

AEROSPACE ENGINEERING

Aerospace engineering is the field of engineering concerned with the design, development, testing, and production of aircraft, spacecraft, and related systems and equipment.

APOLLO MISSIONS

The series of NASA missions in the 1960s and 1970s aimed at landing the first person on the Moon.

ARTEMIS MISSIONS

The series of NASA missions in the 2020s aimed at landing the first woman and first person of color on the Moon, and establishing a base on the Moon.

ARTIFICIAL SATELLITE

An artificial body placed in orbit around the earth, Moon, or another planet to collect information for communication.

ASTRONAUT

A person whose profession is to travel beyond Earth's atmosphere. The United States, Canada, Japan, and Europe use this title.

BOTANIST

An expert of the scientific study of plants.

CODER

An expert who writes code for computer programs.

COMMANDER

In a space mission, the person responsible for ensuring day-to-day safety of the crew and spacecraft and for ensuring the success of the mission itself. The Commander is the pilot-in-command of the spacecraft.

COMPUTER CODE

A set of instructions or rules for a computer to follow, written in a specific programming language. Logical steps that lead the computer to desired actions and outcomes.

COSMONAUT

An astronaut of the Soviet or Russian space program.

CRAWLER

A tracked vehicle used to transport spacecraft to the area where it will launch.

ENGINEER

An expert who uses scientific knowledge to design, construct, and maintain engines and machines (or structures such as roads, railroads, and bridges).

ENGINEERING

This field of science and technology is primarily concerned with the design, building, and use of engines, machines, and structures. Categories of engineering include chemical, civil, electrical, mechanical, and more.

GEOLOGIST

An expert scientist who studies the Earth (its history, nature, materials, and processes).

HUMAN-CENTERED DESIGN

The process of design and problem-solving that focuses on the people who will be using the solution.

LANDER

A space vehicle that is designed to land on a celestial body (i.e., the Moon or a planet).

MATHEMATICIAN

An expert in mathematics.

NACA

Established in 1915, this is the acronym for the National Advisory Committee for Aeronautics. Before NASA was established in 1958, NACA laid the foundation for the agency's mission to explore.

NASA

Acronym for the National Aeronautics and Space Administration, which is an independent agency of the U.S. federal government. Established in 1958, it is responsible for the civil space program, and aeronautics and space research.

NEWTON'S LAWS

A set of statements describing how a body moves related to the forces acting on it.

PROPULSION ENGINEER

An expert who works with all aspects of a rocket related to engines, propulsion systems, etc.

PROTOTYPE

An early-stage model of a design that can be tested and changed.

ROCKET

A cylindrical projectile that can be launched by the combustion of its contents (i.e., fuel).

SATELLITE

A moon, planet, or machine that orbits a planet or star (e.g., Earth is a satellite because it orbits the sun).

SCIENTIST

An expert who has knowledge of one or more of the natural or physical sciences.

SPACE LAUNCH SYSTEM (SLS)

NASA's Space Launch System is a super heavy lift launch vehicle that provides the foundation for human exploration beyond Earth's orbit.

SPACE SHUTTLE

A spacecraft, launched by rockets, able to land as an aircraft and make repeated journeys between Earth and space.

SPUTNIK

A series of earth-orbiting satellites launched by the Soviet Union beginning in 1957. Our lesson refers to Sputnik 1.

STEAM

An acronym for Science, Technology, Engineering, Art, and Mathematics.

STEM

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