

GEL 1 EPR Essay

EXAMPLE EPR PROJECT TOPICS

Example engineering projects that achieve the spirit of the EPR

- GEL A – participated on the Solar Electric Vehicle team as they completed the design, analysis and fabrication of their vehicle for the *World Solar Challenge* in Australia. This individual led a sub-team responsible for tire and suspension systems.
- GEL B – completed a 2.009 capstone project on time, to spec, and within budget
- GEL C – worked at a summer internship where she was a member of a software validation team preparing for a major launch of a new version
- GEL D – led a *D-Lab* Design team that tackled a local engineering problem in Ghana
- GEL E – was a member of the MIT Rocket Team and led a key propulsion test activity in preparation for launch competition in Utah
- GEL F – worked on a project team within the GEL class *Engineering Innovation and Design* (ESD.051J), delivering a user-tested system within constraints and on schedule

...meanwhile, these are not engineering projects (yet they've been proposed for EPRs in the past!)

- GEL G – “I am in charge of publicity and marketing for ___ club’s big annual event. In this role, I must coordinate the design of posters, T-shirts, and other publicity materials. I’ll be leading a team of 3 individuals. This work is constrained by budget and schedule – we face a hard constraint of achieving sufficient publicity in advance of the event deadline”
- GEL H – “This past summer, I took responsibility to coordinate some painting and renovation projects at my fraternity house. I led 2 other individuals on a project to clean, prepare, and paint 3 rooms. I needed to estimate resources, procure materials, and coordinate scheduling. Finally, I oversaw the painting work itself.”
- GEL I – “I served as a white water rafting guide last summer. I was responsible for rafter safety, and for following specific guidelines to ensure proper operation of the rafting expeditions. I also took on responsibility for training other less experienced guides. I had to prepare training materials, and track the certification process. I also responsible for equipment maintenance and upkeep.”

From the GEL Staff: these are all interesting activities, and certainly include some components of leadership, but they simply are not engineering projects. Engineering projects are unique challenges - let's celebrate what we can learn from them!