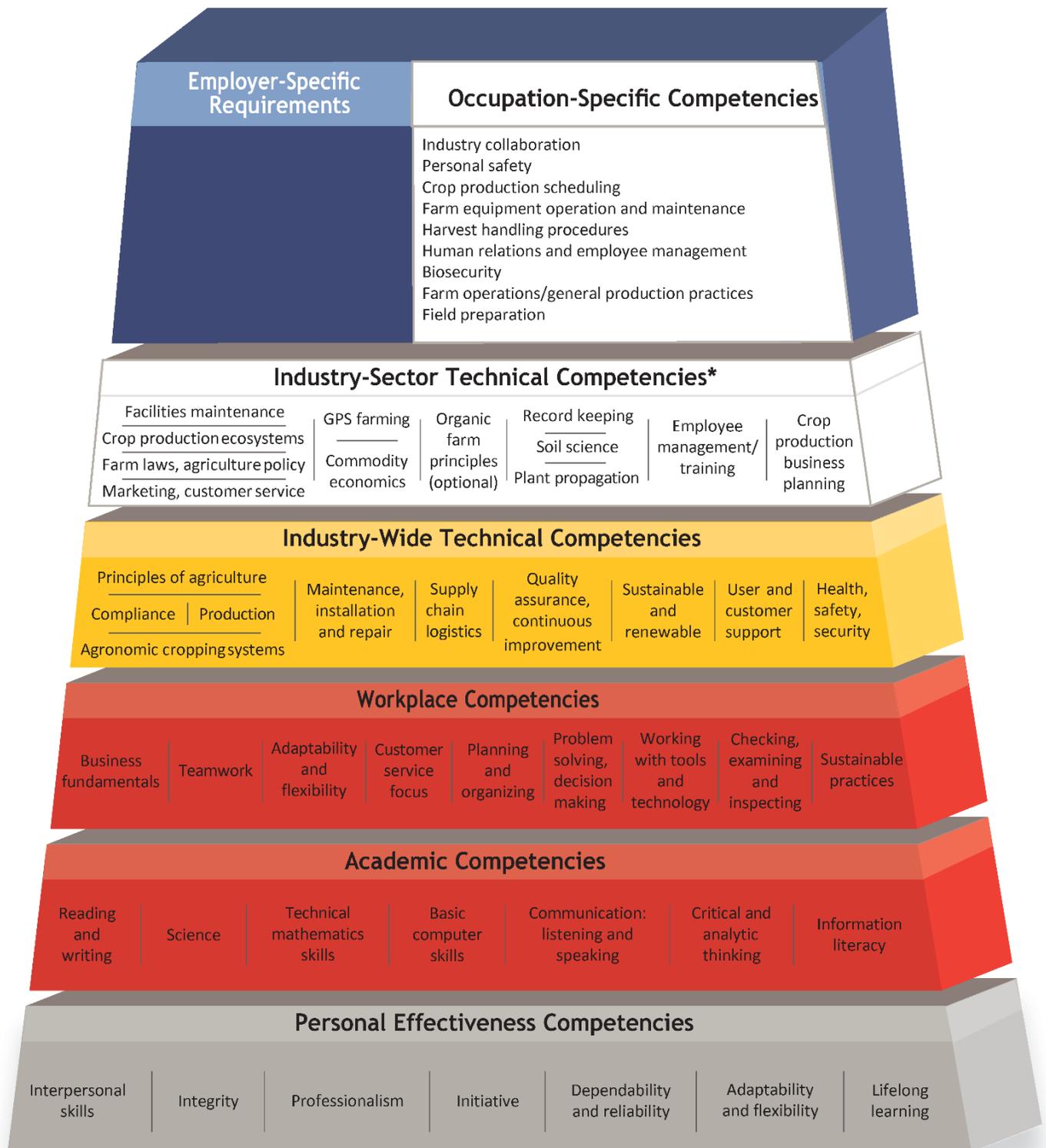


# Minnesota Dual-Training Pipeline

## Competency Model for Agriculture Occupation: Crop Farm Manager



Based on: Competency Model Employment and Training Administration, United States Department of Labor.

\* Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.



## Competency Model for Crop Farm Manager

**Crop Farm Manager** – An individual who leads a team in administering processes to ensure sound production of large-scale production field crops such as wheat, soybeans, potatoes, sugar beets, hay, etc. to assure optimum productivity. Crop Farm Managers are often responsible for all aspects of crop care, facility repair and maintenance at the site. They also are in-charge of marketing and selling the crop as well.

### Industry-Sector Technical Competencies

**Related Instruction** for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Record keeping** – Knowledge of record keeping procedures regarding production, economics, and crop issue troubleshooting.
- **Employee management/training** – Understand employee management principles and training techniques.
- **Plant propagation** – Know how to seed crops, transplant crops, and maintain fertility as well as how to seed and transplant selections for ongoing genetics and breeding.
- **Soil science** – Understanding of the principles of creating optimal soil conditions for crop products.
- **Crop production ecosystems** – Knowledge of principles used to treat farm as an ecosystem and understanding of impact of farm inputs of pesticides, irrigation, fertilizers, etc. to manage productivity and control weeds.
- **Organic farm principles (optional)** – Understand rules, regulations, necessary paperwork, and best practices for operating an organic crop production farm.
- **Marketing, customer service** – Knowledge of the principles of marketing crop products and best practices for customer service.
- **Crop production business planning** – Understand how to write and follow a working

business plan to manage production costs, labor, transportation and supplies to maximize potential profits.

- **Commodity economics** – Understand how best to buy/ sell / hold onto crop commodities based on fluctuating market prices.
- **Facilities maintenance** – Knowledge of how to maintain and repair barns, silos, etc. to ensure best practices for crop production operations.
- **Farm laws, agriculture policy** – General understanding of the laws that pertain to farm insurance, trade policy, government subsidies, etc.
- **GPS farming** – Know how to use global positioning system technology to do things such as farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping.

## Occupation-Specific Competencies

**On-the-Job Training (OJT)** is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- **Industry collaboration** – Introduction to opportunities to collaborate with other businesses within the agricultural industry.
- **Personal safety** – Ability to use proper industry standards to maintain a safe work environment to ensure personal well-being.
- **Crop production scheduling** – Planning of when to plant, weed, prune, harvest, and rotate crops.
- **Farm equipment operation and maintenance** – Ability to operate and maintain tractor, hand tools, tractor implements, pack tools, etc.
- **Harvest handling procedures** – Ability to harvest crop(s) and then post-harvest properly clean, cool, sort, pack, store, cure, and label crop as well as transport crop for processing/sales.
- **Human relations and employee management** – Understanding of proper human relations and managing staff.
- **Biosecurity** – Knowledge of procedures intended to protect plants against disease or harmful biological agents
- **Farm operations/general production practices** – Awareness of general farm

production practices and the operations required for successful farm business.

- **Field preparation** – Know how to get your field to be in optimal condition for utilizing different equipment, while properly balancing cover crops with farm inputs and know how that interacts with soil conditions and weather conditions to create best possible prepared field for crop production.

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