SEISMOLOGIST

EVERYTHING YOU NEED TO KNOW ABOUT A CAREER

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A seismologist is a scientist who studies earthquakes, their causes, such as the movement of tectonic plates on the Earth's crust as well as their effects, such as tsunamis. A seismologist analyses and interprets seismological data through the use of seismographs and other instruments, which measure the magnitude and intensity of an earthquake.

SKILLS

Professional:

- IT skills
- Critical thinking and problem-solving skills
- Analytical skills
- Computational thinking skills

SKILLS

Personal:

- Collaboration
- Communication

TASKS & RESPONSIBILITIES

- Monitoring of the earthquake sequence and informing the public and media.
- Processing, evaluating and interpreting earthquake data, sharing this information with collaborators, and posting it to social media.
- Maintaining specialized instruments at remote seismological stations or fixing a problem that has caused a disruption in its operation and maybe loss of seismic data.
- Working on telecommunication networks.
- Investigating problems on the various servers and computers of a seismological centre.
- Expanding of networks for recording earthquake data with new stations.

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HOW TO BECOME A SEISMOLOGIST:

Which subjects' knowledge is essential for a career?

- Knowledge from physics, mathematics, geology, computing for data processing and evaluation and interpretation of results, and then engineering, telecommunications, information technology to keep the specialized instruments of seismological stations operational and to keep the network of recording earthquake data in good shape, delivering data from all remote stations to seismological centres 24/7.
- A bachelor's degree in Physics and a Master's degree or a PhD on earthquake seismology are recommended.

HOW TO GET EXPERIENCE:

- Knowledge and skills provided in secondary education, e.g., physics (geophysical topics) and geography (Earth's layers, tectonic plates movements, tectonic plates boundaries and seismic zones).
- Conducting fieldwork and getting research or laboratory experience.
- Summer camps.

CAREER PROSPECT:

The development of earthquake early warning systems will affect future opportunities in this field.
The development of these systems is still in experimental stage, but they will save lives in the future provided that they will become fully functional.

"If I could start all over again, I would still follow some branch of applied physics, but I would most probably decide to stay abroad and follow a purely academic career, as the opportunities for such a career in Cyprus are quite limited"

Sylvana Pilidou, Seismologist at the Geological Survey Department, Ministry of Agriculture, Natural Resources and Environment in Cyprus