

## Introduction to Motorsport Engineering Short Course 2025 (provisional timetable subject to change)

Timetable: 28th July - 1st August 2025

Venue: IMEC MR1, IMEC Workshops, MUEAVI, CIC

Times	Monday 28th July	Tuesday 29th July	Wednesday 30th July	Thursday 31st July	Friday 1st August
09:00-10:00	Welcome, the week ahead and Health and Safety - MB, JB, VMR Competitive Advantage - MB	Introduction to Manufacturing and Materials extant in motorsport TiR	Motorsport Powertrain Performance & Simulation - AC	Competition vehicle performance and Dynamics - JB/MB	Competition vehicles - data logging practical (using VBOX)
10:00-11:15	Motorsport History and Competition Vehicle Classes - KB/MB/JB	Workshop: hands on with F1 car and race bike reviewing materials selection, joining techniques and construction.	Motorsport Powertrain Performance & Simulation - AC	Competition vehicle performance and Dynamics - JB/MB	Competition vehicles - data logging practical (using VBOX)
11:15-11:30	Coffee	Coffee	Coffee	Coffee	
11:30-13:00	Vehicle Electrical Systems - KB	Workshop: hands on with F1 car and race bike reviewing materials selection, joining techniques and construction.	Motorsport Powertrain Simulation Workshop (hands-on with powertrain simulation software) - AC	Competition vehicle performance and Dynamics - JB/MB	Competition vehicles - data logging practical (using VBOX)
13:00-14:00	Lunch	Lunch	Lunch	Lunch	
14:00-15:15	Vehicle Electrical Systems - KB	Workhop:Component investigations, examing race car components to determine materials selection rationale and construction.	Engine and Gearbox Practical - TR/AC	Competition Vehicles - Chassis and Suspension practical - SS/TD/MB	Driving Simulator and Data Analysis Practical (using DiL Simulators and MOTEC) - MB
15:15-15:30	Coffee	Coffee	Coffee	Coffee	Coffee
15:30-16:30	Vehicle Electrical Systems - Data Analysis Assignment -KB	Manufacturing constraints for motorsports. TiR	Engine and Gearbox Practical - TR/AC	Competition Vehicles - Chassis and Suspension practical - SS/TD/MB	Driving Simulator and Data Analysis Practical (using DiL Simulators and MOTEC) - MB
16:30-17:30	Facilities overview (IMEC. MUEAVI, Building 54)	Cranfield Impact Centre Visit and overview of impact testing	Engine and Gearbox Practical - TR/AC	Competition Vehicles Practical - MB/JB Understanding the impact of set-up changes to maximise vehicle performance	Wrap up and feedback session including certificates of attendance