

### ECE 310 Notation Translation Table

Spring 2019

	Lectures, exams & homework	Singer & Munson course notes	Manolakis & Ingle	Oppenheim & Schafer	Proakis & Manolakis*	Kamalabadi videos
Continuous-time signal	$x_c(t)$	$x(t)$	$x(t)$	$x_c(t)$	$x_a(t)$	$x_a(t)$
Discrete-time signal (sequence)	$x[n]$	$x[n]$	$x[n]$	$x[n]$	$x(n)$	$x(n)$
Continuous-time Fourier-transform signal	$X_c(\Omega)$	$X_c(\Omega)$	$X(j\Omega)$	$X_c(j\Omega)$	$X(F)$	$X_a(\Omega)$
Discrete-time Fourier-transform signal	$X_d(\omega)$	$X_d(\omega)$	$X(e^{j\omega})$	$X(e^{j\omega})$	$X(\omega)$	$X_d(\omega)$
Discrete-Fourier-transform coefficient	$X[k]$	$X[k]$	$X[k]$	$X[k]$	$X(k)$	$X(m)$
Convolution sum	$(x * h)[n]$	None	$x[n] * h[n]$	$x[n] * h[n]$	$x(n) * h(n)$	$x(n) * h(n)$
Modulo operation	$\langle k \rangle_N$	$\langle\langle k \rangle\rangle_N$	$\langle k \rangle_N$	$((k))_N$	$k, (\text{mod } N)$	$\langle k \rangle_N$

\*Note: Proakis & Manolakis often uses natural frequency  $F$  instead of radian frequency  $\Omega = 2\pi F$  in continuous time.