Remote sensing specialists interpret and analyze many types of aerial photographs and satellite images. They may use color infrared photos to map forest types or areas of irrigated cropland, or to determine areas of insect or disease infestation in forests or croplands. They use thermal infrared scanners to locate and monitor forest fires and to define areas of thermal pollution in rivers and lakes. They use computers to analyze satellite scanner data and create maps of land cover and changes in land use (like deforestation).

Many state agencies and federal agencies such as the U.S. Forest Service, Geological Survey, Environmental Protection Agency, Fish and Wildlife Service, National Park Service, Bureau of Indian Affairs, Bureau of Land Management, Corps of Engineers, and Defense Mapping Agency hire remote sensing specialists. Many commercial companies also hire remote sensing specialists to analyze data and to produce maps and other products for themselves or for government agencies with whom they have contracted.

Remote sensing specialists are usually people who enjoy working with maps and computers. Most have earned college degrees in disciplines such as geography, forestry, civil engineering, geology, wildlife management, or agronomy, and then have specialized in remote sensing. Today most remote sensing specialists also have taken coursework in Geographic Information Systems (G.I.S.).

In high school take courses in math, statistics, computer science, physics, chemistry, and perhaps mechanical drawing and art, as well as any courses involving communication skills such as English, speech, journalism, and debate.