

Assignment 1

ECE 445

Submission deadline: 9th Oct,2023

1. Design a structure as shown in Figure 1.
2. Design a user defined material (Ga_2O_3) with the material properties such as bandgap, affinity, density of states, permittivity, mobility and band-offsets (useful link: <https://www.ioffe.ru/SVA/NSM/Semicond/>); (use user.default=GaN)
3. Show the meshing, band diagram, doping concentration and electric field (along A-A' and B-B') of the structure at zero-bias

