ECE 301,

Note Title

Course syllabus is available online.

* Overall course goal:

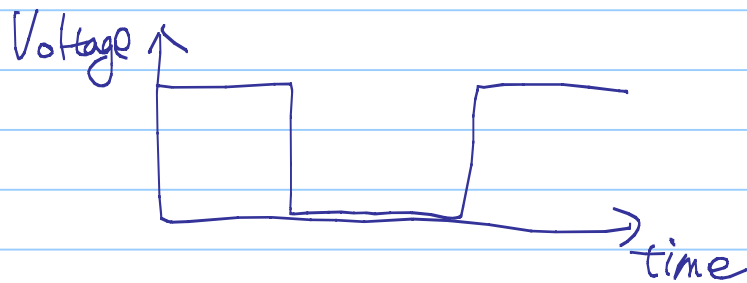A mathematical study of "signals" & "systems."

Q What are signals?
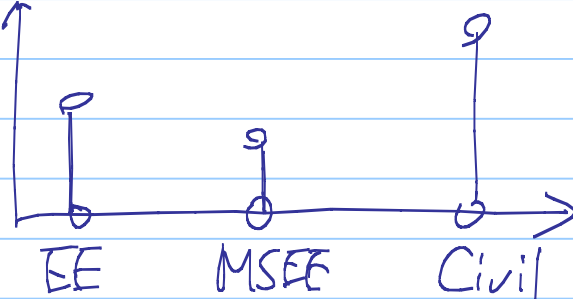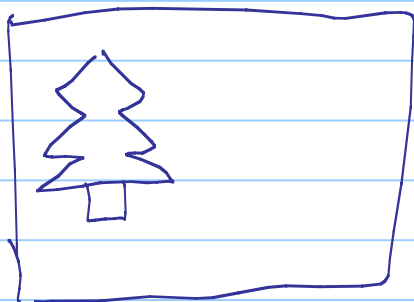
A: Definition #1: Something that contains info.

Ex:

Ex:

Ex: The voltage waveform in ECE202

Voltage ↑

time

Ex: EM waves of a cellular phone

# of bars ↑

EE   MSEE   Civil
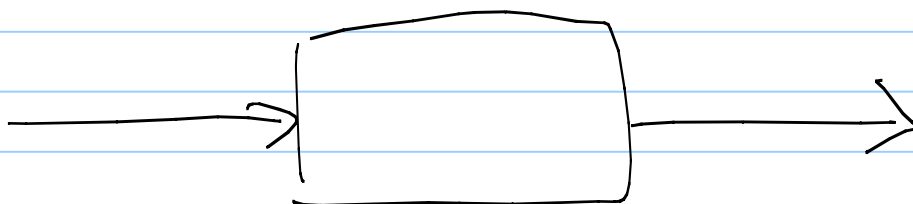
Ex: A picture is a signal

Definition #2:

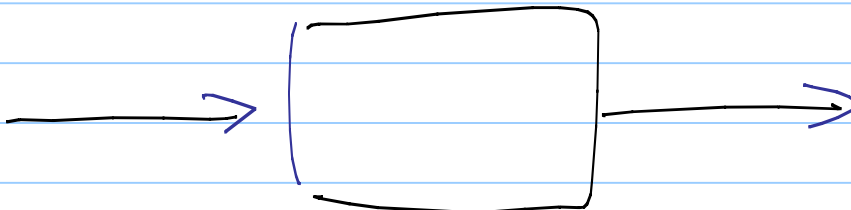Ex: $X(t)$ or $X[n]$

continuous time signal (CT signal)
discrete time signal (DT signal)
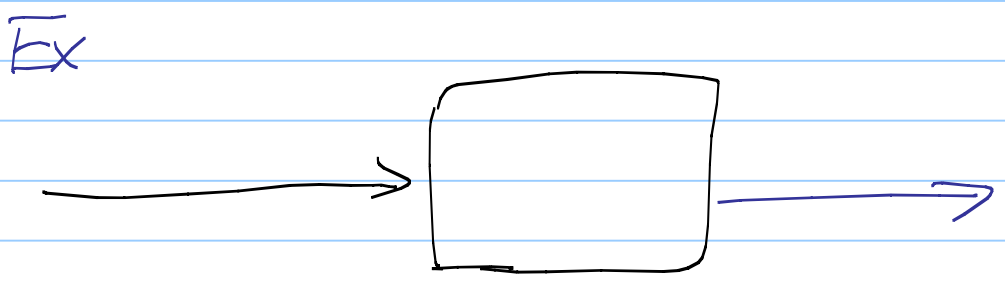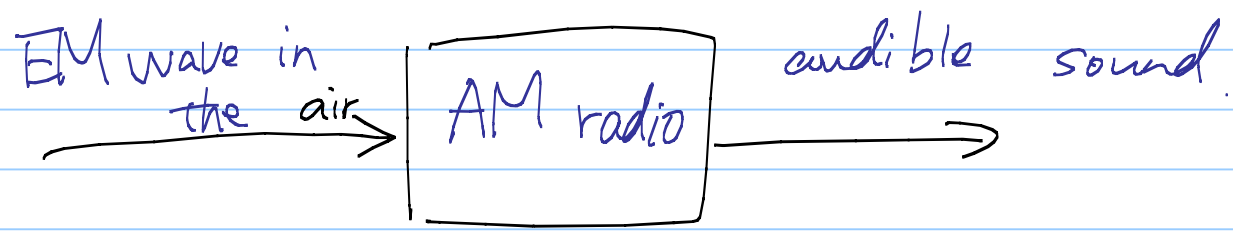
Q: What are "systems"?

A: Definition: (Def:)

Ex:

Ex:

Stock Market

Ex:

Ex:
# of bars → [Cellular phone] → voice quality
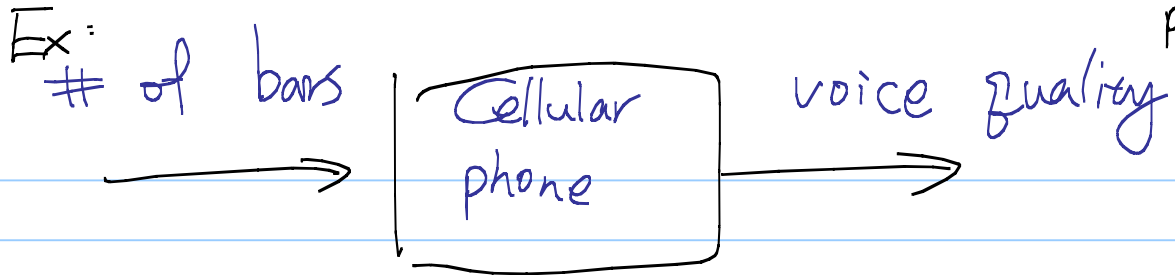
EM wave in the air → [AM radio] → audible sound.

Ex

→ [ ] →

* Different types of systems.

Illustration	Type:	Examples

→ [Sys] →

→ [Sys] →

→ [Sys] →

→ [Sys] →