EERI418 Semester test 2 study breakdown

April 25, 2017

1 Breakdown

Phillips and Nagle Chapter 3	What is important?
Section 3.1 to 3.2	Just read through, I am not going to ask the derivation of the ideal sampler.
Section 3.3	In this section the definition of the star transform is very important, I am not going to give you the definition. Examples 3.1 and 3.2 are very important.
Section 3.4 and 3.5	You can skip these sections.
Section 3.6	This section is very important. You need know the two properties and be able to apply it. You also must know what Shannon's sampling theorem is saying.
Section 3.7-3.8	You can skip these sections.

Phillips and Nagle Chapter 4	
Section 4.2 - 4.3	The relationship with between $E(z)$ and $E^*(s)$ is very important. Example 4.1 is very important. The concept of the pulse transfer function is extremely important. Examples 4.2 and 4.3 are very important. You should be able to calculate the dc gain of a system.
Section 4.4 - 4.6	These are very important sections. In Section 4.4 the concept of adding a ditial filter is discussed. Example 4.4 is important. Sections 4.5 you need to be able to analyse systems with time delays. Remember to check the duration of the time delay to see if you need to use the shifting property $z^{-k}\mathcal{Z}[E(s)] = z^{-k}E(z,m)$. Section 4.6 is very important as well as all the examples in this section.
Section 4.7 - 4.12	You can skip these sections.

Phillips Chapter 5	
Section 5.2	Very important. See the concept this section is trying to convey. It is very important to know when to take the star transform.
Section 5.3	This is the most important section of this chapter. Look at my notes and also all the examples in this section.
Section 5.4 - 5.5	You can skip these section.

Table 1: Study breakdown