

Historic DACUM Chart for Irrigation Technologist

COMPETENCY PROFILE OF IRRIGATION TECHNOLOGIST

Duties: A. BASIC ADMINISTRATION & SUPERVISORY

Tasks:

A1. Follow safety practices	A2. Comply with all government regulations	A3. Process company paperwork	A4. Report to supervisor	A5. Operate within budget guidelines	A6. Perform job costing functions
A7. Train coworkers	A8. Establish irrigation schedule	A9. Monitor weather	A6. Maintain appropriate inventory		

Duties: B. CUSTOMER RELATIONS

Tasks:

B1. Listen and interpret customer needs	B2. Sell to customer's "best interest"	B3. Communicate options to customer	B4. Maintain current knowledge of products and practices	B5. Identify prospective customers	B6. Utilize internal resources (including coworker knowledge)
B7. Perform necessary communications with suppliers	B8. Close sale	B9. Train customer in system operations	B10. Maintain ongoing customer contact		

Duties: C. DESIGN SYSTEM

Tasks:

C1. Determine cropping sequence	C2. Assess topography (weather & water source)	C3. Assess soil	C4. Determine system type	C5. Analyze and research alternatives (cost & availability)	C6. Develop plot plan
C7. Develop sprinkler head layout	C8. Determine system pressure requirements	C9. Determine hydraulic parameter	C10. Determine pump and station type and size	C10. Size pipe and components	

Duties: D. INSTALL SYSTEM

Tasks:

D1. Inspect site	D2. Mark field location of all system components	D3. Determine construction schedule	D 3 4. Determine necessary tools and equipment for installation	D 4 5. Deliver products	D6. Coordinate subcontractors and site personnel
D 5 7. Install underground piping, valves and wire	D 6 8. Build pump stations, if required	D 7 9. Assemble or install above ground irrigation components	D 8 10. Install electrical components	D 9 11. Flush and adjust system	

Duties: E. OPERATE SYSTEM

Tasks:

E1. Review system design	E2. Control system operation	E3. Adhere to correct operating procedure	E4. Follow irrigation schedule	E5. Adjust equipment	E6. Monitor crop <u>and soil for irrigation schedule</u>
E7. Monitor soils	E8. Adjust irrigation schedule as needed	E9. Apply chemical/fertilizer products	E10. Monitor system operation	E11. Maintain operation record	

Duties: F. MAINTAIN & REPAIR SYSTEM

Tasks:

F1. Maintain appropriate inventory	F12. Perform preventative maintenance	F23. Update system	F4. Rebuild system components	F35. Winterize system	F46. Perform annual system start-up procedures
F57. Fill ruts	F68. Control Pests	F7. <u>Respond to customer needs</u>	F8. <u>Troubleshoot mechanical equipment</u>	F9. <u>Troubleshoot electrical equipment</u>	F10. <u>Identify computerized equipment</u>
F11. <u>Dig up underground irrigation pipe & accessories for repair</u>	F12. <u>Repair or replace system components</u>	F13. <u>Locate and repair underground electrical faults</u>	F14. <u>Unplug nozzles, filters, and screens</u>		

Duties: G. SERVICE SYSTEM

Tasks:

G1: Respond to customer needs	G2: Troubleshoot mechanical equipment	G3: Troubleshoot automated equipment	G4: Troubleshoot computerized equipment	G5: Dig up underground irrigation pipe & accessories for repair
G6: Repair or replace system components	G7: Locate and repair underground electrical faults	G8: Unplug nozzles, filters, and screens		