

## Cluster D

65 topics < 85 hours >

prerequisites in other clusters linked

to topic here: 28

successors in other cluster linked to  
topic here: 11

[Previous](#)

prerequisites(successors pairs in this  
cluster 59

[Next](#)

[Up to Index Page](#)

Prerequisite Topic  $\Rightarrow$  Successor  
Topic

acceleration (measurement of)	< 1.5 hr >	$\Rightarrow$	motion, instruments to measure < 1.0 hr >
approximation of functions	< 1.0 hr >	$\Rightarrow$	interpolation & curve fitting < 1.0 hr >
assembly drawings	< 1.0 hr >	$\Rightarrow$	assembly modeling < 1.0 hr >
biomaterials	< 2.0 hr >	$\Rightarrow$	biomechanics < 1.0 hr >
biomechanics	< 1.0 hr >	$\Rightarrow$	physiology < 0.5 hr >
bonding_2	< 1.0 hr >	$\Rightarrow$	molecular structure < 3.0 hr >
bonding_2	< 1.0 hr >	$\Rightarrow$	organic molecules < 1.0 hr >
castigliano`s first theorem	< 1.0 hr >	$\Rightarrow$	castigliano`s second theorem < 1.0 hr >
classes of materials	< 2.0 hr >	$\Rightarrow$	biomaterials < 2.0 hr >
classes of materials	< 2.0 hr >	$\Rightarrow$	mechanical properties of engineering materials < 1.0 hr >
coordinate systems	< 2.0 hr >	$\Rightarrow$	coordinate transformation < 2.0 hr >
coordinate systems	< 2.0 hr >	$\Rightarrow$	generalized coordinates < 1.0 hr >
coordinate systems	< 2.0 hr >	$\Rightarrow$	polar coordinates < 1.0 hr >
coordinate transformation	< 2.0 hr >	$\Rightarrow$	generalized coordinates < 1.0 hr >
design for human use_2	< 1.0 hr >	$\Rightarrow$	robust design < 1.0 hr >
dimensioning_2	< 2.0 hr >	$\Rightarrow$	sketching_2 < 1.0 hr >
electronic instruments_2	< 1.0 hr >	$\Rightarrow$	pressure, instruments to measure < 0.5 hr >
estimation_2	< 1.0 hr >	$\Rightarrow$	approximation of functions < 1.0 hr >
filters_2	< 1.0 hr >	$\Rightarrow$	sampling < 1.0 hr >
generalized coordinates	< 1.0 hr >	$\Rightarrow$	polar coordinates < 1.0 hr >

hydrostatics < 2.0 hr >	⇒	pressure, instruments to measure < 0.5 hr >
impulse response: coefficient of restitution < 0.5 hr >	⇒	impulse response: conservation of momentum < 0.5 hr >
impulse response: collisions < 0.5 hr >	⇒	impulse response: coefficient of restitution < 0.5 hr >
impulse response: conservation of energy < 0.5 hr >	⇒	impulse response: collisions < 0.5 hr >
kinetic energy in 2d < 1.0 hr >	⇒	kinetic energy in 3d < 1.0 hr >
kinetic energy in 2d < 1.0 hr >	⇒	mass moments of inertia < 2.0 hr >
linear transformation (abstract notion of) < 1.0 hr >	⇒	vector/matrix notation < 1.0 hr >
measurement systems & techniques_2 < 2.0 hr >	⇒	dimensioning_2 < 2.0 hr >
molecular structure < 3.0 hr >	⇒	organic molecules < 1.0 hr >
moment of inertia < 2.0 hr >	⇒	fixed axis rotation < 1.0 hr >
moment of inertia < 2.0 hr >	⇒	rotating disks < 0.5 hr >
moment of inertia < 2.0 hr >	⇒	second moments < 1.0 hr >
motion (analytical description) < 2.0 hr >	⇒	acceleration (measurement of) < 1.5 hr >
motion (analytical description) < 2.0 hr >	⇒	acceleration in machines < 1.0 hr >
motion (analytical description) < 2.0 hr >	⇒	analysis of displacement < 2.0 hr >
motion (analytical description) < 2.0 hr >	⇒	combined translation & rotation < 1.0 hr >
organic molecules < 1.0 hr >	⇒	organic materials < 2.0 hr >
organic molecules < 1.0 hr >	⇒	physiology < 0.5 hr >
polar coordinates < 1.0 hr >	⇒	angular momentum for control volumes < 2.0 hr >
pressure distribution_2 < 1.0 hr >	⇒	hydrostatics < 2.0 hr >
robust design < 1.0 hr >	⇒	capstone design project < 5.0 hr >
rotating disks < 0.5 hr >	⇒	rotating machinery < 1.0 hr >
rotational motion_2 < 3.0 hr >	⇒	angular momentum for control volumes < 2.0 hr >
rotational motion_2 < 3.0 hr >	⇒	rotating machinery < 1.0 hr >
sampling < 1.0 hr >	⇒	quality control < 2.0 hr >
sampling < 1.0 hr >	⇒	sampling errors < 1.0 hr >
sampling < 1.0 hr >	⇒	sum & average of random samples_2 < 0.5 hr >

scalar multiplication < 0.5 hr >	⇒	linear transformation (abstract notion of) < 1.0 hr >
scalar multiplication < 0.5 hr >	⇒	vector spaces_2 < 1.0 hr >
shear stresses in torsion < 1.0 hr >	⇒	ideal shear strength < 1.0 hr >
sketching_2 < 1.0 hr >	⇒	solid modeling < 1.0 hr >
solid modeling < 1.0 hr >	⇒	assembly modeling < 1.0 hr >
solid modeling < 1.0 hr >	⇒	parametric solid modeling < 3.0 hr >
sum & average of random samples_2 < 0.5 hr >	⇒	sampling errors < 1.0 hr >
vector spaces_2 < 1.0 hr >	⇒	linear transformation (abstract notion of) < 1.0 hr >
velocity (measurement of) < 1.0 hr >	⇒	acceleration (measurement of) < 1.5 hr >
velocity (measurement of) < 1.0 hr >	⇒	motion (analytical description) < 2.0 hr >
velocity (measurement of) < 1.0 hr >	⇒	motion, instruments to measure < 1.0 hr >
work & energy_2 < 1.0 hr >	⇒	kinetic energy in 2d < 1.0 hr >