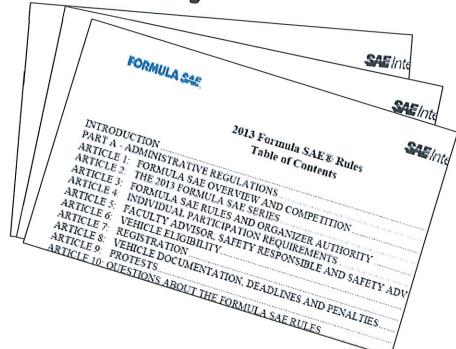
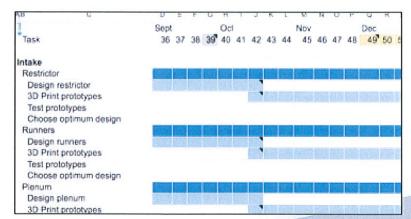


# Defining the Project

- Read the RulebookUnderstand the Rulebook
- Know the Rulebook
  - Develop a Gantt Chart
    - Design Phase
    - Material / Parts Order
    - Build / Manufacturing Phase
- Reasonable & Attainable Milestones
  - Begin build
  - Rolling chassis
  - Car under its own power
  - First test date
  - Vehicle unveiling







## Defining the Project

#### **Understand Your Capabilities**

- Design
- Simulation
- Manufacturing
- Soft skills
- Leadership skills
- Time Management
- Personnel
- Time Commitments
- Dedicated vs. part time vs. not directed







## Knowing the project basics

#### Before and during the project plan formulation...

- Put together a library in your design room
  - FSAE rules
  - Powertrain, Chassis, suspension, dynamics
  - Simulation software tutorials
  - Prepare to Win, Tune to Win, Engineer to Win books by Caroll Smith
- Use this library
- Hold workshops/tutorials for members
- Start building after you have a goal of how the car should perform with the time, effort, and funding that will go into it
- Set optimistic goals which CAN be achieved
- Goals must be quantifiable! What are your metrics to determine if each goal is achieved?



### Study the Competition

### To help with determining your Goals...

- Make a detailed comparison between your team and the winning teams
  - See how you could have done better (even if placed 1<sup>st</sup>)
  - How many more points were needed to achieve your goal?
- Analyze all static and dynamic events
  - Realize your strengths and weaknesses
  - Based on experience & <u>kept records</u>, determine which event would give <u>most points per time & dollar invested</u>



### Study the Competition

FSAE MIS
Points vs Place 2007, 2009-2012

