

## THE MISSION

“ AS A TEAM, WE AIM TO GRAB THE HIGHEST LAURELS FOR THE COUNTRY AND CONSTRUCT AERODYNAMICALLY EFFICIENT AIRCRAFT. WE TEND NOT ONLY TO ACHIEVE OUR MISSION STATEMENT OF THE COMPETITION BUT ALSO TO LEARN AND GATHER DEEP KNOWLEDGE ABOUT AVIONICS AND AERONAUTICS FOR FURTHER FIELD DEVELOPMENT. WE WORK WITH UTMOST PASSION AND FOCUS TO MANIFEST AIRPLANES WHICH ARE CAPABLE OF MORE THAN COMPETITIONS.

## SAE AERO DESIGN

“ THE SAE AERO DESIGN COMPETITION IS A REAL-WORLD DESIGN CHALLENGE DESIGNED TO COMPRESS A TYPICAL AIRCRAFT DEVELOPMENT PROGRAM INTO ONE CALENDAR YEAR, TAKING PARTICIPANTS THROUGH THE SYSTEM ENGINEERING PROCESS OF BREAKING DOWN REQUIREMENTS. IT EXPOSES PARTICIPANTS TO THE NUANCES OF CONCEPTUAL DESIGN, MANUFACTURING, SYSTEM INTEGRATION/TEST, AND SELL-OFF THROUGH DEMONSTRATION.

### #PropelledByPassion



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### TEAM CONTACT

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ASSALING  
FALCONS



## WHO WE ARE

**Assailing Falcons** is one of the most distinguished members of SAE International. The team brings together engineers from a variety of backgrounds that are involved in aircraft design and manufacturing, providing them with professional expertise and hands-on knowledge. The team's goal is to allow students to better themselves and hone their skills by embarking on a journey of learning, technical experience, and achievement.

## OUR ACHIEVEMENTS

### INTERNATIONAL

- 1ST IN ASIA FOR CONSECUTIVE 9 YEARS
- 1ST IN DESIGN REPORT (2019,2021,2022)
- 1ST IN TECHNICAL PRESENTATION,INDIA(2019,2020)
- 1ST IN MAXIMUM PAYLOAD LIFTED
- 1ST IN MAXIMUM ALTITUDE REACHED
- 3RD IN FLYING ROUND 2020

### NATIONAL

- 1ST IN INDIA (2012,2014,2015,2016,2017,2018)
- 1ST IN MAXIMUM PAYLOAD LIFTED,
- 1ST IN MAXIMUM ALTITUDE REACHED
- 1st AMONGST STUDENT TEAM'S IN VIT (2015,2016)
- 2ND IN BITS PILANI EXPO

## WHY US?

Our team started in 2010 with a dream, to become a forerunner in the undergraduate aero design space. It has been one of the oldest aviation teams in VIT, Vellore. Our dedication and strive for improvement have made it possible to defend our position of No.1 in Asia for 8 years. This journey has been possible with the help of our sponsors and their continuous support. The help and motivation offered by the sponsors gave our team the wings it needed to soar high in the sky.

By participating in one of the world's biggest the aero design competition, we are surely noticed and known by students of our university and people around the world. We ensure the satisfaction of our sponsors by branding them at various national and international aviation events.

## OUR SPONSORS



SIEMENS

BHOR





## MISSION STATEMENT

THE OBJECTIVE OF ADVANCED CLASS IS TO DESIGN A SUITE OF SYSTEMS THAT CAN SUPPORT THE FIGHT AGAINST WILDFIRES THROUGH THE DELIVERY OF WATER AND PARTS FOR A GROUND VEHICLE. THIS CLASS IS FOCUSED ON MISSION SUCCESS THROUGH UNDERSTANDING OF DIVERSE REQUIREMENTS, SYSTEM-LEVEL ENGINEERING, AND ROBUST EXECUTION.

## FLAGSHIP 2022

TRIDENT IS A SINGLE MOTOR PROPELLED MID WING AIRCRAFT WITH A RECTANGULAR PLANFORM, AIRFOIL SHAPED FUSELAGE AND SPLIT END-PLATE WINGTIPS, DESIGNED TO LIFT 40.47 POUNDS. TRIDENT FLIES WITH A CRUISING SPEED OF 43 ft/s .IT IS DESIGNED TO DEPLOY A PADA WHICH DELIVERS A FULLY AUTONOMOUS GROUND TRANSPORT VEHICLE.

## FEW OF OUR PAST FLAGSHIPS



TRIDENT  
RANKED 3RD WORLDWIDE 2022



AIRAVAT  
RANKED 3RD WORLDWIDE 2020



NAUTILUS  
1ST BI-PLANE MANUFACTURED BY FALCONS

## HOW TO SPONSOR US

### TECHNICAL SUPPORT



SOFTWARE SUPPORT IS ESSENTIAL IN THIS VIGOROUS AND COMPLEX COMPETITION

### PRODUCT SUPPORT



BY PROVIDING US WITH ESSENTIAL PARTS OF THE RC AIRCRAFT

### MONETARY SUPPORT



PRIORITIZED SPENDING AND COMPLETE TRANSPARENCY ASSURE FINANCIAL STABILITY