

Prof. Alan V. Oppenheim, MIT Videos

1. A Selection of Very good lectures about DSP by a real expert – but with basic presentation.

<http://ocw.mit.edu/resources/res-6-008-digital-signal-processing-spring-2011/video-lectures/>

Start with this one:

<http://ocw.mit.edu/resources/res-6-008-digital-signal-processing-spring-2011/video-lectures/lecture-1-introduction/>

Lecture 4, Convolution | MIT RES.6.007 Signals and Systems, Spring 2011

http://www.youtube.com/watch?v=_vyke3vF4Nk

Topics covered: Sampling and aliasing with a sinusoidal signal, sinusoidal response of a digital filter, dependence of frequency response on sampling period, periodic nature of the frequency response of a digital filter. Two Parts

<http://ocw.mit.edu/resources/res-6-008-digital-signal-processing-spring-2011/video-lectures/demonstration-1-sampling-aliasing-and-frequency-response-part-1/>

<http://ocw.mit.edu/resources/res-6-008-digital-signal-processing-spring-2011/video-lectures/demonstration-2-sampling-aliasing-and-frequency-response-part-2/>

2. Try Oppenheim's Design of IIR Filters

<http://ocw.mit.edu/resources/res-6-008-digital-signal-processing-spring-2011/video-lectures/lecture-14-design-of-iir-digital-filters-part-1/>