
Engineering: An Introduction

Concept *Noun*
idea; notion

Derive from **de.rive** *Verb*
come from; start from; originate from

- In everyday English, people usually say that something **comes from** something rather than **is driven from** something.

Down of something
beginning of something

- down of human history

Ancestor *Noun*
forefather; predecessor

Predecessor **pre(before).de.cess(come).or(person)** *Noun*
forefather; ancestor

Survival *Noun*
Staying alive

Socialization *Noun*
make groups; make friends

- the process by which people, especially children, are made to behave in a way that is acceptable in their society

Innovation **in.nov(new).ation** *Name*
creativity; novelty; originality

- a new idea, method, or invention
- recent innovations in English teaching

Essay *Noun*
article; passage

Predict **pre(before).dict(say)** *Verb*
foretell

in the context of something
situation; location; atmosphere

Interact with **inter(between).act** *Verb*
interrelate; confluence

account for *Verb*
be responsible for; explain

Pace *Noun*
rate; speed

Profession
job; career

in the quest for
looking for; searching; seeking

Infrastructure *infra(below).structure Noun*
substructure; foundation; base

Defence *Noun*
protection

Defend *Verb*
to do something in order to protect someone or something from being attacked

Craft *Noun*
a job or activity in which you make things with your hands, and that you usually need skill to do

Guild *Noun*
an organization of people who do the same job or have the same interests

Craft and guild knowledge
a society based skill; the skill that gain from scoiety

Associate *Verb*
to make a connection in your mind between one thing or person and another

Associated *Adjective*
linked; related; connected

Patriarchal *patri(father).arch(lead;direct).al(adj maker) Adjrcrive*
father-oriented; man-oriented

- if something is patriarchal you can conclude that its traditional

Vocational
job-related

Reveal *Verb*
show; represent; indicate; unveil

Announce *Verb*
to officially tell people about something, especially about a plan or a decision

Illustrate
to make the meaning of something clearer by giving examples

a new approach to *Noun*
a new view towards something

approach *Verb*
to get close to

Landmark *Noun*
important point

- Milad Tower is a landmark in Tehran.

so-called
as people named it

Industrial revolution took off in the United Kingdom
Industrial revolution **started** in the United Kingdom

replace *Verb*
substitute

synergistic **syn(same).ergistic** *Name*
adding up to each other

Capital *Name*
money; fund

mass production
commercial production; large-scale production

textile
any type of woven cloth that is made in large quantities used especially by people in the business of making clothes etc

Boom *Verb*
rapid development

Surge *Verb*
rapid development; Boom

onward
afterward; after an event or time that has already been mentioned

sustainable *Adjective*
stable; long-lasting

Crucial
important; vital

Found *Verb*
establish

retain a character
have specific feature

accreditation
validation; confirmation; standardization

flow of information
transfer of information

ironically
oppositely; unexpectedly

contemporary *con(together).tempo(time).rary(adj maker)*
of the same time

decline *Verb*
fall; decrease; reduction

questioning of something
doubt; criticize

Underpin *Verb*
support

Notion *Noun*
idea

Diffusion
spread; publication

underlying
at the base of

focus *Verb*
concentrate

poverty
moneylessness

mitigation
a reduction in how unpleasant, harmful, or serious a situation is; reduce the side effects

enjoy *Verb*
have

Refugee *Re(away).fug(escape).ee(person) Noun*
someone who has been forced to leave their country, especially during a war, or for political or religious reasons

address *Verb*
deal with

malnutrition **mal(bad;badly).nutrition(food)** *Noun*
when someone becomes ill or weak because they have not eaten enough good food

malpractice **mal.practice** *Noun*
when a professional person makes a mistake or does not do their job properly and can be punished by a court

malfunction **mal.function** *Noun*
a fault in the way a machine or part of someones body works

burglar *Noun*
theif; robber

break-in *Noun*
theft; robbery; burglary

Incidental
a cause of

Engineering: An Introduction

Earthquake *Noun*
quake;tremor;tremblor

result from *Verb*
caused by

Lithosphere litho(stone).sphere(globe) *Noun*
Hard layer of earth

Seismic *Adjective*
related to earthquake
earthquake → seismic → seismic waves
sky → celestial → celestial bodies
earth → terrestil → extraterrestrial
sea → marine → submarine
moon → lunar → lunar calendar
son → solar → solar system

toss *Verb*
throw

manifest *Verb*
show; represent; indicate

epicenter *Noun*
center of an earthquake

shore *Noun*
the land along the edge of a large area of water such as an ocean or lake

offshore
far from the shore; in the sea; in or under the sea and not far from the coast

coast *Noun*
the area where the land meets the sea

trigger
start; cause

occasionally
sometimes

landslide *Noun*
a sudden fall of a lot of earth or rocks down a hill, cliff etc

volcano *Noun*
a mountain with a large hole at the top, through which lava (=very hot liquid rock) is sometimes forced out

volcanic *Adjective*
relating to volcano

undertake *Verb*
do

deduce *Verb*
to use the knowledge and information you have in order to understand something or form an opinion about it

retention *Noun*
the act of keeping something

divert your thoughts
distract your attention

Strike *Verb*
to hit or fall against the surface of something

- past tense: struck

take into account
consider; pay attention to

resist *Verb*
to use force to stop something from happening

earthquake-proof **earthquake.proof(resistant)** *Adjective*
an earthquake-proof building

roam *Verb*
go; move

- to roam around the world

collide
hit; crash; strike; run into

magnitude *Noun*
the great size or importance of something

attribute something to something
to believe or say that a situation or event is caused by something

convection **con(together).vect(move).ion**
the movement in a gas or liquid caused by warm gas or liquid rising, and cold gas or liquid sinking

argue that *Verb*
to state, giving clear reasons, that something is true, should be done etc

exemplar *Noun*

best example

countdown *count.down*

reverse counting; from most importance to least importance

fault *Noun*

a large crack in the rocks that form the Earth's surface

engineering firm

engineering company

withstand

stand against; resist

lateral *adjective*

sided

sway *Verb*

move from side to side; swing

feat *Noun*

great work

truss system

supporting system

extend *Verb*

to continue

torsional

twisting

absorb *Verb*

to reduce the effect of a sudden violent movement

composed of *Verb*

made up of; includes

perimeter *Adjective*

surrounding

contribute *Verb*

to help to make something happen

stiff *Adjective*

firm, hard, or difficult to bend

extensive *Adjective*

large in size, amount, or degree

stringent

a stringent law, rule, standard etc is very strict and must be obeyed

mesmerizing *Adjective*

amazing

mind-blowing *Adjective*

shocking; wonderful

gigantic *Adjective*

very big; giant

counteract **counter(opposite).act** *Verb*

act oppositely

equilibrium **equi(equal).libr(weight).um** *Noun*

balance

damp *Verb*

to reduce

damper *Noun*

reducer

elite

high-class

notorious *Adjective*

badly-known; infamous

surmount

overcome; go beyond

cliam lives

kill people

vast

large

severe *Adjective*

severe problems, injuries, illnesses etc are very bad or very serious

dissipation

spread

stationary

fixed; stable

crust

hardened exterior surface of the earth

susceptibility
defencelessness; weakness

pitch *Noun*
a black sticky substance that is used on roofs, the bottoms of ships etc to stop water coming through

emission *Noun*
the act of sending out light, heat, gas etc

Energy Engineering

kinetic *adj*
relating to movement

thermal *adj*
relating to heat; heat-related

body *noun*
object

designate *verb*
name

hence
thus; therefore

i.e
that is

take place *verb*
to happen

interface **inter.face** *noun*
touch point; contact point; intersect

conventional *adj*
usual

discipline *noun*
major; field

utilize *verb*
to use

extract **ex(out).tract(pull)** *verb*
pull out

ultimate *adj*
very important and basic

unobtainable *adj*
unavailable

affordable *adj*
payable

afford *verb*
pay for

loom *verb*
to appear; come into sight

replete *adj*
full of something

deplete *verb*
to reduce in amount of something

depletion *noun*
finishing

virtually *adv*
almost

exhaust *verb*
to finish; to use all of something

unprecedented *un(not).pre(before).cede(come).nted(adj maker) adj*
unrecorded; unique

supply *verb*
to provide

impact *noun*
effect

accumulation *noun*
collection

demand *noun*
need

biomass *noun*
plant and animal matter used to provide power or energy

tide *noun*
flow and ebb

annual *adj*
yearly

crisis *noun*
problem

broad *adj*
wide

facility management
construction or establishment management

plant *noun*
factory

compliance *noun*
agreement

emerge *verb*
appear

apply *verb*
use

audit *verb*
check

property *noun*
feature

obtain *verb*
to get something

beside
in addition to

verification *noun*
confirmation

conservation *noun*
saving; protecting

budget *noun*
finance; money; fund

feasibility
practicality

encompass *verb*
to include

entrepreneurial *adj*
job-providing

assess *verb*
evaluate

cope with *verb*
deal with

improper *adj*
bad

expenditure *noun*

the total amount of money that a government, organization, or person spends during a particular period of time; cost

wealth *noun*

money

workforce *noun*

all the people who work in a particular industry or company

proceed *verb*

continue

demonstrate *verb*

to show or prove

adjust *verb*

change; modify