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# Astronomy Club, IITK

## Summer Projects 2021

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### Space: The Final Frontier

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#### Week 2

1<sup>st</sup> – 7<sup>th</sup> June, 2021

#### Overview:-

In week 2 we discussed about:

1. [Kerbal Space Program \(Original download\)](#).
2. [Heat shields](#).
3. [Major components of a rocket](#).
4. [Ballistic and Aerodynamic re-entry](#).
5. [Thermal protection system of Space Shuttle](#).
6. [Gravity Turn](#)
7. [Guidance System-1](#).
8. [Guidance System-2](#).
9. [Guidance System-3](#).

## Summary:-

We discussed about and followed upon a very informative software/game-Kerbal Space Program. KSP is a physics based simulator and predicts accurate trajectory and aerodynamics for your vehicle. The link for our lecture on KSP [here](#). In the following session, we talked about the heat shields and their importance during re-entry of spacecraft. The lecture for this part is [here](#).

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