

Cluster H

75 topics < 95 hours >

prerequisites in other clusters linked
to topic here: 36successors in other cluster linked to
topic here: 44[Previous](#)prerequisites/successors pairs in this
cluster 153[Next](#)[Up to Index Page](#)Prerequisite Topic \Rightarrow Successor
Topic

air drag < 1.0 hr >	\Rightarrow	aerofoils < 1.5 hr >
air vapor mixtures < 1.0 hr >	\Rightarrow	boiling < 0.5 hr >
algorithms < 1.0 hr >	\Rightarrow	debugging < 0.5 hr >
algorithms < 1.0 hr >	\Rightarrow	numerical analysis < 2.0 hr >
bearings < 2.0 hr >	\Rightarrow	journal bearings < 0.5 hr >
block diagrams < 1.0 hr >	\Rightarrow	algorithms < 1.0 hr >
block diagrams < 1.0 hr >	\Rightarrow	flow analysis techniques < 1.0 hr >
boiling < 0.5 hr >	\Rightarrow	condensation < 0.5 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	aerofoils < 1.5 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	air drag < 1.0 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	bernouilli equations & applications < 2.0 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	blasius flow < 0.5 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	fluid propulsion < 1.0 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	separation of boundary layers in external flows < 0.5 hr >
boundary layer flow < 1.0 hr >	\Rightarrow	thermal boundary layer < 1.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	conservation of momentum < 2.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	continuity < 1.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	external flows < 1.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	flow analysis techniques < 1.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	flow of a viscous fluid < 1.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	fluid flow equations < 2.0 hr >
conservation of mass < 1.0 hr >	\Rightarrow	fluid flow rate < 0.5 hr >

conservation of mass < 1.0 hr >	⇒	fluid kinematics < 2.0 hr >
conservation of mass < 1.0 hr >	⇒	fluid propulsion < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	fluid system models < 2.0 hr >
conservation of mass < 1.0 hr >	⇒	laminar flow < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	navier-stokes equations < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	non-dimensionalization of conservation equations < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	plane couette flow < 0.5 hr >
conservation of mass < 1.0 hr >	⇒	poiseuille flow < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	steady processes & cycles < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	steady state analysis < 1.0 hr >
conservation of mass < 1.0 hr >	⇒	stress & pressure in fluids < 1.0 hr >
conservation of momentum < 2.0 hr >	⇒	eccentric impact < 1.0 hr >
conservation of momentum < 2.0 hr >	⇒	flow analysis techniques < 1.0 hr >
conservation of momentum < 2.0 hr >	⇒	fluid flow rate < 0.5 hr >
conservation of momentum < 2.0 hr >	⇒	fluid propulsion < 1.0 hr >
conservation of momentum < 2.0 hr >	⇒	fluid system models < 2.0 hr >
conservation of momentum < 2.0 hr >	⇒	non-dimensionalization of conservation equations < 1.0 hr >
conservation of momentum < 2.0 hr >	⇒	plane couette flow < 0.5 hr >
continuity < 1.0 hr >	⇒	basis, dimension & coordinates < 2.0 hr >
continuity < 1.0 hr >	⇒	fluid continuum < 0.5 hr >
continuity < 1.0 hr >	⇒	moody diagram & applications to simple pipe flow < 1.0 hr >
design problems < 5.0 hr >	⇒	design projects < 4.0 hr >
design problems < 5.0 hr >	⇒	engineering design applications < 2.0 hr >
design problems < 5.0 hr >	⇒	engineering design process < 5.0 hr >
design projects < 4.0 hr >	⇒	engineering design process < 5.0 hr >
engineering design applications < 2.0 hr >	⇒	engineering design process < 5.0 hr >
engineering design applications < 2.0 hr >	⇒	journal bearings < 0.5 hr >
engineering design process < 5.0 hr >	⇒	building of design models < 0.5 hr >
engineering method < 1.0 hr >	⇒	design problems < 5.0 hr >
engineering method < 1.0 hr >	⇒	design projects < 4.0 hr >

engineering method < 1.0 hr >	⇒	engineering design applications < 2.0 hr >
engineering method < 1.0 hr >	⇒	engineering design process < 5.0 hr >
external flows < 1.0 hr >	⇒	aerofoils < 1.5 hr >
external flows < 1.0 hr >	⇒	air drag < 1.0 hr >
external flows < 1.0 hr >	⇒	separation of boundary layers in external flows < 0.5 hr >
flow analysis techniques < 1.0 hr >	⇒	external flows < 1.0 hr >
flow analysis techniques < 1.0 hr >	⇒	fluid system models < 2.0 hr >
flow analysis techniques < 1.0 hr >	⇒	poiseuille flow < 1.0 hr >
flow analysis techniques < 1.0 hr >	⇒	potential flow < 1.0 hr >
flow of a viscous fluid < 1.0 hr >	⇒	laminar boundary layers < 2.0 hr >
flow of a viscous fluid < 1.0 hr >	⇒	laminar flow < 1.0 hr >
flow of a viscous fluid < 1.0 hr >	⇒	laminar viscous flow < 1.0 hr >
flow of a viscous fluid < 1.0 hr >	⇒	turbulent viscous flow < 0.5 hr >
fluid continuum < 0.5 hr >	⇒	fluid flow rate < 0.5 hr >
fluid continuum < 0.5 hr >	⇒	newtonian fluid model < 1.0 hr >
fluid continuum < 0.5 hr >	⇒	non-newtonian fluids < 0.5 hr >
fluid flow equations < 2.0 hr >	⇒	bernouilli equations & applications < 2.0 hr >
fluid flow equations < 2.0 hr >	⇒	external flows < 1.0 hr >
fluid flow equations < 2.0 hr >	⇒	fluid continuum < 0.5 hr >
fluid flow equations < 2.0 hr >	⇒	fluid kinematics < 2.0 hr >
fluid flow equations < 2.0 hr >	⇒	fluid system models < 2.0 hr >
fluid flow equations < 2.0 hr >	⇒	turbulent internal flow < 0.5 hr >
fluid flow rate < 0.5 hr >	⇒	flow measuring devices < 2.0 hr >
fluid flow rate < 0.5 hr >	⇒	fluid system models < 2.0 hr >
fluid flow rate < 0.5 hr >	⇒	fluid velocity vector field < 1.0 hr >
fluid flow rate < 0.5 hr >	⇒	moody diagram & applications to simple pipe flow < 1.0 hr >
fluid flow rate < 0.5 hr >	⇒	open channel flow < 0.5 hr >
fluid flow rate < 0.5 hr >	⇒	unsteady flow with uniform state in a control volume < 1.0 hr >
fluid kinematics < 2.0 hr >	⇒	aerofoils < 1.5 hr >
fluid kinematics < 2.0 hr >	⇒	bernouilli equations & applications < 2.0 hr >

fluid kinematics < 2.0 hr >	⇒	brakes < 0.5 hr >
fluid kinematics < 2.0 hr >	⇒	fluid machinery < 1.0 hr >
fluid kinematics < 2.0 hr >	⇒	fluid velocity vector field < 1.0 hr >
fluid properties < 2.0 hr >	⇒	boiling < 0.5 hr >
fluid properties < 2.0 hr >	⇒	condensation < 0.5 hr >
fluid velocity vector field < 1.0 hr >	⇒	boundary layer flow < 1.0 hr >
friction & wear < 2.0 hr >	⇒	bearings < 2.0 hr >
friction & wear < 2.0 hr >	⇒	coulomb friction < 2.0 hr >
friction & wear < 2.0 hr >	⇒	hydrodynamic lubrication < 1.0 hr >
gases & vapors < 1.0 hr >	⇒	air vapor mixtures < 1.0 hr >
gases & vapors < 1.0 hr >	⇒	condensation < 0.5 hr >
gases & vapors < 1.0 hr >	⇒	fluid properties < 2.0 hr >
gases & vapors < 1.0 hr >	⇒	vapor cycles < 1.0 hr >
laminar boundary layers < 2.0 hr >	⇒	blasius flow < 0.5 hr >
laminar boundary layers < 2.0 hr >	⇒	laminar pipe flow < 1.0 hr >
laminar boundary layers < 2.0 hr >	⇒	thermal boundary layer < 1.0 hr >
laminar boundary layers < 2.0 hr >	⇒	turbulent flow < 1.0 hr >
laminar flow < 1.0 hr >	⇒	laminar boundary layers < 2.0 hr >
laminar flow < 1.0 hr >	⇒	laminar pipe flow < 1.0 hr >
laminar flow < 1.0 hr >	⇒	laminar viscous flow < 1.0 hr >
laminar flow < 1.0 hr >	⇒	moody diagram & applications to simple pipe flow < 1.0 hr >
laminar flow < 1.0 hr >	⇒	plane couette flow < 0.5 hr >
laminar flow < 1.0 hr >	⇒	poiseuille flow < 1.0 hr >
laminar flow < 1.0 hr >	⇒	reynolds transport < 1.0 hr >
laminar pipe flow < 1.0 hr >	⇒	open channel flow < 0.5 hr >
laminar viscous flow < 1.0 hr >	⇒	laminar boundary layers < 2.0 hr >
lift & drag < 1.0 hr >	⇒	fluid machinery < 1.0 hr >
material finishing < 2.0 hr >	⇒	friction & wear < 2.0 hr >
navier-stokes equations < 1.0 hr >	⇒	blasius flow < 0.5 hr >
navier-stokes equations < 1.0 hr >	⇒	flow analysis techniques < 1.0 hr >
navier-stokes equations < 1.0 hr >	⇒	fluid flow equations < 2.0 hr >
navier-stokes equations < 1.0 hr >	⇒	fluid propulsion < 1.0 hr >
navier-stokes equations < 1.0 hr >	⇒	fluid system models < 2.0 hr >
navier-stokes equations < 1.0 hr >	⇒	poiseuille flow < 1.0 hr >

navier-stokes equations < 1.0 hr >	⇒	reversible flow in a control volume < 1.0 hr >
navier-stokes equations < 1.0 hr >	⇒	turbulent flow < 1.0 hr >
plane couette flow < 0.5 hr >	⇒	journal bearings < 0.5 hr >
potential flow < 1.0 hr >	⇒	laminar flow < 1.0 hr >
potential flow < 1.0 hr >	⇒	turbulent viscous flow < 0.5 hr >
reynolds transport < 1.0 hr >	⇒	fluid flow equations < 2.0 hr >
separation of boundary layers in external flows < 0.5 hr >	⇒	aerofoils < 1.5 hr >
separation of boundary layers in external flows < 0.5 hr >	⇒	air drag < 1.0 hr >
separation of boundary layers in external flows < 0.5 hr >	⇒	lift & drag < 1.0 hr >
shear forces < 2.0 hr >	⇒	shear stresses < 1.0 hr >
shear stresses < 1.0 hr >	⇒	boundary layer flow < 1.0 hr >
shear stresses < 1.0 hr >	⇒	flow of a viscous fluid < 1.0 hr >
shear stresses < 1.0 hr >	⇒	moody diagram & applications to simple pipe flow < 1.0 hr >
shear stresses < 1.0 hr >	⇒	newtonian fluid model < 1.0 hr >
shear stresses < 1.0 hr >	⇒	viscosity & stress < 1.0 hr >
shear stresses < 1.0 hr >	⇒	viscous flow < 1.0 hr >
streamline & normal coordinates, inviscid flow < 1.0 hr >	⇒	fluid kinematics < 2.0 hr >
stress & pressure in fluids < 1.0 hr >	⇒	viscosity & stress < 1.0 hr >
stress & pressure in fluids < 1.0 hr >	⇒	viscous flow < 1.0 hr >
turbulent flow < 1.0 hr >	⇒	moody diagram & applications to simple pipe flow < 1.0 hr >
turbulent flow < 1.0 hr >	⇒	reynolds transport < 1.0 hr >
turbulent flow < 1.0 hr >	⇒	thermal boundary layer < 1.0 hr >
turbulent flow < 1.0 hr >	⇒	turbulent internal flow < 0.5 hr >
turbulent flow < 1.0 hr >	⇒	turbulent viscous flow < 0.5 hr >
turbulent viscous flow < 0.5 hr >	⇒	turbulent internal flow < 0.5 hr >
vapor cycles < 1.0 hr >	⇒	boiling < 0.5 hr >
viscosity & stress < 1.0 hr >	⇒	boundary layer flow < 1.0 hr >
viscosity & stress < 1.0 hr >	⇒	flow of a viscous fluid < 1.0 hr >
viscosity & stress < 1.0 hr >	⇒	fluid properties < 2.0 hr >
viscosity & stress < 1.0 hr >	⇒	newtonian fluid model < 1.0 hr >

viscosity & stress < 1.0 hr > \Rightarrow separation of boundary layers in external flows < 0.5 hr >

viscosity & stress < 1.0 hr > \Rightarrow viscous flow < 1.0 hr >

viscous flow < 1.0 hr > \Rightarrow boundary layer flow < 1.0 hr >

viscous flow < 1.0 hr > \Rightarrow external flows < 1.0 hr >

viscous flow < 1.0 hr > \Rightarrow laminar viscous flow < 1.0 hr >

viscous flow < 1.0 hr > \Rightarrow reversible flow in a control volume < 1.0 hr >

viscous flow < 1.0 hr > \Rightarrow turbulent viscous flow < 0.5 hr >