



Introduction

Note. These notes are meant for self-study and likely will not get a chance to be classroom tested (so beware that some typographical errors are probable). The assumed background for reading these notes includes a knowledge of Calculus 1 (MATH 1910) to the level of elementary integration (see my [online notes for Calculus 1](#) for more details). A background in Calculus 2 (MATH 1920) is also desirable, especially for the material of Chapter 9 on centers of mass). See my [online notes for Calculus 2](#) for more details (notice, in particular, [Section 6.6. Moments and Centers of Mass](#)). We cover vectors in Chapter 3 and they play a vital role throughout the course. It would be wise to take Linear Algebra (MATH 2010) before taking Technical Physics 1 (PHYS 2110), but it is not essential. I have [online notes for Linear Algebra](#) as well. I also have extensive [online videos for Calculus 1](#) and [online videos for Linear Algebra](#).

Note. Technical Physics 1 is the prerequisite, of course, for Technical Physics 2 (PHYS 2120) which gives an introduction to electricity and magnetism. I have [online notes in preparation for Technical Physics 2](#). Technical Physics 1, along with Calculus 2, is the prerequisite for the engineering course Statics (CEE 2110). Statics (CEE 2110) along with Dynamics (ME 2330) form the foundations of every engineering program. A description of the joint Tennessee Tech/ETSU engineering program is online: [TTU/ETSU Bachelor of Science in Engineering](#) (accessed 8/6/2022).

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