

Applications assignment - Description

Describe a *specific* problem or application that you consider is relevant to the civil engineering profession in which fluid mechanics plays a role.

–This is the part where you identify a scenario where a civil engineer would utilize knowledge of fluid mechanics to solve *engineering* problems that are relevant to society.

–The role of fluid mechanics does *not* have to be direct.

–The application can be associated with any discipline within the context of Civil Engineering.

Describe why the application or the problem is of impact to human life and/or society.

–Here you can outline the social, economic or health impacts of the problem. Does the application you are discussing contribute directly or indirectly to a larger goal?

–Significance could relate to better design, increased efficiency, cost reduction, improved quality of life, better environment etc.

–A statement with some quantitative estimates is often convincing.

How is fluids part of application/problem?

–What is the *mechanism* that makes *fluid mechanics* relevant to the identified application?

–The emphasis is on identifying the scope of fluid mechanics and demonstrating your understanding of role of fluid mechanics in the application. What does one need to know about the fluid behaviour that can help in addressing the application and its significance?

–You can use equations if necessary, or appropriately refer to website, journal articles, etc. that supports your knowledge *so far*.