

# Welcome to ARES

From the ARES Committee



# About ARES

The **Aerospace and Rocket Engineering Society (ARES)** is a group of students who have come together to design and engineer aeronautical technology.

That includes; planes, drones, helicopters, rockets, satellites and anything else you could possibly think of do with aerospace!

We love to get our members involved in hands-on projects and get ready for industry!



# ARES Committee



**Jisoo**

**President**

Rocketry team  
Vice Lead

Capstone Project  
Hybrid Rocket  
Engine



**Harrison**

**Vice-President**

Rocketry team  
Operations & Logistics  
Lead

Australian Youth  
Aerospace Association  
Treasurer

# ARES Committee



**Hasan**

Secretary

Rocketry team  
Flight Sims Engineer

Software  
Developer



**Baden**

Treasurer

Rover team  
Chassis

Spatial Engineer &  
Drone Enthusiast

# ARES Committee



**Ann**

**Engineering  
Officer**

Rocketry team  
Internal Structures &  
CFD Engineer

Graduate  
Engineer!



**Cas**

**Engineering  
Officer**

Rocketry team  
Internal Structures  
Engineer

Capstone Project  
Thrust Vector Control



# ARES Committee



**Ben**

Rocketry Team  
Chief Engineer  
Avionics Team

Mechatronics  
Engineer

ARES Workshop Host



**Luna**

Events Officer

Underwater  
vehicle design

Info for potential  
employment  
opportunities

# ARES Committee



**Zhe**

**Marketing**

Graduate Marketing  
Specialist!

Unimelb Rover team

Information Systems  
Graduate



**Peter**

**Marketing**

Rocketry team  
Project Lead

Melbourne Space  
Program  
Acrux-2 Co-Lead

# ARES Club Projects



## Project Phobos

Australian Universities Rocket Competition 2022

Join our club's largest on-going project, with more than 40 members involved.

Design, manufacture and launch a rocket carrying CubeSat to **10,000ft.** Subsystems include aerodynamics, flight simulations, internal structures, avionics and payload.



# ARES Club Projects



## UniMelb Rover Team (U.R.T.)

### Australian Rover Challenge 2022

In collaboration with Unimelb clubs MESS and MUECC, design and build a rover to compete in a full-scale simulated lunar mission consisting of more than 40 members.

Subsystems include **robotic arm**, **electrical**, **chassis**, **software**, **science payload** and **marketing**.

Follow URT on instagram @[unimelbrover](https://www.instagram.com/unimelbrover)

# ARES Partners



## LEAP Australia

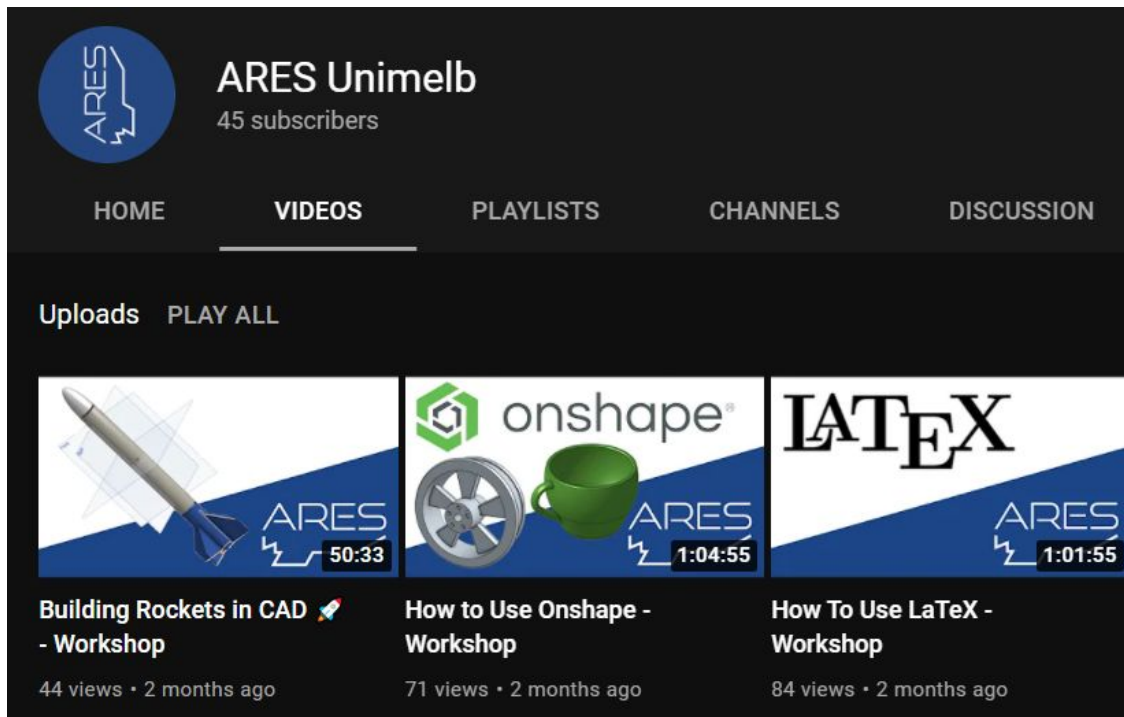
### Engineering Software Consultants

LEAP Australia have partnered with the Project Phobos team act as mentors for modelling and simulation software. In particular, LEAP provide us assistance with the Ansys and Onshape software packages. **Ansys** - powerful software capable of CAD, mechanics simulations (FEA), fluid dynamics simulations (CFD) and much more. **Onshape** - cloud-based CAD design tool used by Project Phobos.

# ARES Workshops - Sem 1



- Previous workshop topics included LaTeX, OpenRocket, Onshape and PCB design. Check out on our [YouTube channel](#)
- Sem 1 workshops focused on DIY rocket building project over 10 sessions. Find out about the whole journey on our [GitHub homepage](#)
- We will be running 5 or 6 workshops for this semester
- Join [our slack channel](#) to receive regular updates and information on our workshops



# ARES Workshops - Sem 2

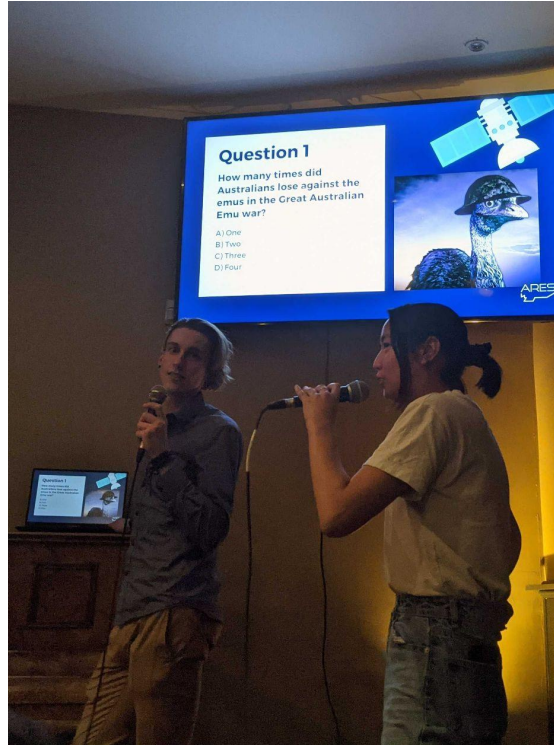
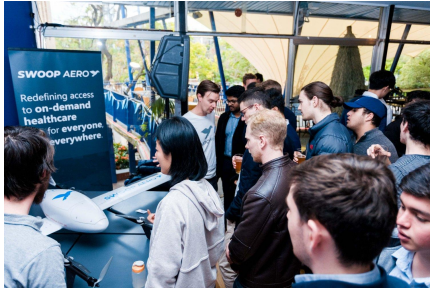


- 5 or 6 workshops this semester
- Workshops mostly in first half of semester over zoom
- Ba COVID restrictions we will plan in-person workshops for the 2nd half of the semester
- We will focus on **Ansys** simulation software - industry leader!



	Date		Workshop
Week 1	26 Jul	30 Jul	No Workshop
Week 2	2 Aug	6 Aug	Meet & Greet!
Week 3	9 Aug	13 Aug	Ansys Onshape + CFD Part 1
Week 4	16 Aug	20 Aug	No Workshop
Week 5	23 Aug	27 Aug	Ansys CFD Part 2
Week 6	30 Aug	3 Sep	No Workshop
Week 7	6 Sep	10 Sep	Ansys FEA
Week 8	13 Sep	17 Sep	No Workshop
	20 Sep	24 Sep	Mid Sem
Week 9	27 Sep	1 Oct	TBD
Week 10	4 Oct	8 Oct	TBD
Week 11	11 Oct	15 Oct	TBD
Week 12	18 Oct	22 Oct	TBD

# ARES Events



## Plans for Semester 2:

- **Women in Engineering** (with MESS) - Originally planned for Wednesday 28th July (*stay tuned*)
- **ARES Industry Night** (*stay tuned*)
- Rocketry **Hackathon** Workshop
- Rocket **launches** on weekends
- **Webinars** with Australian Space Agency and Space Agency Start-Ups



# How to join ARES and participate

- Sign up to be a club member

[aresmembership.getqpay.com](https://aresmembership.getqpay.com)

- Join [aresmelbourne.slack.com](https://aresmelbourne.slack.com) for updates and to join the rocket and rover project teams!



# Next week - Ansys Onshape + CFD Part 1

See you next week! :)

