Curriculum for the Diploma in Agriculture

		Agricultural Production ↓	Farm Business Management ↓	Resource Management ↓	Farm Engineering ↓
Domain →					
Exit level competence outcomes →→→→		• Plans selected production system/s • Manages a production system in a sustainable manner to optimise economic return	• Adds value and markets the farm business effectively • Manages agribusiness finances as a means of planning and monitoring the management of the enterprise • Manages human resources of the farm • Manages the external farm environment • Engages in personal risk taking to exploit opportunities in an informed manner	• Makes informed decisions regarding sustainable land use	• Manages the farm infrastructure and machinery
Generic→		**Generic competencies and exit level outcomes** • Engages in personal risk taking to exploit opportunities in an informed manner (Entrepreneurship) • Identifies and addresses competency gaps between own and required performance (Self management) • Expresses a message in such a way that a previously identified audience understands it coherently (Communication) • Works as a member of a team in such a way that the individual efforts have an optimum contribution to the successful completion of the task (Team work) • Demonstrates a morally acceptable standard of behaviour as defined by the profession (Ethics) • Information retrieval and processing (including ICT)			
Semester Theme ↓					
Year 1	**SEMESTER 1** Identify resources and production systems	**Introduction to Agriculture (24)** Introduction to agriculture, Farming Systems, Animal Anatomy & physiology, Soils (SPAC), Animal behaviour & animal welfare, Plant Anatomy & physiology	**Agri-socio Economics (8)** Rural Sociology, Agricultural Organizations in SA, Land tenure, Economic Principles, Agricultural Calculations	**Natural Resources (24)** Water, Soils, Vegetation, Mapping / Topography, Climate	**Farm Infrastructure (8)** Introduction to: Homestead, Building materials, Foundations, floors & walls, Farm roads, Small farm dams, Conservation structures, Fencing Mechanical Engineering
	SEMESTER 2 Determine requirements for sustainable agriculture	**Agricultural Production (24)** BASIC: Genetics, Life Cycles, Record keeping, Soil fertility, Plant & Animal Reproduction, Digestion & basic nutrition, Animal Health, Plant Health	**Agribusiness (16)** Production Economics, Marketing, Farm Accounting	**Environmental Impact (16)** Resource Conservation, Veld Management, Alien Plant Control	**Farm Construction (8)** Plans & specifications, Water supply, Waste handling, Quantities & costs, Electricity, Alternative building methods Dam construction, Road construction, Contour bank construction
Year 2	**SEMESTER 3** Plan and implement an enterprise	**Animal Production I (16)** BASIC: Breeding and selection, Nutrition, Fodder, Growth & development, Animal Health (Steer Project) **Crop Production I (16)** Plant Propagation and Establishment: Principles, techniques & practices (Propagation Project)	**Agric Business Management (16)** Farm Business Management, Electronic records, Financial Statements, Gross margins, Budgeting, Financial planning Machinery management	**Land Preparation (8)** Site selection and planning, land preparation, contours, soil fertility	**Hydraulics & Irrigation (16)** Properties of fluids, Flow in pipes, Pipes, Pumps, Stock watering, Flow measurement, Soils, Crop – water – climate relations, Overview of systems Planning, Management & maintenance
	SEMESTER 4 Plan, implement and evaluate an enterprise	**Animal Production II (16)** ADVANCED: Breeding, Nutrition, Fodder, Growth & development **Crop Production II (16)** Options of production systems and approaches, Production cycles, Crop protection	**Agri-entrepreneurship (24)** Computerised budgets, Entrepreneurship and enterprise management, Human Resource Management	**Assessing Natural Resources (16)** Climate, Soil Classification, Water, Topography, Vegetation	**Practical Surveying (8)** Dumpy level surveying
Year 3	**SEMESTER 5 & 6** Plan and manage a profitable farming System	**2 x Production Courses (32 each)** Beef Production, Dairy Production, Game Management, Pig Production, Poultry Production, Small Stock Production, Agronomy, Fruit Production, Vegetable Production, Forestry, Sugar Cane Production	**Risk Management in Agriculture (32)** Managing Risk and Risk Planning, Trade Agreements, Deregulated marketing, Production planning, Feasibility study and Agribusiness planning	**Land Use Planning (32)** Interpretation of resource data, Optimisation of enterprises, Enterprise selection, Runoff control planning	
	Credits (384) (392)	**160**	**96**	**96**	**40**