

ASME Glider Challenge



- Teams of up to four compete in Glider Challenge Competitions
- Final competition at end of semester on 5/4/2023
- Glider primarily to be 3D printed parts and assemblies
- All gliders to be hand launched and judged based on their tier
- Workshops coming soon to help launch teams!

Glider Challenge Tiers



- **Uncontrolled Flight Tier: (Tier 1)**
 - Optimize lift & minimize drag + weight on the glider for maximum flight distance
- **Controlled Flight Tier: (Tier 2)**
 - Make use of flight control to enhance the fly-ability of their glider
 - Judged based on time aloft
 - Bonus points given to those who design and program their own flight controller

Glider Challenge Timeline



- 8-week Timeline to begin week of 03/06
- Aerofoil basics and background
 - 3/7 Tuesday from 1pm-2:30pm
- CAD Solidworks workshop
 - 3/14 Tuesday 1pm-2:30pm
- CAD Fusion Workshop with Autodesk!
 - 3/15 or 3/16 12:30pm-2pm
- Spring Break
- Arduino Pro Mini Workshop
 - 3/28 from 1pm-2:30pm
- Glider optimization (free fall vs. controlled flight)
 - 4/5 Wednesday 12pm-2pm
- 3D-printing workshop - In Library Workspace
 - Week of 4/10 time TBD
- Submit designs by end of week 04/10 for printing
- Autodesk Challenge Deadline 4/10:
 - \$500 for first prize
 - <https://www.instructables.com/contest/gamedesign2023/>

Glider Challenge Timeline



- **Assembly week 1- week of 04/17**
 - 4/18: 1-2:30pm
 - 4/19: 12:30-2pm
 - 4/20: 12:30-3pm
- **Assembly week 2- week of 04/24**
 - 4/25: 1-2:30pm
 - 4/26: 12:30-2pm
 - 4/27: 12:30-3pm
- **Competition week- week of 05/01**
 - At end of Gen Mtg 3: 3:30pm to 5pm
(earlier if Gen Mtg is over earlier)