

Nanoelectronics Workshop 3

11:00-12:00 on Thursday, 23/02/2023 (SLB 104)

Handed in by 12:00 on Thursday, 02/03/2023 via VLE

Note: 12.5% of Final Mark (50% from Workshops and 50% from Final Examination)

Feedback:

Q1. Most of you answered well. Note that due to the difference in k and κ for the Schrödinger equations in two neighbouring regions, you need to consider their ratio into account to calculate the transmittance. Please find the details in the model answer.

Q2. This is the most difficult question in the Nanoelectronics workshops. There are some minor mistakes in the last part of the derivation of R and T . Please make sure to provide more details of the calculation processes, so that you can be awarded partial marks.