

## Fundamentals of Pharmacology: For Nursing and Healthcare Students

### Introduction to electronics

It seems impossible to imagine life without electronics. Smartphones, computers, home appliances, security systems, and transit systems all run on electrical circuits. But electronics have a long history predating modern times. In fact, the foundation for modern electronics dates back to 1897, when J.A. Fleming invented the vacuum diode, and later the vacuum triode to amplify electrical signals.<sup>1</sup>

In order to define electronics, it's important to understand how electricity works at a fundamental level. When electrons travel through a vacuum, gas, or another medium, they produce what we know as electricity. Electronics is a branch of physics focused on the design of circuits and the study of electrons under various conditions. Electrical engineers oversee the design, testing, manufacturing, construction, and monitoring of electrical and electronic devices, machinery, and systems.<sup>2</sup>

As daily life becomes increasingly intertwined with electronic devices, electronics and electrical engineering are particularly relevant fields that can be exciting and fulfilling to explore. These fields deal primarily with the transmission of electrical power, whether it's going into a computer's semiconductor or traveling through local power lines.

## Reference

[Nursing Pharmacology Notebook: Blank Medication Blank Study Template is great for the nursing student studying pharmacology for taking detailed notes on each drug/drug class.](#)

[Pharmacology and Therapeutics for Dentistry - E-Book](#)