

Choice of topic

The topic should be a challenge for the student without being over-specialized. It should use the knowledge gained in the physics course to answer a research question that goes beyond the course content. The question must not be trivial in nature.

Inappropriate topics

Topics that require theory that is beyond the grasp of the student should be discouraged. Students should avoid broad or complex topics beyond the scope of the EE, such as investigations into quantum computers or black holes.

Research question

Having decided upon the area of investigation, the student should define a narrow and well-focused question. At this stage it is important to imagine the possible outcomes and conclusions. Doing so will help in the process of defining the question and choosing the methodology.

The selection of the topic and research question is a crucial step of the student's investigation. The guidance of the supervisor is vital in making sure that the student's choice is proper, relevant, realistic and promising.

Examples of topics

These examples are just for guidance. Students must ensure their choice of topic is focused (left-hand column) rather than broad (right-hand column).

✓ Focused topics	✗ Broad topics
The time taken for a single domino to fall depending upon its height and width	Falling dominoes
The frequency of sound produced by a violin depending on room temperature	Musical instruments
The rate of diffusion of different gases from an inflated balloon	Deflating balloons