

University Electrical Engineering

Glossary · every term in the course, A–Z

English
absorption
<i>/əb'sɔ:pʃn/</i>
AC circuit analysis
active region
ADC
<i>/ˌeɪ diː 'siː/</i>
adder
<i>/'ædə/</i>
air gap
aliasing
<i>/'eɪliəsɪŋ/</i>
ammeter
<i>/'æmi:tə/</i>
ammeter
<i>/'æmi:tə/</i>
ampere
<i>/'æmpeə/</i>
Ampere’s law
Ampère’s law
<i>/'æmpeəz lɔː/</i>
amplitude modulation
antennas
anti-alias filter
anti-windup
argument
<i>/'ɑːɡju:mənt/</i>
armature
assembly
asymptote
<i>/'æsimptəʊt/</i>

English
at the clock edge
auxiliary equation
<i>/ɔːk'sɪliəri i'kwɛɪʒn/</i>
back-EMF
bandwidth
<i>/'bændwɪðθ/</i>
base value
baud rate
bias point
BIBO stability
BIBO stability
bilinear transform
binary
<i>/'bɪnəri/</i>
Biot-Savart law
Biot–Savart law
<i>/'biɒt 'sævɑːt lɔː/</i>
bipolar junction transistor
block diagram
Bode plot
Boolean algebra
<i>/'buːliən 'ældʒɪbrə/</i>
boost
bounce diagram
boundary conditions
breakaway point
breakdown torque
bridge rectifier
<i>/brɪdʒ 'rektɪfɪə/</i>

English
buck
bus
 /bʌs/
butterfly
capacitance
 /kəˈpæsɪtəns/
capacitor
 /kəˈpæsɪtə/
Carson’s rule
cascade
causality
channel capacity
characteristic equation
 /kærɪktəˈrɪstɪk iˈkweɪʒn/
characteristic impedance
charge
 /tʃɑːdʒ/
clock
 /klɒk/
clock edge
 /klɒk ɛdʒ/
combinational logic
 /ˌkɒmbɪˈneɪʃənl ˈlɒdʒɪk/
communication systems
commutator
 /ˈkɒmjuːtɛtə/
complex number
 /ˈkɒmplɛks ˈnʌmbə/
complex power
conductance
conserved
 /kənˈsɜːvd/
constant-drop model

English
constellation
continuous conduction
control systems
controllability
convolution
copper loss
core loss
corner frequency
coulomb
 /ˈkuːlɒm/
coupling capacitor
critically damped
curl
 /kɜːl/
current
 /ˈkʌrənt/
current divider
 /ˈkʌrənt diˈvaɪdə/
cutoff
cutoff frequency
 /ˈkʌtɒf ˈfriːkwənsi/
DAC
 /ˌdiː ɛiˈsiː/
damping
 /ˈdæmpɪŋ/
damping ratio
De Morgan’s theorem
 /də ˈmɔːɡənz ˈθiərəm/
debounce
decibel

English
decimation
decoder
/diˈkaʊdə/

English
electromagnetics
electronics I
encirclement
energy
/ˈenədʒi/

English
FIR
flip-flop
<i>/flɪp flɒp/</i>
flux
<i>/flʌks/</i>
flux
<i>/flʌks/</i>
Fourier series
<i>/'fɔːrɪə 'sɪəriːz/</i>
Fourier transform
frequency deviation
frequency response
Friis equation
full adder
<i>/fʊl 'ædə/</i>
fundamental
<i>/ˌfʌndə'mentl/</i>
gain crossover
gain margin
gain-bandwidth product
<i>/geɪn 'bændwɪðθ 'prɒdʌkt/</i>
Gauss's law
<i>/'gaʊsɪz lɔː/</i>
golden rule
<i>/'gəʊldn ruːl/</i>
good conductor
GPIO
gradient
<i>/'ɡreɪdɪənt/</i>
guide wavelength
half adder
<i>/hɑːf 'ædə/</i>
half-wave rectifier

English
Hamming code
Hamming window
hardware description language
<i>/'hɑːdweə dɪ'skrɪpʃn 'læŋɡwɪdʒ/</i>
harmonic
<i>/hɑː'mɒnɪk/</i>
hazard
<i>/'hæzəd/</i>
henry
<i>/'henri/</i>
hexadecimal
<i>/ˌheksə'desɪml/</i>
homogeneous
<i>/ˌhɒmə'dʒiːniəs/</i>
hysteresis
I2C
ideal model
ideal op-amp
ideal operational amplifier
<i>/aɪ'dɪəl ˌɒpə'reɪʃənəl 'æmplɪfaɪə/</i>
IIR
impedance
<i>/ɪm'piːdəns/</i>
impulse response
impulse response
inductance
<i>/ɪn'dʌktəns/</i>
inductor
<i>/ɪn'dʌktə/</i>
infinite bus

English
initial condition /ɪˈnɪʃl kənˈdɪʃn/
instantaneous frequency
integral /ˈɪntɪɡrəl/
interpolation /ɪnˌtɜːpəˈleɪʃn/
interrupt /ˈɪntərʌpt/
interrupt service routine /ˈɪntərʌpt ˈsɜːvɪs ruːˈtiːn/
intrinsic impedance
intrinsic impedance
inverting amplifier /ɪnˈvɜːtɪŋ ˈæmplɪfaɪə/
joule /dʒuːl/
Karnaugh map /ˈkɑːnəʊ mæp/
kilowatt-hour /ˈkɪləwɒt ˈaʊə/
Kirchhoff’s current law /ˈkɜːkhɒfs ˈkʌrənt lɔː/
Kirchhoff’s voltage law /ˈkɜːkhɒfs ˈvɒlɪtɪdʒ lɔː/
Laplace transform
latch /lætʃ/
lead compensator
leakage
linear phase
linear system /ˈlɪniə ˈsɪstəm/
linear time-invariant

English
linearity /lɪˈnɪərɪti/
linearization /ˌlɪniəraɪˈzeɪʃn/
loop /luːp/
loop gain
Lorentz force
lossy medium
LSB
magnetic flux /mæɡˈnetɪk flʌks/
magnetomotive force
marginal stability
mathematical methods /ˌmæθɪˈmætɪkl ˈmeθədz/
matrix inverse /ˈmeɪtrɪks ɪnˈvɜːs/
maximum power transfer /ˈmæksɪməm ˈpaʊə ˈtrænsfɜː/
Mealy machine /ˈmiːli məˈʃiːn/
measure /ˈmeʒə/
memory /ˈmeməri/
memory-mapped I/O
memory-mapped I/O
memory-mapped register
mesh analysis /meʃ əˈnæləsis/
mesh current /meʃ ˈkʌrənt/

English
microcontroller
microprocessors and embedded systems
Miller capacitance
modelling
<i>/ˈmɒdəlɪŋ/</i>
modulation index
modulus
<i>/ˈmɒdjʊləs/</i>
Moore machine
<i>/mʊə məˈʃiːn/</i>
MOSFET
multimeter
<i>/ˌmʌltɪˈmiːtə/</i>
multiplexer
<i>/ˈmʌltɪpleksə/</i>
natural frequency
<i>/ˈnætʃərəl ˈfriːkwənsi/</i>
natural frequency
<i>/ˈnætʃərəl ˈfriːkwənsi/</i>
natural response
<i>/ˈnætʃərəl rɪˈsɒns/</i>
negative feedback
<i>/ˈnegətɪv ˈfiːdbæk/</i>
nodal analysis
<i>/ˈnəʊdl əˈnæləsɪs/</i>
node
<i>/nəʊd/</i>
noise figure
non-inverting amplifier
<i>/nɒn ɪnˈvɜːtɪŋ ˈæmplɪfaɪə/</i>
Norton’s theorem
<i>/ˈnɔːtnz ˈθɪərəm/</i>
Nyquist criterion

English
Nyquist criterion
ohm
<i>/əʊm/</i>
Ohm’s law
<i>/əʊmz lɔː/</i>
open-circuit test
open-circuit voltage
operating point
operational amplifier
<i>/ˌɒpəˈreɪʃənl ˈæmplɪfaɪə/</i>
ordinary differential equation
<i>/ˈɔːdɪnəri ˌdɪfəˈrenʃl ɪˈkweɪʒn/</i>
orthogonality
<i>/ˌɔːθəɡəˈnælɪti/</i>
overdamped
overflow
<i>/ˌəʊvəˈfləʊ/</i>
overshoot
<i>/ˌəʊvəˈʃuːt/</i>
parallel
<i>/ˈpærəlel/</i>
partial fraction
<i>/ˈpaːʃl ˈfrækʃn/</i>
particular
<i>/pəˈtɪkjələ/</i>
passive sign convention
<i>/ˈpæsɪv saɪn kənˈvenʃn/</i>
peak inverse voltage
peak time
per-unit
phase
<i>/feɪz/</i>
phase crossover

English
phase margin
phasor
/ˈfeɪzɔː/
PID controller
piecewise-linear model
plane wave
plant
/plænt/
pn junction
polarisation
/ˌpəʊləraɪˈzeɪʃn/
pole
/pəʊl/
pole placement
poles and zeros
polling
polyphase
potential
/pəˈtenʃl/
power
/ˈpaʊə/
power angle
power factor
power factor correction
power flow
power limit
power-factor correction
Poynting vector
/ˈpɔɪntɪŋ ˈvektə/
prescaler

English
prewarp
probability distribution
/ˌprɒbəˈbɪlɪtɪ ˌdɪstrɪˈbjʊːʃn/
processing gain
program counter
/ˈprəʊɡræm ˈkaʊntə/
proportional
/prəˈpɔːʃənəl/
Q factor
quantisation
/ˌkwɒntaɪˈzeɪʃn/
raised-cosine
random variable
/ˈrændəm ˈveəriəbl/
range
/reɪndʒ/
reactive compensation
rectangular pulse
/rekˈtæŋɡjʊlə pʌls/
reference node
/ˈrefrəns nɔːd/
register
/ˈredʒɪstə/
reluctance
resistor
/rɪˈzɪstə/
resolution
/ˌrezəˈluːʃn/
resonance
/ˈrezənəns/
ripple
/ˈrɪpl/
ripple counter
/ˈrɪpl ˈkaʊntə/
rise time

English
root locus
rotating field
Routh array
saturation
 /ˌsætʃəˈreɪʃn/
saturation region
sequential logic
 /siːˈkwɛnʃl ˈlɒdʒɪk/
series
 /ˈsɪəriːz/
series motor
settling time
shift register
 /ʃɪft ˈredʒɪstə/
short-circuit test
shunt motor
sideband
signal
 /ˈsɪɡnəl/
signals and systems
simulation
 /ˌsɪmjʊˈleɪʃn/
singular
 /ˈsɪŋɡjʊlə/
skin depth
slack bus
slip
small-signal
source transformation
 /sɔːs trænʃɔːˈmeɪʃn/

English
SPI
square-law model
squirrel-cage
standard deviation
 /ˈstændəd ˌdiːvɪˈeɪʃn/
state diagram
 /steɪt ˈdaɪəɡræm/
state space
state variable
static margin
steady-state error
step response
 /step rɪˈspɒns/
summing amplifier
superposition
 /ˌsuːpəpəˈzɪʃn/
synchronous counter
 /ˈsɪŋkrənəs ˈkaʊntə/
synchronous machine
synchronous rectification
synchronous speed
synthesis
 /ˈsɪnθəsis/
synthesizable
 /ˈsɪnθəsaɪzəbl/
system
 /ˈsɪstəm/
system function
system type
telegrapher equations

English
testbench
 /ˈtɛstbɛntʃ/
Thévenin’s theorem
three-phase
threshold
 /ˈθrɛʃəʊld/
time constant
 /taɪm ˈkɒnstənt/
time invariance
time-bandwidth trade-off
timer
time–bandwidth trade-off
toggle
 /ˈtɒɡl/
transfer function
transformer
 /trænsˈfɔːmə/
transient response
 /ˈtrænsɪənt rɪˈspɒns/
transimpedance amplifier
transition matrix
 /trænˈsɪʃn ˈmeɪtrɪks/
twiddle factor
two’s complement
 /tuːz ˈkɒmplɪmənt/
two-port
two-port network
UART
underdamped

English
unit circle
 /ˈjuːnɪt ˈsɜːkl/
variance
 /ˈveəriəns/
velocity error constant
virtual ground
virtual short
 /ˈvɜːtʃuːəl ʃɔːt/
volt
 /vɒlt/
volt-second balance
voltage
 /ˈvɒltɪdʒ/
voltage divider
 /ˈvɒltɪdʒ dɪˈvaɪdə/
voltage divider bias
voltage follower
voltage gain
watchdog
watt
 /wɒt/
waveguide wavelength
wound rotor
z-transform
zener diode