



Students for the Exploration  
and Development of Space

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## **SEDS 2019 University Student Rocketry Challenge Design Report Deliverables and Guidelines**

The following document has been provided to give an overview of the deliverable's guidelines for the design report to be submitted as part of the 2019 University Student Rocketry Challenge. Design reports should address all the following:

1. Rocket design drawings. Please submit engineering drawings of the rocket components as well as the assembled rocket. Consider such technical drawing notations such as tolerances, materials, and methods of manufacturing of all components and assemblies.
2. Concept of operations. Please describe the intended flight of the rocket, including separation and staging events. Include details on how these events will be triggered and how they will be accomplished. Step-by-step procedures and check list for launch operations and all safety precautions work well here.
3. Launch simulations. Please submit simulations of the rocket's flight. Please indicate the conditions under which the simulation was run, including but not limited to the number and type of motors. Also include and comment on the results of the simulations, including maximum altitude, staging altitudes, and recovery details.
4. Assembly procedure. Please submit a document that outlines the assembly of the rocket.
5. Recovery system schematics. Please submit schematics for the onboard recovery systems, including but not limited to system schematics, wiring diagrams, and parachute size calculations.
6. Launch dates. Please indicate the date that the rocket is anticipated to be ready for flight. Indicate the location of the launch site, FAA waiver information, and three possible launch dates prior to **July 5th, 2019**.

**\*\* Late reports will be accepted with a penalty. \*\***

*Design reports should be professional and contain sufficient detail to describe the design of the rocket.*