



### FORMULA STUDENT TEAM NAPIER

## SPONSORSHIP PROSPECTUS

## 2024-2025

The official sponsorship prospectus communications for Formula Student Team Napier for the 2024-2025 academic year.



**OCTOBER 2024** 



#### A WORD FROM OUR TEAM PRINCIPAL

"After an amazing two initial years of competing in the Formula Student (FS) competition in 2023 and 2024, Formula Student Team Napier are excited to continue on to our third year with high aspirations. With a team standing at near 100 dedicated members, amazing supporting faculty at Edinburgh Napier University, and our generous sponsors, we are heading towards big-ger and better things in FSUK 2025.

Our technical team - competing in the FS class of the competition - is currently working towards completing NV2, our second iteration of a single-seater racing vehicle that competed in concept class in FSUK 2024. We are designing and manufacturing the final pieces of the puzzle that will allow us to compete and excel for the first time in standard FS class! On top of competing in FS class, our team has competed in FS-AI for the last two years placing 4th and 5th overall, with the noteworthy achievement of being the first team to complete an endurance run. We are incredibly proud of the success our driverless department has had since its debut in FSUK 2023 and are looking to build on this even further with localisation and mapping being implemented for our 2025 entry. Our sim racing team placed 30th last year, although a good result, has room for improvement and this year we are pushing for more entries into those events throughout the year!

That is not all, running a successful competition team requires a lot of work behind the scenes. Our support departments deal with our finances, event management, merchandise, business, public relations and marketing materials including social media management. These areas of the team have grown significantly over the last couple years, bringing in more innovative ideas and connecting us more with the university and wider community.

In this prospectus, we will introduce you to the FS competition and delve into what makes Formula Student Team Napier, and what it is we do. Each year, we aim as high as possible, constantly enhancing and making headway towards something even better than before. We are looking to expand our reach further, inspiring the next generation of Napier students to take on the challenge that is Formula Student. The aim is to build up the foundations of our team to become a fierce competitor in the Formula Student UK competition in years to come.

It is with great honour that we invite you to join us on our journey towards the Formula Student competition in 2025. Feel free to contact us with any queries you may have!"

## Amy Anderson

Team Principal, FSTN





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#### EDINBURGH NAPIER UNIVERSITY

### Edinburgh Napier University is the award-winning university at which our team members study and we are delighted that they are continuing to support us!

From day one, Edinburgh Napier University has been fully supportive of our mission; providing us space to work in, and the freedom to 'have a go'. With this kind of backing, it is no surprise that ENU has been steadily climbing the rankings in many of the university league tables. This is in addition to receiving a multitude of awards, demonstrating the university's dedication to its students! Edinburgh Napier University consists of three campuses located around Edinburgh: Merchiston, Craiglockhart and Sighthill. Our workshop and meeting facilities are in Merchiston Campus where we design, develop, manufacture and assemble our vehicle and autonomous software.



**ABOUT US** 

FORMULA STUDENT TEAM NAPIER

### Formula Student Team Napier (FSTN) is a formula student team operating out of a variety of Edinburgh Napier University's schools including the School of Computing, Engineering and the Built Environment (SCEBE), but also the Business School and School of Creative Arts.

At FSTN, we are eager to build a car that can take on the challenge that is competing in the formula student competition at Silverstone against 100+ other university teams. Our main objectives are to design and manufacture a formula-style race car to compete in the iMechE's FS-class competition, and to design and develop sophisticated autonomous software to compete in FS-AI at the same competition.

Since our founding in December 2021, we have been working diligently to develop a robust team and infrastructure whilst collaborating with the university to overcome logistical challenges that our team faces. Within our team are multiple departments, including but not limited to; Driverless, Technical, Sim Racing, PR & Marketing, Operations and Business. We have a brilliant student-led management team that oversee these departments to ensure they function smoothly and that we work to our best ability!

FSTN consists of students from all years of study, bringing a diverse range of skills and expertise to the team. We are determined to make FSTN a prosperous multi-year endeavour and are focused on imparting our extensive knowledge and skills to the next generation of students.

As we prepare to embark on our new academic year, we are eager to expand our team and create opportunities for students to get involved. We have created our Junior Engineer Program to aid our new technical students with their onboarding to the team and quickly get them involved in what we do. New this year is our business department, where they support and prepare for our business plan presentations in both FS-class and FS-AI.



## **ABOUT FORMULA STUDENT**

### Formula Student is one of the biggest educational engineering competitions, with over 600 teams competing in more than 20 countries. The challenge: to design, build and race a custom Formulastyle car.

Formula Student offers students a valuable opportunity to acquire practical engineering experience, while also developing essential soft skills such as project management, teamwork, communication, business planning and marketing. This combination of technical interpersonal skills makes Formula Student a highly regarded program for students pursuing a career in engineering, whether in the field of motorsport or other industries. It is considered the gold standard for preparing students to succeed in their future careers.

In the UK, the competition is organised by the Institute of Mechanical Engineers (iMechE). Since Formula Student's inception in the UK in 1998, there are now over 100 university teams who compete annually at Silverstone. The competition takes place as a series of static and dynamic events, following rigorous scrutineering to check if the vehicle is safe to drive. Teams can score points for each event, with the winner of the competition being the team with the highest number of points secured.

#### FS-CLASS POINTS:

Lap Time Simulation - Business Plan Presentation - Cost and Manufacturing - Engineering Design -

Sprint - **100** Skid Pad - Acceleration - Endurance - Efficiency -

#### FS-AI POINTS:

Real World AI - Business Plan Presentation - Simulation Development - Engineering Design -

Sprint - **100** Skid Pad - Acceleration - Endurance - Efficiency -

You can find out more about Formula Student on the official website, linked here: https://www.imeche.org/events/formula-student





#### FORMULA STUDENT TEAM NAPIER

### NOW - JULY 2025

Surpass the results obtained at the 2024 competition.
Complete NV2 (our vehicle for FS-Class).
Implement SLAM on our FS-AI system.
Expand the teams diversity.
Foster steady growth of each department.

Placements: Technical top 30 / FS-AI top 3 / Sim Racing top 20.

### IN 5 YEARS

Move over to a more sustainable powertrain for FS-Class.
Research into the ADS-DT for future competition.
Establish lasting sponsorships to reduce the universities allocated budget for the team.

Placements: Technical top 10 / FS-Al 1st place / Sim Racing top 10.

#### 5+ YEARS

Obtain a podium finish in FS-Class.
Win FS-AI.
Obtain top 5 finish for FS-Class and FS-AI in concurrent years.
Moving towards EV powertrain.
Merge FS-Class entry and FS-AI class to build our own ADS-DT vehicle.
Produce more research and development opportunities.
Competing in other FS competitions around Europe

## CURRENT PROJECTS

#### FORMULA STUDENT TEAM NAPIER

Since our founding in December 2021, we have been dedicated to building a team that can successfully construct a car. To achieve this goal, we have established several key departments essential to the project's success.

#### TECHNICAL DEPARTMENT

This department works towards our FS-Class entry, NV2. Silverstone '24 saw the first appearance of this new and improved vehicle from its predecessor NV1 in concept class. This year, we are ready to complete this vehicle and compete in FS-Class for the first time. With the NV2 chassis and fundamentals complete, it is time to finalise our designs for our vehicle and begin manufacture. The team have turned their eyes to integrating a new, high performance engine exhaust, refined suspension system and sophisticated ergonomics. This ensures great handling and reliable performance to propel them through a design challenge never seen before at Edinburgh Napier University.





#### DRIVERLESS DEPARTMENT

The Driverless department are competing in the Dynamic Driving Task (DDT) category of the FS-Al competition, using a provided vehicle called the 'ADS-DV' to focus on the autonomous software systems before building on their own fully autonomous vehicle. The team have made significant progress in developing their system, which consists of five main components: perception, vehicle control, simulation, path planning, and mapping and localisation. Our team has an exciting road ahead of us curious and passionate team ready to tackle the challenge.

#### **BUSINESS DEPARTMENT**

Reshaped for this year, our business department is ready to tackle the challenge that is the Business Plan Presentation event at competition. Teams compete in a 'Dragon's Den' style business pitch where we must present to a panel of potential investors. Within this department, our members enhance their presenting skills, deal with realistic accounting, and learn about effective product placement and marketing strategies.



# CURRENT PROJECTS

#### FORMULA STUDENT TEAM NAPIER

#### OPERATIONS DEPARTMENT

The operations department are responsible for looking after the logistics of the team, from planning team socials, organising merch, getting the team to the start line, and everything in-between. The team worked very hard to ensure the team was ready and prepared for our second competition at Silverstone, where we camped and cooked all our meals on site. The operations department is constantly striving to develop new event ideas for the team, both inside the university and out in our wider community.





#### PR & MARKETING DEPARTMENT

Our recruitment had a strong start in the PR & Marketing department with lots of new members joining our team. Last year, we introduced our podcast "Talking Shift with FSTN", and created several new roles within the department, such as marketing, public relations, social media management, and website development. The team this year is striving to create more of an online presence for the team after gaining more interest in platforms like TikTok and Instagram reels. We are proud to present our fantastic sponsors with dedicated posts on social media. Additionally, all our sponsors have their own segment on our website.

#### MANAGEMENT

In addition to our departments, our management team have been incredibly important to get the ball rolling. They have been responsible for creating a strong team dynamic and ensuring everyone – regardless of experience – is able to contribute to the development of the team. In addition, the management have set the direction of the project by making key decisions and outlining important deadlines and time frames. They are also the main line of communication with the university staff members, who graciously support the team in many different aspects such as manufacturing support, procurement, health & safety and finance.



## RECENT NEWS

#### FORMULA STUDENT TEAM NAPIER

#### WINNING AWARDS!

Back in March, our team collectively won our university's society of the year award for the second year running in 2024. We are incredibly proud of this achievement and strive to continue the effort we have put into the first two years into our third for 2024-2025.





#### CREATING OUR CAR!

As a younger team, with little experience in vehicle design, it has taken hard work and dedication from our technical team members to research and develop our current designs for NV2. With the chassis now complete, our engine ready to test and our manufacture ready to begin for key components, it is time to push forward and get our first running car for competition in 2025.

#### KNOCKHILL VISIT!

In March, two of our business students and two engineering students, took a trip to Knockhill Racing Circuit to receive real life feedback on the provisional business plan strategy from experts in the Industry! The team had a great time and gained a lot of knowledge and support!





#### SILVERSTONE, JULY 2024

The competition this year was fierce, with our work being but to the test by the Formula Student judges. Overall, we placed **5th** in FS-AI, **30th** in Sim Racing, and **24th** in Concept Class. We gained a lot of new feedback that we can take forward with us for our next iterations we are taking to FSUK 2025.

## TEAM COMMITTEE

#### FORMULA STUDENT TEAM NAPIER



**Amy Anderson Team Principal** 



**Harrison Brown** Vice Principal



**Ben Lunney** Wellbeing Officer



**James Rendall Chief Engineer** 



**Cameron Liddell Driverless Lead** 



**Ruby Crawford** 



Victor Wroblewski Workshop Lead

**Operations Lead** 

**Alexander Hallard Driverless Co-Lead** 



**Teriza Parley** PR & Marketing Lead



**Tian Tian Brunton Business Lead** 

## EXPERIENCES

#### FORMULA STUDENT TEAM NAPIER



#### MARIA BAHNA

#### Alumni-Head of Path Planning, Driverless

"I joined the team in September 2022, and I held the responsibility of Path Planning Lead. I worked towards delivering an impactful solution for our Driverless system, alongside a group of likeminded friends, with whom I shared similar ambitions of making our mark at Silverstone 2024."

#### TERIZA PARLEY

#### PR & Marketing Lead

"Becoming the Marketing Lead provided me with a lot of opportunities to express my creative freedom in and outside the team. The team has helped me build my confidence in my abilities and in general. Having the opportunity to work with incredible people has encourage me to find my full potential."





#### JULIA SWIETOCHOWSKA

#### Logistics Manager, Driverless Department

Reflecting on her experience during the 2023-2024 year: "In the team I hold the position of Head of Vehicle Control. That means that my responsibility is to deliver successful solutions for controlling the Driverless car. I get to work on that alongside other very talented individuals, who now I get to call my friends. For me, the most gratifying part of being on the team is the feeling of belonging to something great."



#### FORMULA STUDENT TEAM NAPIER

Sponsoring Formula Student Team Napier provides a chance to invest in the future of engineering. Our team is comprised of talented and dedicated Edinburgh Napier University students, who are passionate about pushing the boundaries of technology and design. Through sponsorship you can help us continue to grow and develop our team. You will be assisting us in reaching our goal of competing in the Formula Student competition and supporting the next generation of engineers!

We are grateful for any kind of support you and your business can provide us, be that through financial support, material donations, or providing services such as manufacturing, transportation or advice. Our team will work with you directly to cultivate a tailored partnership arrangement that will be to your satisfaction.

We hope you consider supporting our team and joining us on our journey towards a shared success.

## WHAT CAN WE OFFER?

As a standard, we offer the following to all of our sponsors:



SOCIAL MEDIA

All our partners' logos are displayed on our website. In addition to this, we will advertise your brand across our social media platforms to thank you for your support.



#### EVENT INVITATIONS

Every partner will receive invitations to our exclusive team events, such as our car launch, testing days, and university open days.



#### CAR BRANDING

We will proudly display your logo on our car as the centrepiece of our technical team. This will culminate at the Formula Student competition at Silverstone, where your brand will be widely broadcast. We may also offer the following to our most dedicated sponsors, and are willing to provide tailored benefits to your business where possible.



#### ADDITIONAL SOCIAL MEDIA PROMO

We are able to work with you directly on tailored social media posts. An example of this may include a feature on our podcast "Talking Shift with FSTN" or a recorded visit to facilities and events.



#### STUDENT ENGAGEMENT

We are also able to provide direct access to our team members, who are some of Edinburgh Napier University's most dedicated and talented students, coming from a wide range of academic backgrounds. This is ideal if you are looking to network or recruit students for graduate roles.



**APPAREL BRANDING** 

There are opportunities for your logo to be on our team kit and merchandise that we wear both at the Formula Student competition at Silverstone, and throughout the year. This is extremely visible around Edinburgh Napier campuses!



OUR CAR, YOUR EVENT

For our most dedicated partners, there is the opportunity for us to take our car once complete, to your business or event, to highlight your crucial support of the team.

# FACULTY ADVISORS

#### FORMULA STUDENT TEAM NAPIER



**Dr Savvas Papdopoulos** 



Mr Babis Koniaris



Mr Daniel Gonzalez-Delgado



**Mr Norman Harris** 



#### FORMULA STUDENT TEAM NAPIER

Whether you are interested in partnering with us, learning more about what we do, or just have a technical question, we'd be delighted to hear from you! Please feel free to send us an email with your inquiry, and we'll get back to you as soon as we can.

If you would like to stay up to date with our latest activities, we encourage you to check out our social media channels or our website. We're keen to continue building these platforms and developing our community through our content.

Thank you for taking the time to read our prospectus. We appreciate your interest in our project and hope to have the opportunity to connect with you soon. We look forward to hearing from you!



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