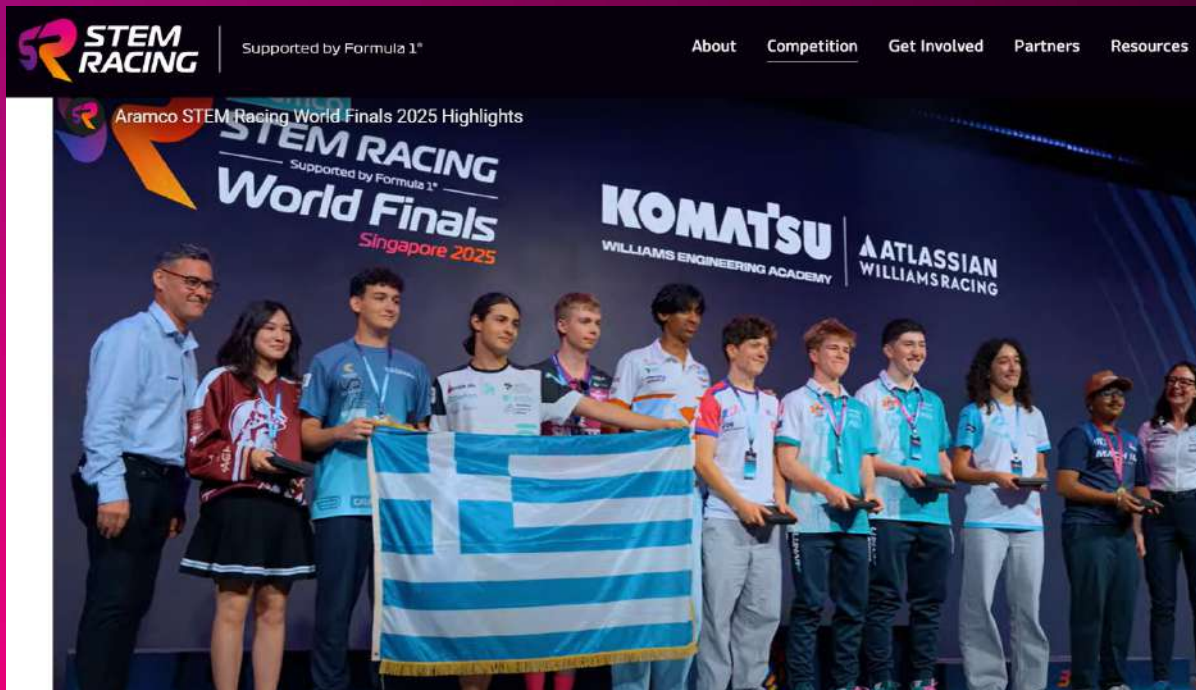
- Register your school or team via [official STEM Racing site or national hub].
- Receive starter resources: training guides, CAD software access, and car kits.
- Form teams (3–6 students) and assign roles.
- Design, build, and compete!

Web: <https://stemracing.gr/>



Get Involved

- Join the race to inspire the next generation of innovators!



Maaden And STEM Racing Launch Global STEM Education Partnership

The collaboration will deliver a pioneering online learning platform and establish the first "Motorsport Valley" STEM Racing Centre of Excellence.

The Learning Journey: Beyond the Track

- Core steps students take: Plan, Design (using professional-grade CAD software), Analyse (using CFD/FEA software), Make (using CNC machines), Test, and Race.
- Various judging criteria beyond racing time, such as the Engineering Portfolio, Enterprise Portfolio, Pit Display, and Verbal Presentation
- Multidisciplinary nature, which goes beyond just engineering (science, technology, finance, marketing, teamwork, etc.).



STEM RACING | Supported by Formula 1®

About Competition Get Involved Partners Resources News Get In Touch



George Poulter: Mechanical Structural Analysis Engineer At Mercedes-AMG PETRONAS F1 Team



Lewis Fowler: Graduate Design Engineer – Aerodynamics At Aston Martin Aramco Formula 1 Team

STEM RACING | Supported by Formula 1®

About Competition Get Involved Partners Resources News Get In Touch



George Stonor, Mechanical Structural Analysis Engineer At Red Bull Power Trains

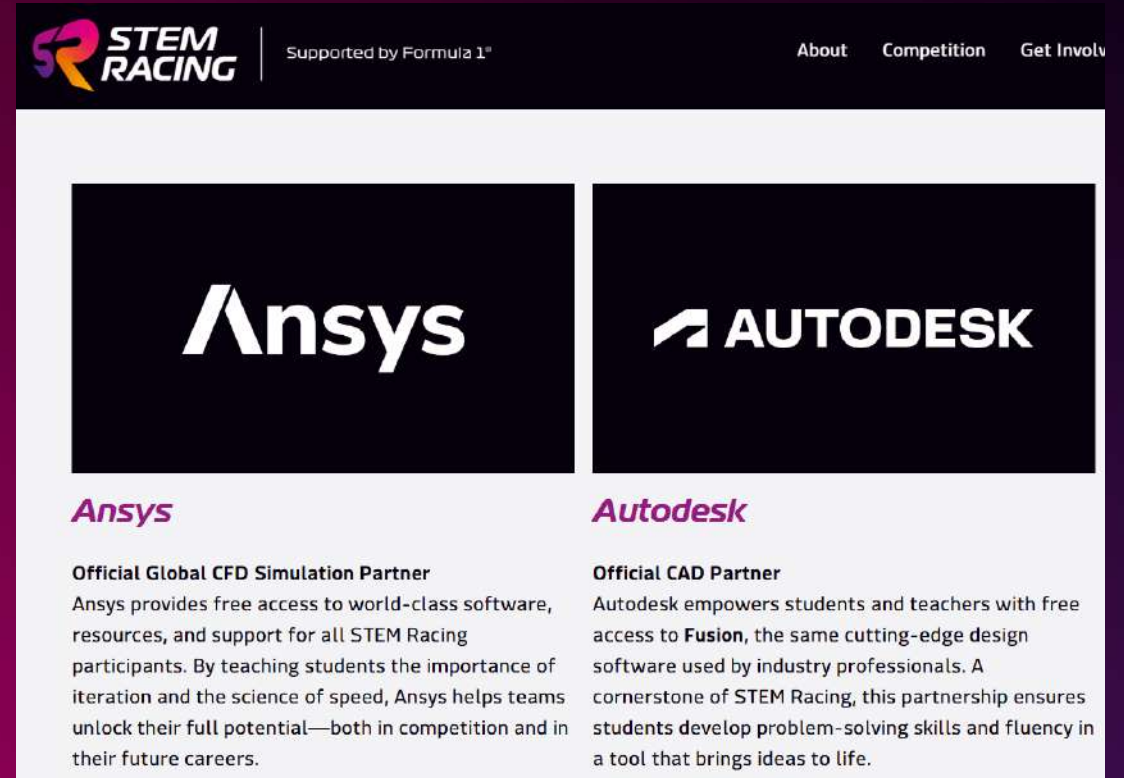
Part of Evolve UK, 2019 World Champions, George had an incredibly successful journey in the competition, and is currently undertaking a placement year as a Mechanical Design Engineer at



Mary Aldersley: Coordinator, Transmission And Component Assembly At McLaren Formula 1

Sponsorship & Community Impact

- Support local talent in STEM education.
- Corporate sponsors can provide mentorship, materials, or funding.
- Recognition for contributing to future innovation leaders.



The screenshot shows the top section of the STEM RACING website. The header includes the STEM RACING logo, the text "Supported by Formula 1™", and navigation links for "About", "Competition", and "Get Involved". Below the header, there are two main sections for sponsors. The first section is for Ansys, featuring the Ansys logo and the text "Official Global CFD Simulation Partner". The second section is for Autodesk, featuring the Autodesk logo and the text "Official CAD Partner".

STEM RACING | Supported by Formula 1™ | [About](#) | [Competition](#) | [Get Involved](#)

Ansys

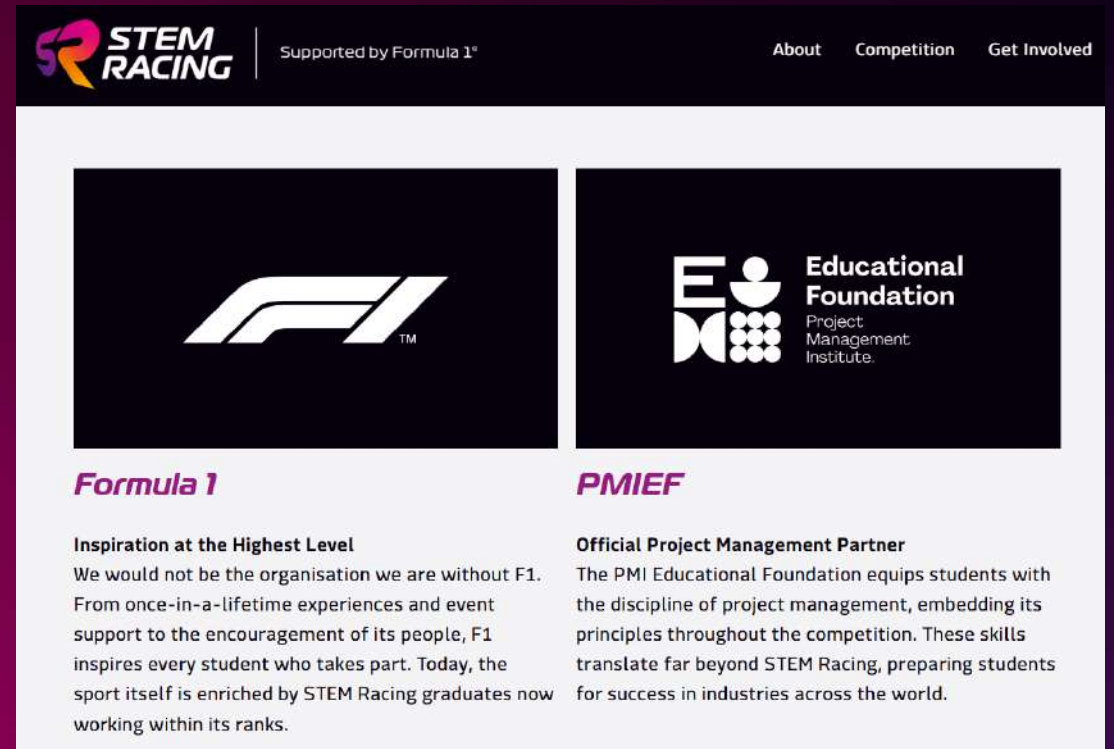
Official Global CFD Simulation Partner
Ansys provides free access to world-class software, resources, and support for all STEM Racing participants. By teaching students the importance of iteration and the science of speed, Ansys helps teams unlock their full potential—both in competition and in their future careers.

AUTODESK

Official CAD Partner
Autodesk empowers students and teachers with free access to **Fusion**, the same cutting-edge design software used by industry professionals. A cornerstone of STEM Racing, this partnership ensures students develop problem-solving skills and fluency in a tool that brings ideas to life.

The Future of STEM Racing

- Expanding beyond racing: [RaceTrack Simulator](#), eSport, Sustainable Project Management, Sustainability Challenges.
- Encouraging gender diversity and international collaboration.



The screenshot shows the top section of the STEM RACING website. The header includes the STEM RACING logo, the text "Supported by Formula 1®", and navigation links for "About", "Competition", and "Get Involved". Below the header, there are two main partnership sections. The first section, titled "Formula 1", features the Formula 1 logo and a text block stating: "Inspiration at the Highest Level. We would not be the organisation we are without F1. From once-in-a-lifetime experiences and event support to the encouragement of its people, F1 inspires every student who takes part. Today, the sport itself is enriched by STEM Racing graduates now working within its ranks." The second section, titled "PMIEF", features the logo of the Educational Foundation Project Management Institute and a text block stating: "Official Project Management Partner. The PMI Educational Foundation equips students with the discipline of project management, embedding its principles throughout the competition. These skills translate far beyond STEM Racing, preparing students for success in industries across the world."

STEM RACING | Supported by Formula 1® | [About](#) | [Competition](#) | [Get Involved](#)



Formula 1

Inspiration at the Highest Level
We would not be the organisation we are without F1. From once-in-a-lifetime experiences and event support to the encouragement of its people, F1 inspires every student who takes part. Today, the sport itself is enriched by STEM Racing graduates now working within its ranks.



Educational Foundation
Project Management Institute

PMIEF

Official Project Management Partner
The PMI Educational Foundation equips students with the discipline of project management, embedding its principles throughout the competition. These skills translate far beyond STEM Racing, preparing students for success in industries across the world.

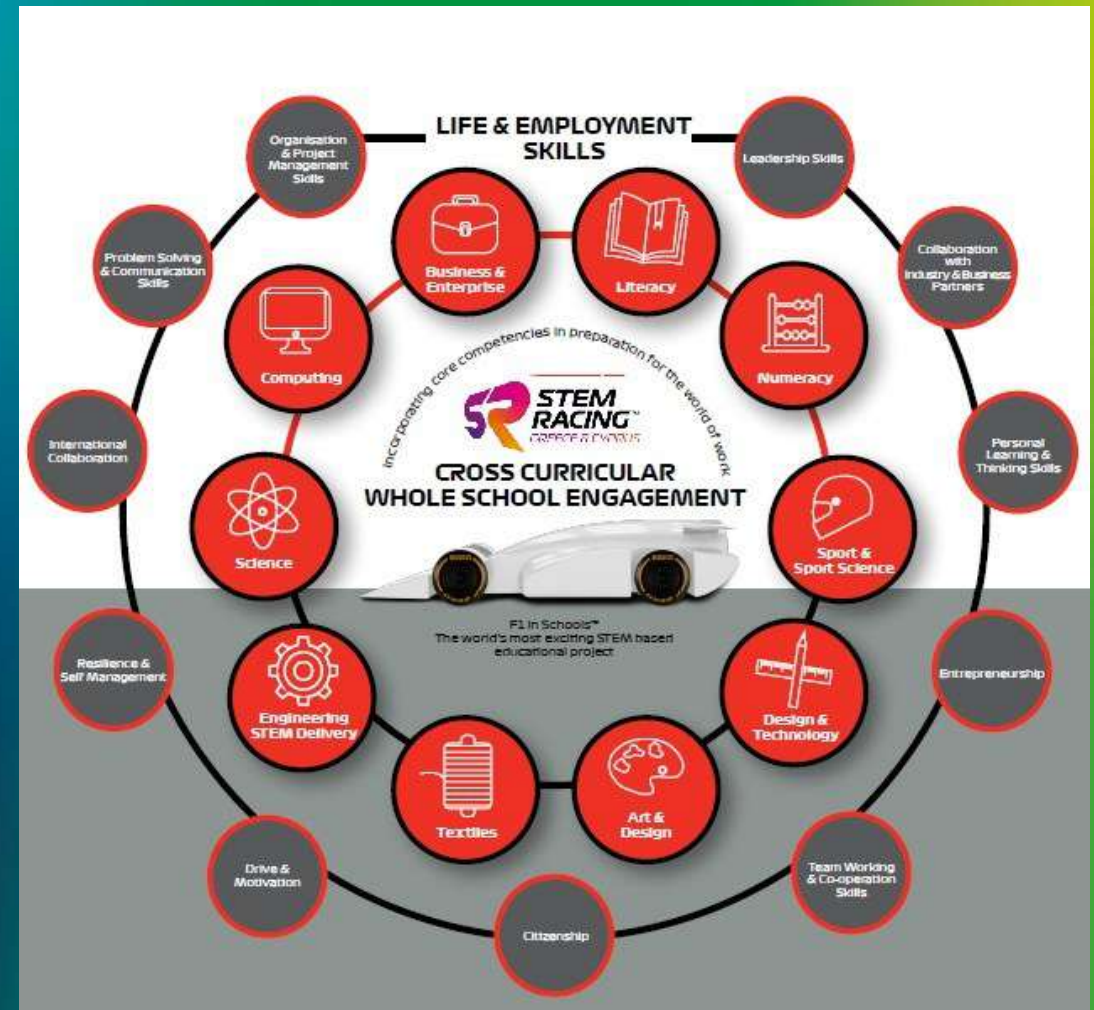
Best Practices of Incorporating New Technologies into Learning Environments

- Design analytical program of studies based on experiential learning programs
- An experiential learning ecosystem, such as the STEM Racing (formerly F1 in Schools) program, motivate students use new technologies (AI and emerging) and make partnerships with tech businesses.



Skill Development & Real-World Impact

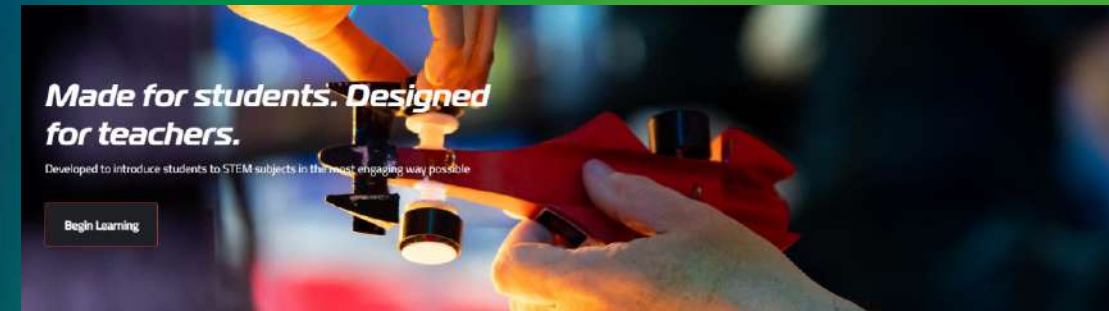
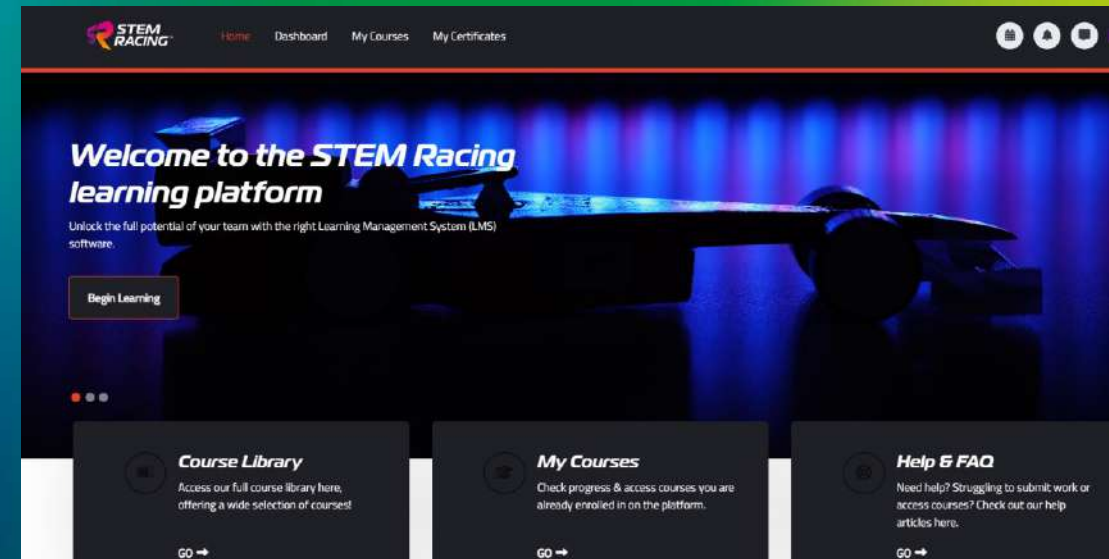
- Experiential learning program, such as the STEM Racing (Formerly F1 in Schools), help students bridge the gap between classroom learning and real-world industry application
- 21st-century skills students gain, including project management, leadership, collaboration, communication, creativity, problem-solving, entrepreneurial mindset, and financial strategy.



Critical Challenges to Address for an Effective Education System



- **Assessment:** Traditional tests cannot accurately measure the skills gained. Instead, experiential programs such as the STEM Racing use authentic assessments like digital portfolios, verbal presentations, score cards based on KPIs, or peer-to-peer judging and coaching.
- **Knowledge Gaps:** Students may not have specialized knowledge in a particular field. Experiential programs like STEM Racing provide a learning platform to address the knowledge gap.
- **Resource Intensity:** Purely experiential programs, such as the STEM Racing, integrate significant resources, including partnerships with local businesses, access to specialized labs/hubs/centers, or VR simulations.



The STEM Racing experiential learning program is a major shift to a feature school model

- Motivation: if give students opportunities (a chance) they may surprise us
- Inspiration: for students and educators



Web: <https://stemracing.gr/>

