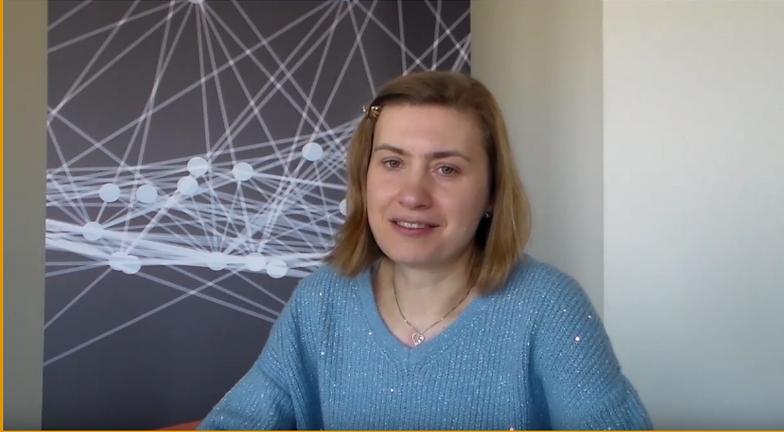


SPACE MISSION SPECIALIST



EVERYTHING YOU NEED TO KNOW ABOUT A CAREER



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Space missions are using space technology to achieve the flight of spacecraft into and through outer space. Spaceflight is used in space exploration and satellite telecommunications but also, soon, in commercial activities like space tourism. Due to their complexity and variety, space missions are the culmination of thousands of people's work who collaborate to solve the innumerable problems that arise when one tries to reach beyond what seems possible. Since there are so many aspects to the work, describing someone as Space Mission Specialist could mean many different things. In this career sheet, we will focus on the engineering (i.e. computer/software engineer, electrical/electronics engineer, materials engineer, robotics engineer) aspects of this role.

SKILLS

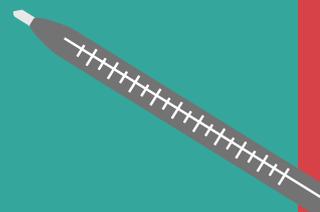
Professional:

- Knowledge of computer programming and technologies
- Critical Thinking
- Complex Problem Solving
- Operation Monitoring
- Quality Control & Systems Analysis

SKILLS

Personal:

- Good written and verbal communication
- Collaboration
- Adaptability



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HOW TO BECOME A SPACE MISSION SPECIALIST:

Which subjects' knowledge is essential for a career?

- Chemistry, physics, astronomy, and math, including algebra, trigonometry, and calculus, as well as programming courses.
- Get a bachelor's degree in engineering, biological science, physical science, computer science or mathematics. A Master's degree or a PhD in any of the previous subject is also recommended although real-world working experience is also important. Some universities offer cooperative programs, in partnership with industry, that give students practical experience while they complete their education.

HOW TO GET EXPERIENCE:

- Annual "Young Graduate Trainee" programme run by the European Space Agency
- Internships in any space firms or in a software company that makes web apps, and/or a civil engineering company that builds a new train station.
- International conferences.

CAREER PROSPECT:

Space mission specialists are employed in industries (for example, Airbus or Space X) that design or build aircraft, missiles, systems for national defense, or spacecraft. They work primarily for firms that engage in manufacturing, analysis and design, research and development, and for the federal government.

"If I could start over, I am not sure what I would have done. When I was young, I knew I wanted to work with computers, as an adult you also think about financial stability and other aspects. The career path of a space specialist and researcher is not the easiest, as it requires constant development that requires work after hours. Although it is not the easiest job, I am very happy, and I cannot tell if I would have done anything differently."

Dr Mag Selwa, HPC consultant KU Leuven, Belgium