

ECOCAR

INNOVATION CHALLENGE

DRIVING THE FUTURE

Integration Manager Lead

About the Competition: The EcoCAR Innovation Challenge is a four-year collegiate engineering competition in which university teams develop intelligent and energy-efficient vehicle technologies using advanced controls, electrified propulsion, automation, artificial intelligence, and industry-standard development processes.

Mississippi State University will compete in the General Motors track using a 2026 Chevrolet Blazer SS Police Edition EV. Students will contribute to the design, integration, and validation of advanced propulsion, electrical, controls, and autonomous vehicle systems.

Overview: This posting is for a fully funded graduate research assistant position (or hourly undergraduate for well-qualified candidates) to serve as the System Design and Integration (SDI) Lead for the MSU EcoCAR Team. The SDI lead will be responsible for leading the physical development and integration of propulsion systems, autonomous systems, auxiliary systems, and vehicle calibration.

Hours: 20 hours/week, greater availability while approaching deadlines for deliverables and during travel expected

Benefits:

- Graduate students
 - Full tuition exemption, ~\$2000/month stipend, and health insurance reimbursement
- Undergraduate students
 - Hourly pay
- Industry-led experience with a multidisciplinary team
- Travel to workshops and competitions
- Mentorship and training from industry engineers, faculty, and other students
- Competitive edge for careers in the automotive and mobility sectors

Skills and Qualifications:

- Leadership and team management
- Ability to articulate ideas to both technical and non-technical audiences in presentations and writing
- CAD and FEA software experience (EcoCAR uses Siemens NX)
- Ability to read and generate electrical schematics
- Automotive Systems and Integrations
- Vehicle calibration and validation testing
- Willingness to learn (the competition provides in-depth training on many subjects)

Preferred Skills and Qualifications:

- Manufacturing capabilities (CNC, 3D Printing, Welding, Automation, etc.)
- Proficiency with MATLAB, Simulink, or Python

Requirements:

- Currently accepted/enrolled in an engineering program at MSU for FALL 2026
 - Must be available until May 2027 (minimum)
- Majoring in Electrical and Computer Engineering, Computer Science Engineering, Software Engineering, or related field

Job Description:

- Lead Integration Subteam:
 - Recruit and train subteam members
 - Lead, execute, and plan Integration subteam workshops
 - Manage deliverable progress and deadlines
- Oversee vehicle testing, track and execute all project-level activities and knowledge transfer and report to project manager
- Develop prototypes in a timely manner
- Complete a DIS course

Interested candidates should apply soon [here](#) to allow onboarding with the start of the semester. If you have any questions, please send an email to jeball@ece.msstate.edu.