

# [Systems engineering essay sample](https://assignbuster.com/systems-engineering-essay-sample/)

[Engineering](https://assignbuster.com/essay-subjects/engineering/)

1. Identify a key character in each of the 4 groups (program oversight, project management, systems engineering, operations support). Find and quote this character’s lines (between 2-3 instances) in the film that best portray his/her problem solving style / priorities / worldview. Present a context diagram that depicts the interactions between these characters and the Bradley project, and among themselves. (1 page)

2. Trace the evolution of the Bradley as portrayed in the film. Using details from the film, and general knowledge, describe this evolution in terms of the (a) operational objectives; (b) system concept, features or components; (c) system functional and non-functional requirements, and (d) derived requirements allocated to key components. Organize the list of requirements in any manner you deem suitable to show the nature of the different requirements, their association with components or system features, and the interaction between the requirements. (2 pages)

3. Identify some design trade-offs that the Bradley’s designers were likely to have faced. Explain the nature of these. Suggest some appropriate MoEs. (1 page)

4. Using the generic SE development life-cycle as a reference, identify possible shortcomings in its execution on the Bradley project. Recommend measures to address these shortcomings. (1 page)

The “ numbers of pages” (shown in brackets) against each question is meant as a guideline on the expected length of the response; use single spaced text.

Present your answers as a PDF file, with a title page that identifies the group members by name and matriculation number. The filename should be made up of the name and matricNo of the person making the submission on behalf of the group. Upload the file to the designated folder. The dateline for submission is the same as that of the BPR project.