

# [Writing in electrical engineering 10544](https://assignbuster.com/writing-in-electrical-engineering-10544/)

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Have you recently found yourself lost after high school, knowing that you want to go to college, but having no idea what to major in? I sure did! So after reading through the NMSU undergraduate catalogue and asking peoples advice, I found out that our university has one of the top 5 engineering colleges in the entire country and problems were solved! With a fascination of electronics and a steady hold on math, I decided that Electrical Engineering was the choice for me. However, after completing my first semester and gaining a greater knowledge on what Electrical Engineering is all about, I have a greater understanding of how important English and writing really are in this profession. Although most people assume Electrical Engineering to be a purely mathematical field, writing skills are an equally important factor in getting a E. E. major or living as a professional in the field.

In the world of engineering today, just as much writing is being done as there are equations being scribbled out. Whether you are writing a memo or an e-mail to a co-worker or you are writing a detailed essay describing your theories of tri-polar electromagnetism, intelligent writing is important. In an interview with Dr. Ram Prasad, the professor of Electrical Engineering here at NMSU, a brilliant piece of advice was given to me. He said, " You can be the most brilliant mathematician on the planet, but if you cannot effectively communicate your thoughts and ideas with others, it is a wasted talent." In this field a great understanding of technical writing must be achieved before you will be given credit for your thoughts.

In a field where so much education is required, you will be judged by your peers and superiors by the way you write. So how do I gain this knowledge? According to the NMSU 2000-2001 undergraduate catalog, English 111 Rhetoric and Composition which teaches freshman the methods used in writing effective essays and arguments. Following this is English 218 Technical and Scientific Communication. In this class you learn to write in the same fashion that you would as a professional in the engineering field. It is in this class that students learn to express technical terms and complicated information in a manner that can easily be understood. The last required English class is English 265G which is entitled Principles of Human Communication. This final writing requirement enables the student to communicate with other professionals, business clients, or just socially among other people. These English classes will help any student be able to write effectively in his/her field as an electrical engineer. So what is the next logical step? Finding out what writing is all about as an Electrical Engineer.

To find out what kind of writing is expected from an Electrical Engineer, I looked through some of the major periodicals in the Branson Library in the section TK which is for engineering oriented texts. In my interview with Dr. Prasad, he recommended some of the more respected and popular periodicals read by most professionals in the field. His two top recommendations, Electronic Engineering and Control Systems were both easily found in the library. Both magazines had the same essential layout as well as did the individual articles within them. Essays written in the field of Electrical Engineering tend to be very technical in language and can be difficult to read without a knowledge of all the professional terminology. The article in Control Systems discussed the many possibilities of AUVs which are essentially unmanned vehicles. Some of the themes discussed were the many uses of AUVs, challenges facing designers, a detailed description of each type of AUV and what it does specifically, a brief description of what is to come in the near future of this technology, and finally a conclusion. The article also included three pictures which helped to visually describe what the author was writing about as well. There was also a table which clearly laid out the different types of AUVs, their sizes, the environments they operate in, model complexity, and degree of autonomy.

After reading both articles and browsing through some of the other related periodicals as well, patterns begin to appear in the format, content, and themes of Electrical Engineering and its writings to be more specific. Essays often come in a format in which there are five main topics; an introduction, a description of why this technology could benefit society, some of the challenges the designers are facing, their proposed solutions, and a conclusion paragraph. Articles can be written with a wide range of formality, technical language and visual evidence.

In order to further your career as an Electrical Engineer, you have to be constantly on top of the latest technology and theories, creating your own as well. So as a professional, when you make the latest technological discovery, how do you go about sharing with the rest of the scientific community? The most common method is to write an essay or a journal article and publish it. The articles in periodicals such as Control Systems and Electronic Engineering are not written by journalists, they are written by the electrical engineers who created concepts like AUVs being used to defuse terrorist bombs and how much their research can benefit society. But in order for their work to be published or even considered worthy to read, it has to be very intelligent with a high level of writing skill and technique. Writing is just as important to an Electrical Engineers as the math and science which their professions are centered upon. In order to achieve your major as an electrical engineer and then practice as a professional in the field, you must learn how to perfect your writing skills. This can be achieved through practice in both reading and writing. So good luck. An endless world of possibilities awaits you.

Bibliography

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