



Forest and Conservation Technicians

CA and DOL – Forest and Conservation Technicians: [O*Net Code 19-4071.00](#)

Apprenticeship Competencies. Related and Supplemental Instruction are not paid (compliance). On-the-job-training are paid hours. Apprenticeships span one year. Compliance allows completion in more than six months and less than one year in cases of demonstrated progress.

Competency Check List

Demonstrates Fundamentals: Apprentice can perform the task with some coaching.

Proficient in Task: Apprentice performs task properly and consistently.

Completion Date: Date apprentice completes final demonstration of competency.

Competencies:

1. Thin and space trees and control weeds and undergrowth, using manual tools and chemicals.
2. Support seasonal activities, such as planting tree seedlings, putting out forest fires, and maintaining recreational facilities.
3. Learn about regulations, such as those concerning environmental protection, resource utilization, fire safety, and accident prevention.
4. Map forest tract data using digital mapping systems. Measure distances, clean sightlines, and record data to help survey crews.
5. Support forest protection activities, including fire control, fire crew training, and fire detection public education programs.
6. Perform reforestation or forest renewal, including nursery and silviculture operations, site preparation, seeding and tree planting programs, cone collection, and tree improvement.
7. Inspect trees and collect samples of plants, seeds, foliage, bark, and roots to locate insect and disease damage.
8. Measure distances, clean sightlines, and record data to help survey crews.
9. Support laboratory or field experiments with plants, animals, insects, diseases, and soils.
10. Install gauges, stream flow recorders, and soil moisture measuring instruments, and collect and record data from them to assist with watershed analysis.
11. Project Management Software —Microsoft Teams: Utilize Microsoft Teams and Outlook to schedule and attend meetings, collaborate with team members, manage project tasks, and track progress.
12. Spreadsheet software — Microsoft Excel: Use Microsoft Excel to analyze data, create spreadsheets, and perform calculations.

13. Utilize Geographic Information Systems (GIS) to communicate and share data.
14. Utilize public and private databases and artificial intelligence to gather information related to pollution and conservation.
15. Analyzing Data or Information — Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.
16. Organizing, Planning, and Prioritizing Work — Developing specific goals and plans to prioritize, organize, and accomplish your work.
17. Making Decisions and Solving Problems — Analyzing information and evaluating results to choose the best solution and solve problems.
18. Communicating with Supervisors, Peers, or Subordinates — Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
19. Establishing and Maintaining Interpersonal Relationships — Developing constructive and cooperative working relationships with others.
20. Communicating with People Outside the Organization — Communicating with people outside the organization, representing the organization to customers, the public, government, or other external sources.

ARTICLE IV Related Instruction

Apprentices shall satisfactorily complete prescribed courses of related and supplemental instruction, which will not be less than 144 hours per year. Related and supplemental instruction (RSI) will be provided by Open Source Agriculture Apprenticeship.

Time spent in related and supplemental instruction may not be compensated.

Approximate RSI time by Category:

Forestry and Conservation Skills	50 Hours
Microsoft Office Suite	20 Hours
Technology	20 Hours
Communication	20 Hours
Analysis	20 Hours
Operations	20 Hours

Employers consistently ask for skills in the business - O*Net also list essential communication, technology, and communication competencies. Please refer to O*Net for their detailed lists. Typically, Open Source Ag and partner Bayha Group provide RSI and collaborate with employers for on-the-job training.