Steps:

1. Plot axial force - time graph. For next steps, neglect data from the 1 st loading-unloading part and use only 2nd and 3rd loading part for the calculations and the graphs.

2. Calculate loading rate from the slope of axial force - time graph.

3. Calculate axial stress corresponding to each axial force data (𝜎 = 𝑃⁄𝐴).

4. Take the average of each deformation value taken from LVDT#1 and LVDT#2.

5. Calculate axial strain corresponding to each average deformation value.

6. Plot stress-strain curve.

7. Calculate the elastic modulus of the specimen from the slope of the stress-strain curve.

8. Calculate the transverse strain corresponding to each deformation values taken from COD (see Figure 1).

9. Plot transverse strain - axial strain curve.

10. Calculate the Poisson’s ratio of the specimen from the slope of transverse strain - axial strain curve.