

**Cluster G**

41 topics &lt; 52.5 hours &gt;

prerequisites in other clusters linked  
to topic here: 6successors in other cluster linked to  
topic here: 11[Previous](#)prerequisites/successors pairs in this  
cluster 29[Next](#)[Up to Index Page](#)Prerequisite Topic  $\Rightarrow$  Successor  
Topic

ac circuits < 3.0 hr >	$\Rightarrow$	actuators & sensors < 0.5 hr >
ac circuits < 3.0 hr >	$\Rightarrow$	digital circuits < 1.0 hr >
beam theory < 2.0 hr >	$\Rightarrow$	columns < 1.0 hr >
beam theory < 2.0 hr >	$\Rightarrow$	design deflection < 1.0 hr >
beam theory < 2.0 hr >	$\Rightarrow$	flexure < 1.0 hr >
binary representations < 1.0 hr >	$\Rightarrow$	digital logic < 1.0 hr >
calculus of variations < 0.5 hr >	$\Rightarrow$	direct & variational approaches to finite element analysis < 3.0 hr >
circuit analysis < 1.0 hr >	$\Rightarrow$	actuators & sensors < 0.5 hr >
circuit analysis < 1.0 hr >	$\Rightarrow$	electronic amplifiers < 0.5 hr >
circuit laws & applications < 2.0 hr >	$\Rightarrow$	circuit analysis < 1.0 hr >
cylindrical coordinates < 1.0 hr >	$\Rightarrow$	spherical coordinates < 1.0 hr >
decision making < 1.0 hr >	$\Rightarrow$	project management < 1.0 hr >
digital logic < 1.0 hr >	$\Rightarrow$	digital circuits < 1.0 hr >
dimensional analysis < 1.0 hr >	$\Rightarrow$	fluid dimensions < 0.5 hr >
dimensional analysis < 1.0 hr >	$\Rightarrow$	modeling analysis methods < 2.0 hr >
electric current_3 < 2.0 hr >	$\Rightarrow$	ac circuits < 3.0 hr >
equation systems < 1.0 hr >	$\Rightarrow$	parametric equations < 1.0 hr >
equilibrium of co-linear 2d force systems < 1.0 hr >	$\Rightarrow$	equilibrium of co-linear 3d force systems < 1.0 hr >
equilibrium of concurrent/non-concurrent 2d force systems < 1.0 hr >	$\Rightarrow$	equilibrium of concurrent/non-concurrent 3d force systems < 1.0 hr >
equilibrium of rigid body systems & subsystems < 2.0 hr >	$\Rightarrow$	equilibrium of concurrent/non-concurrent 2d force systems < 1.0 hr >

functions_2 < 1.0 hr >	⇒	calculus of variations < 0.5 hr >
functions_2 < 1.0 hr >	⇒	orthogonal functions < 1.0 hr >
machine tools < 2.0 hr >	⇒	numerically-controlled (nc) machines < 0.5 hr >
machining < 2.0 hr >	⇒	machine tools < 2.0 hr >
orthogonality < 1.0 hr >	⇒	orthogonal functions < 1.0 hr >
parametric equations < 1.0 hr >	⇒	parametric curves < 1.0 hr >
spherical coordinates < 1.0 hr >	⇒	3d geometrical transformations < 1.0 hr >
superposition < 1.0 hr >	⇒	interference < 1.0 hr >
time domain analysis < 4.0 hr >	⇒	time domain response by numeric simulation < 1.0 hr >