

Milestones in the history of mechanics

Name	Lifespan	Achievements
Thales of Miletos	624 - 546 B.C.	greek philosophy, science, and mathematics
Pythagoras	ca 582 - ? B.C.	geometry, number theory
Demokritos	ca 470 - 380 B.C.	the theory of atoms
Aristotle	384 - 322 B.C.	postulated laws of motion (wrong)
Euclid	ca 325 - ? B.C.	summarized and systematized geometry
Aristarchus	320 - 250 B.C.	first suggestion of heliocentric system
Archimedes	287 - 212 B.C.	hydrostatics, primitive infinitesimal calculus
Eratosthenes	276 - 196 B.C.	determined the circumference of the earth
Hero	ca 20 - ? A.D.	theory of the lever
Ptolemy	ca 75 - ? A.D.	summarized greek geocentric astronomy
Pappus	ca 250 - ?	center of gravity, inclined plane
Leonardo da Vinci	1452 - 1519	experiments on motion, laws of friction
Copernicus	1473 - 1543	heliocentric astronomy
Brahe, Tycho	1546 - 1601	precise astronomical observations
Galileo	1564 - 1642	the experimental method
Kepler	1571 - 1630	laws of planetary motion
Descartes	1596 - 1650	analytical geometry
Roberval	1602 - 1675	the law of composition of forces
Toricelli	1608 - 1647	the barometer, production of vacuum
Pascal	1623 - 1662	hydrostatics, probability theory
Huygens	1629 - 1695	motion of pendulum, wave nature of light
Hooke	1635 - 1703	Hooke's law (elasticity)
Newton	1642 - 1727	laws of motion, law of gravity infinitesimal calculus, the spectrum
Leibnitz	1646 - 1716	developed differential and integral calculus
Varignon	1654 - 1722	developed the theory of statics
Polhem	1661 - 1751	industrial and applied mechanics
Bernoulli, Johann	1667 - 1748	the principle of virtual work
Bernoulli, Daniel	1700 - 1782	fluid flow theory
Euler	1707 - 1783	rigid body, fluid, and solid mechanics
D'Alambert	1717 - 1783	developed the force concept
Coulomb	1736 - 1806	friction, Coulomb's law in electrostatics
Lagrange	1736 - 1813	analytical mechanics
Watt	1736 - 1819	the steam engine
Montgolfier	1740 - 1810	the hot air balloon
Laplace	1749 - 1827	perfected celestial mechanics
Gauss	1777 - 1855	differential geometry
Poisot	1777 - 1859	rigid body motion, force systems
Poisson	1781 - 1840	conservation laws in mechanics
Cauchy	1789 - 1857	theory of elasticity
Faraday	1791 - 1867	the field concept
Coriolis	1792 - 1843	the Coriolis (fictitious) force
Ericsson	1803 - 1889	the screw propeller
Jacobi	1804 - 1851	partial differential equation of motion
Hamilton	1805 - 1865	canonical mechanics
Foucault	1819 - 1868	Foucault's pendulum
Maxwell	1831 - 1879	electromagnetism, statistical mechanics
Mach	1838 - 1916	shock waves, Mach's principle
Boltzmann	1844 - 1906	statistical mechanics
Kovalevsky	1850 - 1891	integrability of rigid body motion
Poincaré	1854 - 1912	the three-body problem, 'chaos'
Hertz	1857 - 1894	non-holonomic constraints, electromagnetic waves
Planck	1858 - 1947	quantization
Einstein	1879 - 1955	relativity