



AME 491: Undergraduate Design Projects: Solar Car

Faculty Advisor:	Dr. Emma Singer eksinger@usc.edu OHE 500E
Spring 2025 meeting time:	Monday 6:00pm, BHE 301
Lab location:	Baum Family Maker Space
Organization website:	uscsolarcar.com
Organization contact:	uscsolarcar@gmail.com

AME 491 is a one-credit elective course allowing students to receive educational credit for participating in an undergraduate design team. Before enrolling in this class, it is strongly recommended that you spend at least a semester with the team to get a feel for the roles and expectations of this expansive project. This is at its essence a type of self-directed research and requires discipline and commitment to **participation**.

To receive credit for this class, the following objectives must be met:

Attend general & sub-team meetings

- General meetings with the faculty advisor are held once a week in the evening – time currently Mondays at 6pm but subject to change given the team leadership availability. These are usually in-person but may periodically be held over Zoom.
- Sub-team meetings are self-organized and are scheduled based on current projects and timelines. Participation in sub-teams requires a commitment to spending time in the lab.
- General communication is through the team discussion channel on the SC Solar Discord Channel.

Ownership of a project that furthers SC Solar Car's goals

- Choose a project idea (can be something new or based on observed needs from team experience) with the team & sub-team lead.
- Keep notes on the project's development & have regular check-ins with the faculty advisor.
- Be ready to periodically present presentation slides at general or subteam meetings to update the group on your project or solicit advice from your peers.
- Prepare a Google Doc for the end of the semester that documents the contribution to the team. This should include a short abstract that allows someone to quick-reference the work. The end goal is that this will live on in the team archives/Wiki and that your work can serve a purpose even as you move on from the team. Include what you did, why you did it, and any relevant references/sources that informed your choices.
- Learn something! While this bullet list may seem intimidating for someone working independently, this is just a guideline. It is inherently part of the process that some ideas will not pan out, which is okay. Work on scope control and think of something achievable in a single semester by a single person.

Be a good custodian of the shared Baum Family Maker Space

- **Attend safety training.** This is organized through BFMS and is required to enter.
 - Learn the tools of the engineering trade! Spend time in lab to familiarize yourself with the team workspace, tools, and equipment.
 - Be safe. If you think something looks like a bad idea, it probably is. Ask for help when needed – that is what the space is for!
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If you wish to enroll in AME 491 and “agree to the terms” above, please email E. Singer (eksinger@usc.edu) with your Student ID# to request D-Clearance.