An Introduction to Building Electronics Projects with Arduino

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Fall semester 2021

Contents

Preface

The notes are structured into 6 chapters. The first chapter mainly describes basics that students should already know from their introduction to Physics classes. It will be briefly reviewed in the first session. Subsequently, we will discuss one chapter per workshop session. The notes are prepared as we go and you can always find the latest version, but also solutions to the examples in the form of code examples, on GitHub. If you find typos, errors, or other issues please let me know. The most recent copy of the LaTeX files and figures can also be found on

The lecture notes contain clickable links, e.g., all acronyms are linked to the acronyms' definition page. These links are generally colored in dark blue. Many links to topics are also provided in the footnotes, so keep an eye out for those. Specific boxes throughout the text discuss further information. They are defined as following:

> **Background information** on topics that do not necessarily fit into the text but are important to keep in mind will be given in a box like this.
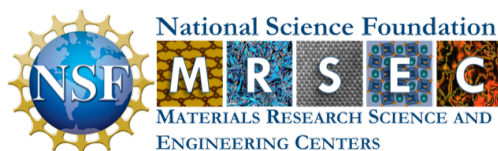
> **Further information and reading** for the avid reader will be pointed out in a box like this. The scope of these boxes is generally slightly outside the realm of the class.

> **Programming background information** is given in a box like this. Code snippets and examples will be given throughout the text. The boxes will point you to more resources.

Acronyms

MRSEC Materials Research Science and Engineering Center

Appendices