



Formula SAE® Workshop I February 15, 2025

Start time	Duration	Presentations	Speaker	Location
7:30 AM	0:30	Registration and breakfast		Architecture Gallery (A210)
8:00 AM	0:15	Welcome <i>Workshop Overview, Sponsor Introductions.</i>	Matthew Meyer, General Motors	Architecture Auditorium (A200)
8:15 AM	0:45	Traveling to and at the Competition <i>Tips on preparing for and traveling to the competition, and suggestions to make things go more smoothly at the competition.</i>	Michael Royce, Albion Associates	Architecture Auditorium (A200)
9:00 AM	1:00	Enhanced Driver Techniques <i>This presentation will cover driving techniques, course analysis, and driver preparation methods to optimize performance in the context of FSAE competition. It will cover basic information for the beginner and progress to insights for the experienced drivers.</i>	Al Chan, SCCA	Architecture Auditorium (A200)
10:00 AM	0:15	Networking Break		Architecture Gallery (A210)
10:15 AM	1:00	Aerodynamics Development <i>The lecture is an introduction to low speed aerodynamics with the use case specific to FSAE. A systems engineer approach is taken with discussion of vehicle dynamics impacts of aerodynamic devices, starting with interactions of tire mechanics through aerofoil selection, cooling and application of CFD.</i>	John Bucknell, Virtus Solis Technology	Architecture Auditorium (A200)
11:15 AM	1:00	Data Acquisition <i>The objective of this presentation is to give FSAE students an introduction, by example, to data acquisition hardware (data loggers and sensors) and data processing using relatively inexpensive, commercially available equipment and software.</i>	Tim Drotar, Stellantis	Architecture Auditorium (A200)
12:15 PM	1:00	Networking Lunch		Architecture Gallery (A210)
1:15 PM	1:00	Chassis Testing and Tuning <i>This presentation will guide you through planning, preparation, and execution of a development plan for the steering and handling characteristics of your Formula SAE vehicle. The focus of the presentation is on developing a reliable vehicle and improving its vehicle dynamics performance.</i>	Darrell Hancock, Stellantis	Architecture Auditorium (A200)
		IC Engine Development <i>The presentation is an overview of the development of IC engine hardware with the use case specific to FSAE. Major subsystems are described, their contribution the motive force of the vehicle as well as the control system development methods to extract the maximum performance out of the engine hardware.</i>	John Bucknell, Virtus Solis Technology	UTLC Gallery (T210)
2:15 PM	0:15	Networking Break		Architecture Gallery (A210)
2:30 PM	1:00	Lap Time Simulation <i>The presentation will walk through the steps to create a basic quasi-static lap time simulation. Key topics will include foundational equations, building a track and vehicle model, correlating and using the simulation.</i>	Max Taylor, Stellantis	Architecture Auditorium (A200)
		How to Get Through EV Tech Inspection <i>An overview of mechanical EV powertrain technical inspection, and how to build your car to breeze through. The talk will delve into the technical details behind the rules, and common mistakes seen in competition.</i>	Simon Cohen, Roush	UTLC Gallery (T210)
3:30 PM	:15	Networking Break		Architecture Gallery (A210)
3:45 PM	0:30	The Career Hunt, A Job Panel Discussion with Q&A <i>This panel will discuss, give advice and perspectives around helping students to land their first internship, Co-op or professional job by highlighting their FSAE experience on a resume or in an interview. Please bring questions!</i>	Steffano Martinez, Bosch; Vismata Sonagra, Bosch; Jacqueline Zimny, General Motors	Architecture Auditorium (A200)
4:15 PM	0:15	Open Resources for Formula SAE Teams <i>This presentation will briefly cover FSAE resources from trusted sources to support the design, manufacture, and development of FSAE cars as well as how to succeed at competition.</i>	Darrell Hancock, Stellantis Michael Royce, Albion Associates	Architecture Auditorium (A200)
4:30 PM	0:30	Open Forum (General Questions)	All Speakers	Architecture Auditorium (A200)
5:00 PM		Adjourn For additional information go to: www.sae.org/attend/student-events , and www.sae-detroit.org		
Speakers and Times Subject to Change				