

FS-AI DESIGN CONCEPT SPECIFICATION

FS2024

DUE 17:00 UTC 8 December 2023 – UPLOAD VIA FS TEAM ACCOUNT

University Name: University of Leeds
Team Name: Leeds Gryphon Racing
Entry type (ADS or DDT): DDT

Team Bio (written in third person, max 1000 characters, FOR INCLUSION IN SILVERSTONE EVENT PROGRAMME AND FORMULA STUDENT WEBSITE)

In 2023, Leeds Gryphon Racing embarked on an exciting new chapter with the establishment of its AI division. Drawing upon the accumulated knowledge and resources from previous master's projects, Leeds Gryphon Racing is ambitiously aiming to rank within the top 3 UK teams in the AI division for 2024.

Leeds Gryphon Racing is a diverse and dynamic blend of talent, comprising Masters and Undergraduate students from various academic disciplines. These include Electrical Engineering, Computer Science, Mechanical Engineering, and Business Studies, united by a common passion for innovation in racing and autonomous technology.

Leeds Gryphon Racing would like to thank the University of Leeds and their kind sponsors for their continual support. They are also incredibly grateful for the tireless efforts of their faculty advisor Kris Kubiak, technicians Alan Brickwood, Peter Grieve, Max Pepper, Zbigniew Pilichiewicz, and Sam Flint, as well as visiting lecturer Isobel Pollock.

ADS Only:

Key Design Features

Chassis/Body Type	<i>E.g. carbon tub; steel tube</i>	Computer	
Power train type	<i>Eg IC engine / electric</i>	Sensor(s)	
Power / engine	<i>Eg. 600cc twin 80bhp / electric motor – 50kW</i>	Target weight, kg	
<i>Other critical performance targets (Team decides)</i>	<i>Other critical performance targets (Team decides)</i>		
<i>Other Key Feature(s) (Team decides)</i>			

DDT only:

ADS-DV usage	<i>Already have own ADS-DV</i>	<i>Shared use of IMechE ADS-DV</i>
	<i>No</i>	<i>Yes</i>
Computer		InCarPC CQ67G Raspberry Pi 4B
Sensor(s)		PCAN-GPS / IMU and ZED Stereo camera fitted as standard. <i>You may add additional sensors, if you plan to do so please itemise here:</i> <ul style="list-style-type: none"> • Intel RealSense D435i • RPLidar A1

NOTE: *The organisers appreciate that things may change; it is not intended to limit or restrict the benefits of "learning by doing" but rather to ensure that changes which arise are recognised and related back to the overall objectives. This will assist explanations to Judges at the event in a logical (and desirably documented) manner and avoid being surprised by obvious questions on the rationale for various design or feature selections.*