

# Robby Norris

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## EDUCATION

**Purdue University**, School of Mechanical Engineering Indianapolis, IN  
**Bachelor of Science in Motorsports Engineering - GPA: 3.41/4.00** May 2028  
**Relevant Courses:** Vehicle Dynamics, Motorsports Systems Engineering, Motorsports Programming and Computer Modelling

## TECHNICAL SKILLS

**Data Collection and Analysis** (Cosworth Pi Toolbox)  
**Finite Element Analysis** (SolidWorks)  
**Computational Fluid Dynamics** (STAR-CCM+)

**Computer-Aided Design** (SolidWorks)  
**Topology Optimization** (SolidWorks)  
**Programming** (Python, MATLAB)

## MOTORSPORTS EXPERIENCE

**FG3 Performance Engines** May 2026 – Present  
General Service Speedway, Indiana

- Contributed to the assembly, service, and testing of vintage Formula 1, IndyCar, Sprint Car, and Silver Crown engines.
- Executed quality inspections and clearance measurements on engine components, assisted with cam timing, and rebuilt various race engine components.

**Pit Crew**  

- Performed setup and mechanical work such as stagger, shock, tire pressure, and fueling adjustments on a 410 Sprint Car and pavement Midget.

**Norris Motorsports** September 2022 – Present  
Driver, Mechanic, Assistant Car Chief San Diego, California

- Earned multiple dirt oval main event wins in the Pure Stock class at Barona Speedway.
- Maintained and developed the 1976 Chevrolet Nova, performing race preparation, mechanical repairs, setup adjustments, and trackside troubleshooting while also competing as the driver.

**CR7 Motorsports** July 2026  
Apprentice Brownsburg, IN

- Shadowed engineers at CR7 Motorsports during the NASCAR Truck Series race weekend at IRP.
- Learned from race engineers about shock and spring data and setup, simulation software, tire preparation and management, and optimizing pace within NASCAR regulations.

**Herzog Racing** June 2025  
Apprentice Madera, CA

- Supported a championship-winning asphalt late model team during race preparation and trackside operations.
- Assisted with suspension and tire-related setup work while evaluating how changes affected vehicle behavior.

## ENGINEERING PROJECTS

**Motorsports Practicum** August 2026 – Present  

- Designing and building a Rat-Rod Wheelbarrow from scratch for Purdue's Motorsports outreach program.
- Researching cost-effective parts, developing the design in SolidWorks, and fabricating at Dallara's Indianapolis lab.

**iRacing Data Analysis (Cosworth Pi Toolbox)** May 2026 – Present  

- Developed setups for various cars and tracks in iRacing using Cosworth Pi Toolbox.
- Analyzed tire temperatures, splitter heights, shock deflection, and throttle/brake traces to support setup adjustments.

**Purdue University VIP (Vertically Integrated Projects)** August 2025 – May 2026  

- Collaborated with an aerodynamics specialist to create a conceptual aero package for a Pikes Peak time attack car.
- Evaluated drag, downforce, and aerodynamic balance in STAR-CCM+ to guide SolidWorks aero design.

**Traxxas RC Car Redesign** January 2026 – May 2026  

- Recreated a Traxxas RC chassis and performed FEA and topology optimization in SolidWorks.
- Modeled and assembled individual components and used surface modeling to develop redesigned bodywork

**Purdue University EPICS (Engineering Projects in Community Service)** August 2024 – May 2025  

- Led a 12-member engineering team through the design and fabrication of a racing simulator.
- Co-designed the simulator chassis, assembled and tested the system, and successfully delivered the project on schedule.