



CAREER GUIDANCE MATRIX



This document highlights some careers in the seed industry. This is a guide for students who wish to or are currently studying in the agricultural space, to indicate the types of careers one can venture into with certain degrees. Please take note that studying a certain degree does not automatically mean you will work in those fields. With experience, your career can evolve over time. This matrix indicates the lowest qualification and experience required for specific roles.

Job titles	Grade 9-12	Agriculture	Agribusiness/ Ag Economics	Agronomy	Biotechnology	Botany	Crop Science	Entomology	Genetics	Horticulture	Microbiology	Plant Breeding	Plant Pathology	Plant Production	Plant and Soil Science	Seed Science and Tech	Qualification	Description
Field Positions																		
Field Production Officer / Inspector																	Agricultural Diploma / Degree	Organises and manages production activity to ensure that seed is produced and delivered at the right quantity and quality.
Junior/Trainee Production Officer																	Not qualified as a seed inspector. No experience required	Assists seed production officers with field activities.
Seed Production Planner																	BSc Agriculture/Similar degree	Develops and updates the Crop Plan for parental and experimental seeds to cover and support production and future strategy requirements.
Plant Pathologist																	BSc (Hons) / MSc Plant Pathology	Performs disease screening (field), may perform DNA extractions, inoculations (laboratory).
Agricultural Worker																	Qualified through experience	Works in the field. Performs basic duties tending to plants.
Research Assistant / Technician																	National Diploma	Provides technical and practical back-up on all breeding activities, such as identifying trial sites, layout and planting of trials, and data collection.
Research Farm Manager																	Diploma/Degree in Plant Production or similar (5-10 experience)	Manages the farm operations.
Skilled Agricultural Worker																	Literate (5-10 years experience)	Semi-literate and qualified through experience. Performs duties such as pollinating and attending to plants.
Agronomist / Horticulturist / Technical Specialist																	Post-graduate degree in Agriculture or related discipline	Provides technical solutions to agronomic / horticulture problems for each segment in support of the sales strategy and technical development strategy.
Trial Officer																	BSc/Diploma Agriculture	Prepares and implements various product trials to evaluate product performance, prior to commercial release.
Sales Representative (Agriculture)																	Tertiary qualification with technically specialised knowledge (Sales experience required)	Sells seed and other products and services, using specialised knowledge of the relevant technology.
Product / Crop Specialist / Sales Agronomist																	BSc Agriculture	Supports sales team by providing specialist technical solutions (crop knowledge).
Laboratory Positions																		
Biotechnologist																	BSc Biotechnology/Genetics/ Microbiology	Performs and applies various molecular techniques and related biotechnology methodologies in the laboratory.
Laboratory Assistant																	Grade 10 - 12. Not qualified	Assists the Plant Pathologist/Biotechnologist/Seed Analyst with routine tasks in the laboratory.
Quality Laboratory Manager																	Degree in Botany / Plant Pathology	Manages employees in germination, purity, field and special tests related to quality testing, sizing and planting studies.
Senior Seed Analyst																	Degree in Botany / Plant Pathology	Responsible for analysing seed samples and performing advanced seed testing techniques.
Trainee Seed Analyst																	Not yet qualified but may be in the process of obtaining certification	Performs basic, routine tasks in the seed testing laboratory such as preparing and planting of samples to assist the Seed Analyst.
Office Positions																		
Product Manager																	BSc Agriculture or similar degree	Work with sales and commercial team to manages products throughout life cycle.
Regulatory Assistant																	BSc Biotechnology or Genetics	This position is responsible to provide support for biotech registration and regulatory affairs activities in South Africa.
Quality Lead/Executive																	Degree with 5-10 years experience	Oversees all quality assurance functions and departments.
Seed Quality Manager																	BSc Agriculture	Performs compliance and systems audits on all internal systems and processes, and on external parties handling the company's products.
Technical Services Manager/ Head of research / Lab manager																	MSc / PhD Plant Pathology; experience required	Manages the plant pathology department and oversees plant pathology and / or biotechnology activities.
Programme Leader / Senior / Principal Breeder																	PhD/MSc qualification in Plant Breeding or genetics; experience required	To be responsible for a breeding programme to ensure that value-added commercially viable varieties are developed.
Research Associate / Junior Breeder																	MSc in Plant Breeding and Genetics	Assembles and analyses data of specific research problems and experiments, while initiating actions within standard procedures.
Commercial Lead/Executive/Sales and Marketing Executive																	Appropriate Degree/Diploma/MBA; experience required	Oversees all commercial activities of the organisation.
Supply Chain Executive (Agriculture)																	Degree (Agriculture not needed, logistics); experience required	Provides leadership and direction to seed production operations and manufacturing activities across the country.
Warehouse Positions																		
Seed Receiving Supervisor/Seed Sampler																	Qualified seed sampler	Receives seed lots into the organisation (physically and electronically), taking representative seed samples for testing.