



Design → Build → Compete

Society of Automotive Engineers (SAE) Automotive Design Projects

- Student Society Extra-Curricular Activities
- One year cycle – new car each year
- Freshman through Senior experience
- Highlighted Competitions & Challenges:
 - Formula SAE (Illini Motorsports)
 - Formula Electric SAE (Illini Formula Electric)
 - Baja SAE (Baja Illinois)





Society of Automotive Engineers (SAE) Automotive Design Projects Overview of Class Structure

Freshman

Sophomore

Junior

Senior

ME199 SAE
1 credit hour

ME199 ADV
3 credit hour

SAE Senior
Design
3+3 credit hour

*Generally Free Elective
But Tech. Elective Option
(MechSE students)
– 3 consecutive semesters
Design sequence with
documented design activity*

*See ME199 Sequence –
Tech Elective Requirements*

*Free Elective
Instructor Approval
Required*

*3 hrs **ENG491** SAE
Tech Elective in Fall
+
3hrs **ME470** SAE
Senior Design in Spring*

*Instructor Approval
Required – must
complete two semester
Sequence*



ME199 - 1 hr Class

- Attend weekly meetings (attendance will be taken – if conflict, need sub-team leader meeting attendance validation)
- Be an “apprentice member” of one or more of the project teams. You will attend sub-team meetings and help within your capabilities.
- Complete 2 one page reports – 1st on ‘planned’ activities/involvement, 2nd at semester end on ‘actual’ SAE activities
- 3 x 1 credit, tech elective design sequence – need design report at end
- Grade based on attendance, participation, contribution, and effort (from Team Leader and Peer Evaluations)



ME199 ADV - for 3 credit hours

- Typically in your Junior year – 3 credits for one or both semesters.
- Work as full members of the FSAE team
- Graded by presentations, reports, work ethic and performance (meeting build schedule and peer performance grading)

ENG491/ME470 SAE – 2 semester sequence

- Team Leaders and full-time team members
- Graded by presentations, reports, work ethic and performance (meeting build schedule and peer performance grading)
- Senior Design Credit only given if BOTH semesters completed with documented evidence of contributions in presentations and reports
- If contribution insufficient in 1st semester (Fall), you will not be allowed to enroll for second semester ME470 SAE.



Design/Build Schedules

- *Design freeze and presentations schedule at least by **Thanksgiving***
- *Chassis jigging and welding completed by end of **Winter Break**.*
- *CARS MUST BE “COMPETITION READY” BY Engineering Open House (EOH)*
- *SHOWCASE TO SPONSORS – EOH ~ **MARCH***
- *First Competitions – **April/May***