



## Agricultural Technicians

CA – Agricultural Technicians [O\\*Net Code: 19-4012.00](#)

DOL – Agricultural Equipment Operator [O\\*Net Code: 45-2091](#)

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.

**Note:** The competencies noted are CA DAS approved for Agricultural Technicians. For apprentices working more toward the DOL Agricultural Equipment Operator, competencies can be added/edited when they align with [O\\*Net Code: 45-2091](#).

## Competencies:

1. Record data pertaining to experimentation, research, or animal care.
2. Collect animal or crop samples. Examine animals or crop specimens to determine the presence of diseases or other problems.
3. Support pest or weed control operations, including locating and identifying pests or weeds, selecting chemicals and application methods, or scheduling application.
4. Perform crop production duties, such as tilling, hoeing, pruning, weeding, or harvesting crops.
5. Perform general nursery duties, such as propagating standard varieties of plant materials, collecting and germinating seeds, maintaining cuttings of plants, or controlling environmental conditions.
6. Transplant trees, vegetables, or horticultural plants. Care for plants or animals.
7. Determine the germination rates of seeds planted in specified areas.
8. Assess comparative soil erosion from various planting or tillage systems, such as conservation tillage with mulch or ridge till systems, no-till systems, or conventional tillage systems with or without moldboard plows.
9. Research sustainable agricultural processes or practices and crop management methods.
10. Research diseases or parasites.
11. Test quality of materials or finished products.

12. 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.
13. Spreadsheet software — Microsoft Excel: Use Microsoft Excel to analyze data, create spreadsheets, and perform calculations.
14. Utilize graphics, photo imaging, or mapping software to communicate and share information.
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, email, 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, and 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:

Agriculture Technician Skills	60 Hours
Microsoft Office Suite	15 Hours
Technology	15 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.