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**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Agricultural Extension

registered by Organising Field 01, Agriculture and Nature Conservation, publishes the following Qualification for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification can be accessed via the SAQA web-site at www.saga.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification should reach SAQA at the address below and **no later than 15 September 2008**. All correspondence should be marked **Standards Setting – Agricultural Extension** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION: *National Diploma: Agricultural Extension*

SAQA QUAL ID		QUALIFICATION TITLE	
63249		National Diploma: Agricultural Extension	
ORIGINATOR		PROVIDER	
SGB Agricultural Extension			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National Diploma	1 - Agriculture and Nature Conservation	Primary Agriculture	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	256	Level 5	Regular-Unit Stds Based

This qualification does not replace any other qualification and is not replaced by another qualification.

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

Qualifying learners will gain competencies that will promote extension expertise in a sub field in the context of plant/animal production or Land Care by being able to:

- > Apply integrated knowledge, skills and values of the Principles & Philosophy of extension in an intervention.
- > Select and apply inter personal skills which are conducive to an extension setting.
- > Interact with a group towards fulfilling their objectives and goals within their own potential.
- > Apply knowledge of extension management to complement the role of all stakeholders and role players towards sustainable development.
- > Implement and manage an extension project plan, meeting the objectives and criteria within an extension programme.
- > Design a farm plan based on natural resources for the development and implementation of a sound production strategy ensuring sustainable resource utilization.
- > Collect and analyze appropriate data to provide support and to participate in the development of an agri business plan.
- > Implement an integrated sustainable production system to ensure the quality and quantity of the produce.

Rationale:

Learners who wish to enter extension as a profession need knowledge and skills to work in the complex and rapidly changing agricultural environment.

The Department of Agriculture initiated the development of this qualification based on a research study conducted in all the provinces suggesting active skills enhancement. The research culminated in "An Agricultural Education and Training Strategy" which outlines the need for training of extension officers to support small scale farmers to be able to produce for profit including addressing poverty, managing food security and natural resources.

This qualification is aimed at learners who wish to enter a career in extension and have acquired experience in related sub fields of technical skills, experience and knowledge. Qualifying

learners could render services to: Farmers, farm workers, Rural communities, Departments of Agriculture (National and Provincial), Community Based Organisations, NGOs, Faith-based organisations, Universities, Agricultural Colleges, Local Governments, Department of Water Affairs and Forestry, Social and Economic cluster departments, Private sector (e.g. producer orgs. Coops, service provider), Agricultural Research Council, Department of Economic/Environmental Affairs and Tourism.

Extension is recognised to be multi- and inter-disciplinary in nature. It overlaps largely with other behavioural sciences, which have the common purpose of understanding human behaviour, and in this regard it shares certain interests with disciplines in the human and natural science.

However, because extension is an applied discipline it focuses not only on the understanding, but also on the change of behaviour.

Services rendered by a qualifying learner would further the participation of target communities in development programmes and increase the sustainability of specific development projects and programmes for improved and accelerated upliftment of their livelihoods.

This qualification provides benefits to the economy and society as it addresses the skills shortage as identified in the National Skills Development Act of 1998 and the Critical and Scarce skills identified by the Department of Labour. Furthermore, it supports the national initiatives of the National Department of Agriculture as explained in the following strategic documents:

- > National Education and Training Strategy for Agriculture and Rural Development in South Africa - Department of Agriculture 2005.
- > Norms and Standards for Extension and Advisory Services in Agriculture - Department of Agriculture June 2005.
- > The Strategic Plan for South African Agriculture - Department of Agriculture 2003.

This qualification more generally supports the following national initiatives:

- > Land reform initiatives and programmes.
- > Black economic empowerment.
- > Integrated Sustainable Rural Development Strategy.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED IN PLACE

It is assumed that the learner is competent in Communication and Mathematical Literacy at NQF Level 4 and in other related technical knowledge such as animal production, plant production, or nature conservation.

Recognition of Prior Learning:

The structure of this unit standards based qualification makes the Recognition of Prior Learning possible. This qualification may therefore be achieved in part or completely through the recognition of prior learning, which includes formal, informal and non-formal learning and work experience.

The learner should be thoroughly briefed on the mechanism to be used and support and guidance should be provided. Care should be taken that the mechanism used provides the learner with an opportunity to demonstrate competence and is not so onerous as to prevent learners from taking up the RPL option towards gaining this qualification.

If the learner is able to demonstrate competence in the knowledge, skills, values and attitudes implicit in this qualification the appropriate credits should be assigned to the learner. Recognition of Prior Learning will be done by means of Integrated Assessment as mentioned above.

Access to the Qualification:

Open Access.

QUALIFICATION RULES

This qualification consists of:

- > Fundamental 24 credits.
- > Core 178 credits.

Electives:

The learner must choose any of the Specialization:

- > Plant production: A minimum of 54 credits.
- Or
- > Animal production: A minimum of 54 credits.
- Or
- > Land Care Management: A minimum of 54 credits.
- > Other Electives - Or electives for any relevant technical sub-field or work setting.

To obtain this qualification a minimum of 256 credits is required.

EXIT LEVEL OUTCOMES

1. Apply integrated knowledge, skills and values of the Principles & Philosophy of extension in an intervention.
 - > Range for intervention includes but not limited to: Programmes, projects, setting, plan.
2. Select and apply interpersonal skills which are conducive to an extension setting.
 - > Range for inter personal skills includes but not limited to: One to one; face to face, group, mass media.
3. Interact with a group towards fulfilling their objectives and goals within their own potential.
4. Apply knowledge of extension management to complement the role of all stakeholders and role players towards sustainable development.
5. Implement and manage an extension project plan, meeting the objectives and criteria within an extension programme.
6. Design a farm plan based on natural resources for the development and implementation of a sound production strategy ensuring sustainable resource utilization.
7. Collect and analyze appropriate data to provide support and to participate in the development of a business plan.
 - > Range for data: Financial, input, price tendencies, production volumes; export opportunities, market access; climate.
8. Implement an integrated sustainable production system to ensure the quality and quantity of the produce.
 - > Range for system not limited to: Plant production, animal production, land use.

Critical Cross-field Outcomes (CCFO):**Unit Standard CCFO Identifying:**

- > Identify and solve problems using critical and creative thinking to address extension project contingencies.

Unit Standard CCFO Working:

- > Work effectively with others when participating on project teams as well as multi-disciplinary teams.

Unit Standard CCFO Organizing:

- > Organize and manage one-self and activities when participating as project team member.

Unit Standard CCFO Collecting:

- > Collect, organise and evaluate information when delivering reports.

Unit Standard CCFO Communicating:

- > Communicate effectively and responsibly whilst reporting on project milestones.

Unit Standard CCFO Science:

- > Use science and technology when reporting on extension practices.

Unit Standard CCFO Demonstrating:

- > Demonstrate an understanding of the world as a set of related systems when functioning in the extension environment.

Unit Standard CCFO Contributing:

- > Be culturally and aesthetically sensitive across a range of social contexts when interacting with communities.

ASSOCIATED ASSESSMENT CRITERIA**Associated Assessment Criteria for Exit Level Outcome 1:**

- > Community dynamics are observed and interpreted to plan an intervention which mobilizes community participation.
- > Extension approaches are selected and applied according to the interpretation of organizational and institutional structures.
- > The philosophies and principles of extension are described and considered for different settings.
- > Extension ethics are explained and applied in a professional manner.

Associated Assessment Criteria for Exit Level Outcome 2:

- > The theory of basic communication is interpreted and applied in an extension intervention.
- > Coaching and mentoring strategies are developed to promote experimentation and learning within communities.
- > The fundamentals of behavior are applied when interacting with beneficiaries of an extension intervention.
- > The effect of personal characteristics and traits is identified and counteractive approaches are considered for different target groups.

Associated Assessment Criteria for Exit Level Outcome 3:

- > The principles of group dynamics are considered and applied when working with a group in an extension programme.

- > Range principles not limited to: Leadership, atmosphere, communication, group size, cohesion.
- > Relevant processes to change are considered to enhance development in communities.
- > Group facilitation skills are applied to explore the full potential of a group.
- > The role of groups are recognized and explored in the broader context of community development.
- > Group participation is encouraged to ensure optimum functionality and empowerment of a group.
- > Group activities within different groups are coordinated to ensure optimum development.

Associated Assessment Criteria for Exit Level Outcome 4:

- > The political, institutional and legislative environment is considered and adhered to in the designing and planning of extension/development programmes.
- > Context within which the client/beneficiaries operates is explained within a macro setting with reference to the impact of all systems on development.
 - > Range for systems includes but not limited to: Funding, agricultural input/output, value chain, resources, extension agents, economy.
- > The role and functions of multi-disciplinary teams are considered to interact and participate meaningfully in development initiatives.
- > Networks are established to improve the support base in extension management.
- > Full pro-active participation in the analysis, planning and management of a sustainable enterprise is obtained taking into consideration a volatile and competitive business environment.
 - > Range for enterprise includes but is not limited to agri-business, value-adding enterprise, craft enterprise, service industry.

Associated Assessment Criteria for Exit Level Outcome 5:

- > All the phases of a project cycle are managed to meet the objectives and criteria as identified with the beneficiaries.
 - > Range project cycle; Initiation, Planning, design, execution and evaluation.
- > Managerial principles are applied to ensure the effective and efficient implementation of the project plan.
 - > Range managerial principles not limited to: Plan, organize, lead and control.
- > Communication structures within the project are followed to support the flow of information to all stakeholders.
- > All relevant data is collected and recorded in a format suitable for analysis and interpretation.
- > Interventions and opportunities for the transfer of technology are integrated in the project plan.

Associated Assessment Criteria for Exit Level Outcome 6:

- > Natural resources are evaluated according to existing scientific criteria.
 - > Range scientific criteria not limited to: Carrying capacity, soil classification; physical and chemical properties; climatic data; topography; water, catchments.
- > A physical farm plan is designed based on the evaluation of the resources.
- > A land-use plan is designed and implemented for sustainable production.
- > A production plan is designed and implemented considering the impact of resources and markets on the sustainability of the production process.
 - > Range of resources: Technology, economic, human, natural and physical resources.
- > A strategic management and maintenance plan for equipment, infrastructure and implements is designed and implemented for economic and sustainable production.

Associated Assessment Criteria for Exit Level Outcome 7

- > Financial statements are analyzed and interpreted with the view to generate sound managerial information.

- > A data collection plan is developed and managed to identify suitable enterprises to make sound managerial decisions.
- > Range for enterprise includes but is not limited to agri-business, value-adding enterprise, craft enterprise, service industry.
- > An input chain is planned and managed to support the economic viability of an enterprise.
- > Various farming systems and trends are optimized and integrated within related enterprises.

Associated Assessment Criteria for Exit Level Outcome 8:

- > Risk management plans are developed to reduce vulnerability and insecurity against the disastrous effects of hazards such as, climatic extremes, fires, theft, problem animals and plants.
- > The anatomical, physiological and bio-chemistry processes are interpreted to improve production processes within an ecological system/situation.
- > Scientific re-production and manipulation practices and sound selection criteria are considered for sustainable and economical yield.
- > Scientific nutrition principles are implemented to support quantity and quality of production.
- > Integrated pest and disease management principles are implemented to ensure a healthy and safe production environment and products.
- > Sound physical maintenance practices and sanitation are applied for qualitative and quantitative production.
- > Effective Harvest/utilization practices are performed to ensure sustainable quality and quantity of the produce.

Integrated Assessment:

- > To ensure that assessment practices are open, transparent, fair, valid, and reliable and to ensure that no learner is disadvantaged in any way whatsoever, an integrated assessment approach is incorporated into the qualification. Assessment practices will also integrate practical and theoretical assessment.
- > Learning, teaching and assessment are inextricably interwoven. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the unit standards should be integrated.
- > Assessment of communication should be integrated as far as possible with other aspects and should use practical administration contexts wherever possible. A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working or will work.
- > The term 'integrated assessment' implies that theoretical and practical components should be assessed together. During integrated assessments, the assessor should make use of a range of formative and summative assessment tools, methods and assess combinations of practical, applied, foundational and reflective competencies.
- > Assessors must assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.
- > Assessment should ensure that all specific outcomes, embedded knowledge and critical cross-field outcomes are evaluated in an integrated manner.

INTERNATIONAL COMPARABILITY

Comparison with similar qualifications internationally is difficult to establish. Traditionally extension is treated in one of three ways internationally:

- > As a top-up qualification to a previously acquired agricultural qualification.

- > As modules within a technical agricultural qualification (e.g. National Diploma: Plant Production).
- > A general qualification without a technical agricultural focus.

Further, internationally extension is usually either offered as agricultural extension or as extension education. The qualifications sit within agricultural faculties of universities, education faculties of universities and in agricultural training institutes. In other cases, extension is offered as an area of learning within an agricultural qualification. This qualification fits into the third category cited above. It is aimed at a more generic qualification that can be applied to a number of technical specialisations and qualifications. It is also designed to accommodate the unique transitional issues facing South Africa.

Comparison within SADC:

No one-year diplomas or certificates were found in the SADC region (other than within South Africa) that could be compared to this qualification.

The Universities of Namibia and Swaziland each offer a 3-year diploma in agriculture in which agricultural extension features significantly. The areas of learning covered are similar to those in this qualification but to a very limited degree. Again, however, these are both 3-year diplomas unlike the proposed diploma.

Comparison with other International Institutions:

- > University of Mauritius:
- > Certificate in Agricultural Extension:
- > One-Year Qualification:

The University of Mauritius offers a Certificate of Agricultural extension. The course is designed to train the students to develop a good understanding of the principles and theory underlying agricultural extension. On successful completion of the programme, they will be able to apply these practical extension works and have the ability to evaluate extension activities and programmes.

Although the qualification is grounded in agriculture, this certificate closely resembles the proposed diploma in many ways. The areas of greatest similarity to the proposed diploma are:

- > Basic principles of extension. Human behaviour and learning. The Communication process. Communication and extension. Approaches, methods and techniques of extension. Adult education. Design and running of Training courses.
- > Information transfer (in agriculture). Communication and information technologies - Print & audiovisual communication. Emerging trends. Multimedia. Internet and Worldwide Web. Design and production of communication material.
- > Working objectives and preparation of extension programmes. Selection of appropriate methods, tools and techniques. Monitoring & evaluation. Staff Management. Extension organisation in Mauritius.
- > Urban and rural areas. Characteristics of rural communities. Gender issues. Traditional farming and Modern agriculture. Rural organisations & cooperatives. Rural Development and policy implications.
- > Institutions (agricultural). Producer groups. Institutional development. Legislation (agricultural). Emerging issues, concepts & technologies.

It covers areas of learning similar to those in the SAQA qualifications including:

- > Extension principles and methods.
- > Management of extension programmes.

- > Communication and media in extension.
- > Farming systems research.
- > Social aspects of agriculture.
- > Data analysis and computing techniques.
- > Agricultural organisation and services.

Areas not directly covered in the proposed diploma, but covering the similar concepts:

- > Farming systems research. Participatory rural appraisal. Participatory diagnosis of farm problems. Farmer - extension - research linkages. On-farm research. Agricultural information systems. Sustainable agricultural development.

Areas not covered in the proposed diploma:

- > Basic economic principles. Farm Management. Planning, implementation & control functions. Planning tools. Records. Farm development and project preparation. Capital and credit. Marketing. Implications of Government Support Policies.
- > Collection, organisation and presentation of data. Data handling and analysis. Computer hardware operation. Application Softwares e.g. wordprocessing, spreadsheet and database. Computer applications in agriculture.

North Carolina State University, USA:
Graduate Certificate in Agricultural Education:
One-Year Qualification:

The qualification is grounded in agriculture and is more directly concerned with education. As such it is dissimilar to the proposed certificate.

One area of similarity to the proposed diploma is:

- > Programme Planning in Agricultural and Extension Education.

Areas of marginal similarity are:

- > Practicum in Agricultural and Extension Education.
- > Youth Program Management.

Areas of dissimilarity:

- > Agricultural Education, Schools and Society.
- > Occupational Experience in Agriculture.
- > Instructional Design in Agricultural and Extension Education.
- > Curriculum Development in Agricultural and Extension Education.
- > Teaching Agriculture in Secondary Schools.
- > Effective Teaching in Agriculture and Life Sciences.

University of the West Indies:
Diploma in Agricultural Extension:
One-year qualification:

This qualification is open to learners who have completed a first degree or who hold a recognised technical or professional qualification in addition to practical experience or other qualifications of special relevance to the course of studies. This is a very similar approach to the proposed certificate in that it is intended for learners (especially learners with field experience) in

a technical field to which they can add an extension qualification. Again, although it is embedded in agriculture, this diploma has much in common with the proposed certificate.

The areas of similarity to the proposed diploma are:

- > Community Analysis.
- > Extension Philosophy and Principles.
- > Communications Theory and Practice.
- > Current Issues in Agricultural & Rural Development.
- > Managing Extension for Agricultural and Rural Development.
- > Rural Social Systems.

This qualification has a Field Research Project which the proposed diploma does not have.

Other institutions included in the search for international comparability included the following:

- > Bahir Dar University, Ethiopia (Management Department: Business Economics Faculty).
- > Bangladesh Open University, Bangladesh.
- > Botswana College of Agriculture, Botswana.
- > Bukalasa Agric College, Uganda.
- > Ewing Christian College, India (Allahabad Agricultural Institute).
- > Guru Ghasidas University, India (Faculty of Adult, Continuing Education and Extension).
- > Indian Institute of Technology, Kharagpur, India (Rural Development Centre).
- > Maharajah Sayajirao University of Baroda, India (Department of Extension and Communication: Faculty of Home Science).
- > Ministry of Agriculture, India (Institute of Agricultural Extension Management).
- > Ohio State University, USA.
- > University of Bath, UK.
- > University of Kerala, India (Centre for Adult, Continuing Education and Extension).
- > University of Mauritius.
- > University of Melbourne, Australia (Institute of Land and Food Resources).
- > University of New South Wales, Australia, (Hawkesbury College of Advanced Education).
- > University of Queensland, Australia.
- > University of Reading, UK (International and Rural Development Department).
- > University of Science and Technology, Ghana.
- > University of the West Indies, Trinidad & Tobago (Department of Agricultural Economics and Extension).

Conclusion:

In conclusion, the proposed Diploma compares very favourably with similar level extension qualifications offered by numerous institutions internationally. It covers the essential areas of extension that are used internationally, but in addition to accommodating more traditional agricultural extension (including agribusiness, and plant and animal production), it is constructed to address areas of particular concern to South Africa such as Land Care as well as the transformational issues peculiar to South Africa particularly in agriculture, land reform and Black economic empowerment.

ARTICULATION OPTIONS

The Diploma: Extension Level 5 articulates horizontally and vertically with the following learning programmes and qualifications in the "Extension field".

Horizontal Articulation:

- > ID 49011: National Diploma: Animal Production at NQF Level 5.

- > ID 49010: National Diploma: Plant Production at NQF Level 5.
- > ID 49626: National Certificate: Land Care Facilitation at NQF Level 5.
- > ID 59949: National Certificate: Natural Resource Management: Terrestrial at NQF Level 5.

Vertical Articulation:

- > ID 59550: National Certificate: Agricultural Extension at NQF Level 6.
- > Bachelor of Agriculture: Extension at NQF Level 6.
- > Bachelor of Science: Agriculture: Livestock Science and Agricultural Extension at NQF Level 6.

MODERATION OPTIONS

- > A person assessing a learner or moderating the assessment of a learner against this Qualification must be registered as an assessor with the relevant ETQA.
- > Any institution offering learning that will enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA.
- > Assessment and moderation of assessment will be overseen by the relevant ETQA and/or HEQAC according to the ETQAs and/or HEQAC policies and guidelines for assessment and moderation; in terms of agreements reached around assessment and moderation between ETQAs and/or HEQAC (including professional bodies); and in terms of the moderation guideline.
- > Moderation must include both internal and external moderation of assessments at exit points of the qualification, unless ETQA and/or HEQAC policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual unit standards, exit level outcomes as well as the integrated competence described in the qualification.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

For an applicant to register as an assessor, the applicant needs:

- > To be competent in the planning and conducting assessment of learning outcomes as described in the unit standard: Plan and conduct assessment of learning outcomes NQF Level 5.
- > A relevant tertiary qualification above the level of the qualification and/or 3 years experience in the relevant field.
- > To be registered with the relevant Education and Training Quality Assurance Body.

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	8662	Analyse and communicate workplace data	Level 5	5
Fundamental	8648	Demonstrate an understanding of professional values and ethics	Level 5	4
Fundamental	252894	Use non-verbal communication in extension and development	Level 6	5
Fundamental	252994	Use verbal communication in extension and development	Level 6	5
Fundamental	252954	Use written communication in extension and development	Level 6	5
Core	116428	Analyse and interpret the financial statements and physical records in an agri-business to generate managerial information	Level 5	11
Core	252469	Apply group dynamic principles in order to guide a group towards independence and sustainability	Level 5	8
Core	252463	Apply the fundamentals in the practice of extension as a profession	Level 5	8
Core	252490	Demonstrate an understanding of extension management	Level 5	12
Core	116425	Design a natural resource management plan	Level 5	8
Core	116426	Develop a production and strategic plan for the agricultural business	Level 5	11

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	252476	Develop and implement an extension programme plan	Level 5	10
Core	116412	Develop and manage a data collection plan to support an agricultural enterprise	Level 5	4
Core	252473	Develop and update networks for extension delivery	Level 5	10
Core	252471	Display cultural awareness in dealing with clients and extensionists	Level 5	4
Core	252478	Establish sustainable extension structures in a community	Level 5	10
Core	252475	Evaluate an extension programme in a simple setting	Level 5	5
Core	252477	Facilitate a group to achieve a stated objective or solve a problem	Level 5	10
Core	252474	Implement strategies for behaviour change and innovation	Level 5	5
Core	116382	Manage an input chain	Level 5	6
Core	116384	Manage and control resources in a sustainable manner	Level 5	5
Core	116337	Optimise and integrate various farming systems and trends within related enterprises	Level 5	11
Core	116324	Plan a farm and select a site	Level 5	9
Core	8663	Plan and conduct a research project	Level 5	6
Core	252464	Plan and implement interventions and opportunities for transfer of technology	Level 5	5
Core	252897	Facilitate behaviour change and innovation in extension	Level 6	20
Elective	14600	Analyse community and conservation issues	Level 5	12
Elective	116430	Apply and plan animal nutrition	Level 5	12
Elective	13649	Apply fundamental knowledge of environmental ethics to a field of work or study	Level 5	6
Elective	116429	Apply integrated pest management principles	Level 5	10
Elective	253972	Control soil erosion	Level 5	5
Elective	116431	Describe biological processes in plant physiology	Level 5	9
Elective	116427	Develop a propagation plan for any agricultural production system	Level 5	9
Elective	116419	Develop and implement a food safety and quality management system in an agricultural supply chain	Level 5	7
Elective	116409	Develop and implement plant manipulation methods	Level 5	8
Elective	116414	Develop suitable irrigation systems	Level 5	10
Elective	116399	Dissect animals	Level 5	5
Elective	116388	Evaluate animal anatomy and physiology systems	Level 5	10
Elective	116393	Evaluate animal health systems	Level 5	8
Elective	117871	Facilitate learning using a variety of given methodologies	Level 5	10
Elective	116390	Harvest animal products: animal products systems	Level 5	9
Elective	116385	Integrate sustainable breeding and selection methods	Level 5	10
Elective	13647	Investigate options for improved environmental management and sustainable living	Level 5	16
Elective	116371	Manage soil systems	Level 5	10
Elective	116373	Manage the harvesting process of agricultural crops	Level 5	10
Elective	14020	Monitor budgets related to community projects	Level 5	8
Elective	116336	Understand juvenile animal rearing practices	Level 5	8

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION

None