



LUNAR
Brighton Secondary Schools 2024
F1 in Schools World Finals
3rd Overall

2026

Victorian State Finals Supplementary Regulations

Development & Professional Class

Version 1.0

Managed by

WYNDHAM
TECH
SCHOOL



Luna - Brighton Grammar Schools Victoria - 2024 F1 in Schools National Champions & 3rd Outright F1 in Schools World Finals - Saudi Arabia
Leo Jansen: Team Manager, Oliver Chernikeeff: Engineering Director, Carey Tong: Enterprise Director, Max Zylberman: Digital Engineer, Liam Jones: Manufacturing Engineer)

ENQUIRIES

Wyndham Tech School
Building 14,
Gate 2 via, 235 Hoppers Lane
Werribee VIC 3030

E: wtg-programs@vu.edu.au

W: www.wyndhamtechschool.vic.edu.au/vicstemracing

COPYRIGHT NOTICE

This document, all its contents (including images, text, procedures) are copyright 2025 Re-Engineering Australia Foundation Ltd. All rights reserved.

- Re-Engineering Australia Foundation Ltd. PO Box 136 Castle Hill NSW 1765 Australia.
- Phone: +61 2 9620 9944. Email: contact@rea.org.au

REA, Re-Engineering Australia, the Re-Engineering Australia Foundation Logo, and other associated logos are trademarks of Re-Engineering Australia Foundation Ltd. All rights reserved

STEM RACING: and the associated logos are trademarks of STEM Racing HQ.

Formula 1®: F1®, Formula 1® and the associated logos are trademarks of Formula 1® Licensing BV.

ACKNOWLEDGMENT

In preparing the STEM Racing Technical Rules, certain wording and images have been adopted from the Australian National Final Technical Regulations.

REPRODUCTION

This document may only be reproduced by schools registered in the STEM Racing program in Australia regardless of whether they intend to enter teams into the competition. To register your school in the STEM Racing program at no cost, [click here](#). Schools outside of Australia must first seek permission from Re-Engineering Australia Foundation Ltd. Prior to reproducing this document.

ALTERATIONS

Wyndham Tech School reserves the right to alter any specifications and documentation associated with the 'Challenge' without prior notice.

PREFACE – SUMMARY OF MAIN REVISIONS FROM REVIEW OF 2026 SEASON	4
ARTICLE C1 – DEFINITIONS	5
C1.16 Booth Floor Area	5
C1.25 Peer Review	5
ARTICLE C2 – GENERAL REGULATIONS	5
C2.8 Wyndham Tech School Corporate Partner Logos, Word Marks & National Support	5
ARTICLE C3 – COMPETITION AND JUDGING FORMAT	5
C3.7 Point Allocations	5
ARTICLE C8 – MARKETING JUDGING (205 points)	6
C8.4 Set Up	6
C8.5 State Final Trade Displays	6
ARTICLE C10 – RACING (170 points)	6
C10.3 Racing Procedures	6
C10.4 Race Scoring for Awards	6
ARTICLE C14 – AWARDS	6
C14.4 List of Awards to be Presented	6
ARTICLE C16 – PEER REVIEW (70 points)	6
C16.1 General Information	6
C16.2 Judging Process / Procedure	6
C16.3 Key Criteria	7
ARTICLE C17 – DEVELOPMENT CLASS TECHNICAL REGULATION CHANGES	7
C17.1 Body	7
C17.2 CAM Requirements	7
C17.3 Minimum Mass	8
C17.4 Standard Wheels	8
C17.5 Standard Grommets	8

PREFACE – SUMMARY OF MAIN REVISIONS FROM 2026 NATIONAL REGULATIONS

This document only contains 'Supplementary Regulations' Separate documents encompasses the 'Competition and Technical Regulations.'

This preface provides an overview of all competition related regulations that have been revised from the 2026 National season's regulations.

It is each team's responsibility to thoroughly read this document in order to identify wording changes and to understand any impact this **MAY** have on their project.

ARTICLE C1 -	DEFINITIONS
C1.16	Updated Booth Floor Area
C1.25	Added definition of Peer Review
ARTICLE C2 -	GENERAL REGULATIONS
C2.8	Wyndham Tech School Logos
ARTICLE C3 -	COMPETITION AND JUDGING FORMAT
C3.7	Updated Point Allocations to remove Knockout Racing
ARTICLE C4 -	SPECIFICATIONS JUDGING - Nil changes.
ARTICLE C5 -	ENGINEERING JUDGING - Nil changes.
ARTICLE C6 -	Not in use
ARTICLE C7 -	PORTFOLIO JUDGING - Nil changes.
ARTICLE C8 -	MARKETING JUDGING
C8.4	Excluded trestle tables from maximum size of items restrictions
C8.5	Revised trade display dimensions
ARTICLE C9 -	VERBAL PRESENTATION JUDGING - Nil changes.
ARTICLE C10 -	RACING
C10.3.5	Knockout Racing draws randomly allocated.
C10.4.3	Knockout Racing scoring removed.
ARTICLE C11 -	CAR REPAIR - Nil changes.
ARTICLE C12 -	GRIEVANCES - Nil changes.
ARTICLE C13 -	JUDGES - Nil changes.
ARTICLE C14 -	AWARDS - Peer Review Added
ARTICLE C15 -	APPENDICES
CRITERIA 12	New Criteria 12.1 Branding & Identity, 12.2 Rendering, 12.3 Quality of Display Car, 12.4 Car Display, 12.5 Trade Display Design & Impact
ARTICLE C16 -	PEER REVIEW - New category
ARTICLE C17 -	DEVELOPMENT CLASS TECHNICAL REGULATION CHANGES - New category
C17.1	Body
C17.2	CAM Requirement
C17.3	Minimum Mass
C17.4	Standard Wheels
C17.5	Standard Grommets

ARTICLE C1 - DEFINITIONS

C1.16 Booth Floor Area

A booth floor area of 2000mm x 1000mm will be allocated to teams for erection of their trade display. NO clear perimeter will be provided. The primary viewing of the display SHOULD be from the front 2000mm wide edge.

C1.25 Peer Review

A structured judging process where participating teams evaluate the displays or work of other teams using a provided rubric or checklist. Peer review is conducted anonymously and fairly, with each team required to assess multiple entries. Responses may include checkboxes and written feedback.

ARTICLE C2 - GENERAL REGULATIONS

C2.8 Wyndham Tech School Corporate Partner Logos, Word Marks & National Support

C2.8.1 Wyndham Tech School Corporate Partner Logos

[Advice]

Teams **MUST** include the Wyndham Tech School Corporate Partner logos in their project and failure to use some or all of the logos as required will be reflected in a team's marks in the relevant judging criteria. The logos and branding guidelines (where they exist) are available to download from the Wyndham Tech School Learning Space via the Wyndham Tech School website and teams **MUST** be fully aware of the conditions outlined in these documents. The two levels of Corporate Partners are clearly identified within the downloadable file.

C2.8.1.1 Level 1 Corporate Partner Logos

[Advice]

These **MUST** be applied to a team's cars, portfolio, trade display and uniform. Car decals for Level 1 Wyndham Tech School Corporate Partners are supplied to team immediately prior to the Submission process and **MUST** be applied to both Cars A & B and on identical display cars. Teams are **NOT** permitted to produce their own corporate partner decals. Refer to the Technical Regulations.

C2.8.1.2 Level 2 Corporate Partner Logos

[Advice]

These **MUST** be applied to a team's portfolio and trade display as a minimum.

ARTICLE C3 - COMPETITION AND JUDGING FORMAT

C3.7 Point Allocations

[Advice]

At Victorian State Finals, points will be awarded to teams across eleven (11) criteria with maximum possible scores as detailed in the following table.

Points Allocation Table		
Criteria	Categories	Victorian State Finals
1	Specifications	80 points
2	Engineering CAD	70 points
3	Engineering Manufacturing	70 points
4	Engineering Design Process	70 points
5	Project Management	100 points
6	Portfolio Design	60 points
7	Marketing Branding	60 points
8	Marketing Trade Display	145 points
9	Verbal Presentation Technique	70 points
10	Verbal Presentation Content	95 points
11.1	Grand Prix Racing	150 points
11.2	Reaction Time	20 points
Total		990 points

ARTICLE C8 - MARKETING JUDGING (205 points)

C8.4 Set Up

C8.4.1.1 Maximum Size of Items

Trestle Tables will not be included in the maximum size of items restrictions.

C8.5 State Final Trade Displays

C8.5.2 Walling & Floor Area Dimensions

Teams will not be allocated a 600mm clear perimeter around their trade displays. Due to this C8.5.3 does not apply.

ARTICLE C10 - RACING: CRITERIA L (170 points)

C10.3 Racing Procedures

C10.3.5 Knock-out Competition Procedure

Teams will be randomly allocated to a draw rather than allocated the order by seeding.

C10.4 Racing Scoring for Awards

C10.4.3 Knockout Racing

No points will be given for Knockout Racing.

ARTICLE C14 - AWARDS

C14.1 List of Awards to be Presented

C14.1.1 Awards for Development and Professional Classes

KNOCKOUT CHAMPIONS AWARD

No point will be awarded but the team with fastest race time in:

Criteria 11.3: Racing/Knockout Racing.

STUDENTS CHOICE

Team with highest combined score for:

Criteria 12: Peer Review

ARTICLE C16 - PEER REVIEW: CRITERIA 12

C16.1 General Information

C16.1.1 Competition Class Provisions

Peer review applies to ALL competition classes.

C16.1.2 Team Preparation

Each team **MUST** prepare a Trade Display or Poster to be reviewed by their peers. Some Branding elements **MUST** be contained within a team's Trade Booth or Poster. Read the Peer Review Score Cards carefully to ensure that all areas to be assessed are included within the context of their Poster or Trade Display.

C16.2 Judging Process / Procedure

The Peer reviewed elements will be completed primarily at the Poster or Trade Display. Scoring will be conducted by students from other teams using a digital form accessed during the event. Each student will be assigned five teams to assess, none of which may be from their own school or classification.

C16.2.1 Scoring Methodology

Each of the five peer review criteria is worth a maximum of 10 points. Each criterion contains a checklist of 10 observable descriptors. Peers will assess whether each descriptor is present or not. A point is awarded for each descriptor if more than 40% of reviewers indicate that the item was observed. The total score per criterion is based on the number of descriptors meeting this threshold.

C16.2.2 Benchmarking and Score Moderation

A combination of appointed judges and educators may provide additional peer-style reviews to serve as a reference point for moderation. These will not affect official team scores but will assist in identifying review inconsistencies.

Score Moderation

Statistical methods will be used to detect significant outliers in peer reviews. Outlier scores may be adjusted or excluded to ensure fairness.

C16.2.3 Written Feedback

Each peer review includes a single text box for written feedback. While not scored, this feedback is strongly encouraged. Students are expected to provide constructive, respectful comments highlighting strengths and/or areas for improvement.

C16.3 Key Criteria: CRITERIA 12

C16.3.1 Team Branding & Identity (10 points)

C16.3.1.1 What Will Be Assessed?

The Peer judges will assess a team's branding primarily within their Trade Display.

- Team Name
- Final Logo Design
- Logo Application
- Team Branding
- Team Sponsors

C16.3.2 Car Rendering (10 points)

- Rendering (On poster or Trade Display).

C16.3.3 Quality of Display Car (10 points)

- Quality of Finished Product - Geometry/Form.
- Quality of Finished Product - Surface finish.

C16.3.4 Car Display (10 points)

A Trade Display is to visually 'sell' the team's most important key messages in snapshot form for assessment and event promotion. The Peer judges will assess a team's trade display content and structure.

- Car Display

C16.3.5 Trade Display / Poster Design & Impact (10 points)

A Trade Display is to visually 'sell' the team's most important key messages in snapshot form for assessment and event promotion. The Peer judges will assess a team's trade display content and structure.

- Information Design
- Visual Design & Impact
- Structural Design
- Materials Selection & Use

C16.3.6 Peer Review Completion (20 points)

Teams will gain 20 points upon completion of all allocated peer judging by all registered team members present at the competition. If a registered team member is not present at the competition, it is the teams responsibility to inform the Chair of Judges.

C16.4 Unsportsmanlike Conduct

[20pt Penalty per Instance]

Unsportsmanlike conduct during the peer review process will result in penalties. **EACH** instance of peer feedback found to contain any of the following will attract this penalty:

- Inappropriate, offensive, or disrespectful language
- Discriminatory remarks or behavior of any kind
- Deliberate score manipulation (demonstrable patterns of assigning unreasonably low or high scores to influence outcomes)

ARTICLE C17 - DEVELOPMENT CLASS TECHNICAL REGULATION CHANGES

C17.1 Body

The body is defined as the primary connective structure of the car. It is a solid, uninterrupted piece of balsa wood or 3D printed plastic which begins at either the front axle centre line or at the boundary of the front wheel support, and extends rearward. For dimensional purposes the body also includes any attached decals and surface finishes. Any balsa wood OR 3D printed plastic forward of the front axle centre line is not defined as car body. The body can be thought of as the monocoque car chassis with which all other legal components are integrated.

C17.2 CAM Requirement

The body of Development Class cars **MUST** be manufactured via CAM machinery, using either a CNC router/milling machine, stereolithography (SLA) 3D printer, selective laser sintering (SLS) 3D printer, or fused deposition modeling (FDM) 3D printer. This manufacturing process should occur at your school/college or at a designated manufacturing centre/partner site.

C17.3 Minimum Mass

The minimum mass of the complete car product, without the CO2 cylinder fitted **MUST** be 55 grams for Development Class Cars.

C17.4 Standard Wheels

Teams **MUST** use any combination of four (4) unmodified REA standard wheels, OR WTS standard wheels manufactured by the team using the supplied file without any dimensional changes, the files can be downloaded from <https://www.wyndhamtechschool.vic.edu.au/vicstemracing>. No other parts can be added to the wheels. Removal of the sprue remnant is acceptable.

C17.5 Standard Grommets

Teams **MUST** use four (4) unmodified REA axle grommets OR WTS grommets manufactured by the team using the supplied file without any dimensional changes, the files can be downloaded from <https://www.wyndhamtechschool.vic.edu.au/vicstemracing>.

CRITERIA K - PEER REVIEW SCORE CARD

JUDGING SUB CATEGORY	PEER REVIEW	TEAM ID	
PRIMARY EVIDENCE	TEAM TRADE DISPLAY	TEAM NAME	
SECONDARY EVIDENCE		SCHOOL	
CRITERIA	12	COMPETITION CLASS	

CRITERIA	1 POINT PER CONFIRMED CRITERION		SCORE
			/10
12.1 Branding & Identity	The team name reflects their identity, values, or theme. The logo is original, clear, and easy to recognise. The same logo appears on the car, display, and documents. Brand colours are used consistently across all materials. Fonts and design style are consistent throughout. The branding feels polished and professional. The team slogan or message is easy to understand. The branding makes the team feel memorable or distinct. Sponsors are acknowledged clearly and professionally. Team branding matches their presentation style and personality.		/10
12.2 Rendering	A 3D render of the car is clearly displayed. The render is high-resolution and well-lit. The render includes multiple views (e.g. top, side, isometric). The render accurately matches the physical car on display. Car colours and branding in the render match the final product. The render shows attention to design details. The environment or background enhances the presentation. The render looks professional and well-composed. The render helps explain the car's design choices. The render includes annotations or explanations.		/10
12.3 Quality of Display Car	The car's shape matches the CAD or render. The car is symmetrical and balanced. There is no visible warping or misalignment. The axles are straight and wheels are well placed. The surface is smooth and evenly finished. There are no visible printing or machining marks. Branding or paint is clearly applied and well-aligned. The car includes small details that show craftsmanship. The overall finish is clean and professional. The car looks ready for competition.		/10
12.4 Car Display	The car is placed where it's easy to see. The car is positioned as a key feature of the booth. The display elevates or frames the car attractively. Labels or signs help explain the car. The car is angled to highlight its best features. Lighting enhances how the car is viewed. The display encourages viewers to stop and look closely. The car display links visually to the team's branding. The car is secure and protected from handling. The display creates a sense of pride or quality.		/10
12.5 Trade Display Design & Impact	The booth layout is well organised and balanced. Colours and design match the team's brand. Text and graphics are easy to read. Information is laid out clearly and logically. The display uses creative visual elements. Sponsors are recognised in a consistent, visible way. The booth draws attention from a distance. The message or theme is immediately clear. Innovative or interactive elements are included. The overall presentation is professional and impressive.		/10
12.6 Peer Review Completion	All team members have completed peer review of assigned teams (0 or 20 Points).		/20
	Peer review GRAND TOTAL		/70

WYNDHAM
TECH
SCHOOL

www.wyndhamtechschool.vic.edu.au