



Western Cape  
Government

Agriculture

BETTER TOGETHER.



# Prospectus: Higher Certificate

Elsenburg Agricultural Training Institute

## CONTACT DETAILS

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### Applications

Applications on the prescribed application form must reach the Institute by or on 30 June of the preceding year of study. Application forms are available from the Registrar, or on the Elsenburg website. All applicants must, if required, complete the standardised tests of the Stellenbosch University.

### Student number

On receipt of new applications the Institute office assigns a unique number to each applicant that serves as identification of the individual concerned so as to simplify future communication. The student number must be used in all future correspondence with the Institute.

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### **PLEASE NOTE**

1. The Elsenburg Agricultural Training Institute reserves the right to amend the Prospectus at any time.
2. Management of the Elsenburg Agricultural Training Institute accepts no liability for any inaccuracies there may be in the Prospectus. Every reasonable care has, however, been taken to ensure that the relevant information to hand as at January 2017, the time of going to press, is given fully and accurately in the Prospectus.

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## **Vision**

The Advancement of Elsenburg Agricultural Training Institute as an agricultural and educational centre of excellence to the benefit of the broader community.

## **Mission**

To promote sound, integrated managerial and skills training in agriculture with advanced specialisation in area specific fields of excellence informed by industry and societal needs.

## **Elsenburg: a proud tradition**

Elsenburg's history dates back to 1698, when the land was allocated to Samuel Elsevier by Willem Adriaan van der Stel, at that time the governor of the Cape colony. The farm's successive owners, among whom Martin Melck is probably the best known, built it up to one of the prime farms in the Cape. Martin Melck built the beautiful old manor house in 1761. The farm was sold to the government by the Myburgh family in 1898.

On 1 September 1898 the Agricultural College, the first of its kind in South Africa, opened its doors. Five students received their diplomas at the end of the first academic year (June 1899). During the first fourteen years of its existence the average number of students was 44. During the First World War, however, there was a drastic reduction in applications, with only 8 students studying there in 1915.

In 1926 Elsenburg College of Agriculture and the University of Stellenbosch amalgamated and a two-year diploma course was offered at Elsenburg, with the primary aim of training prospective farmers. In 1927 this course was replaced with a one-year course, which was replaced by practical courses in 1931. In 1939 the two-year diploma course was reinstated. Elsenburg's relationship of 47 years with the University was severed in 1973 and the Department of Agriculture accepted responsibility for agricultural training at Elsenburg.

An important milestone in 1976 was the establishment of the Diploma in Cellar Technology. Many of South Africa's winemakers today, received their agricultural training at Elsenburg.

In 1994, with the transformation to a democratic political order in South Africa, the Department of Agriculture: Western Cape was created. The Elsenburg and Kromme Rhee colleges of agriculture amalgamated. The amalgamation placed a great responsibility on the Department of Agriculture to continue and to expand the training offered. A Centre for Further Education and Training was consequently created to address the need for short, practical courses.

The relationship with the University of Stellenbosch was again initiated and since 2004 Elsenburg has been offering a B.Agric programme in association with the University of Stellenbosch's Agriscience Faculty.

This development is in line with the government's new academic policy to give tertiary students more mobility between educational institutions. Duplication of programmes is also eliminated. Elsenburg College of Agriculture was renamed on 1 April 2004 to the Elsenburg Agricultural Training Institute.

## **South Africa: an agricultural gem!**

The creation of employment opportunities and the provision of sufficient and safe food and fibre of high quality at affordable prices are some of the demands faced by the agricultural sector. The opportunities and challenges in agriculture lie in the diversity of our topography, the variation in our soil, the divergent nature of our climatic regions, and in the expectations of demanding buyers of our agricultural products. Agriculture has to maintain a balance with nature without exploiting natural resources. Our country has an astonishing diversity of fauna and flora that has to be respected, protected and conserved. The agriculturalist is dealing with living and life-giving organisms in such a way that the goal to improve the quality of life of all, will be furthered.

Agriculture in South Africa contributes almost 5% to the gross national product, assists significantly in earning foreign exchange, is an important provider of employment and supplies basic human requirements in food and fibre. Agritourism is becoming increasingly important as an industry and provides an escape for many city dwellers. For each R1 million increase in the final demand for agricultural products, 83 new employment opportunities are created, in comparison with a corresponding figure of only 29 employment opportunities in the rest of the economy. It is generally acknowledged that agriculture has an important role to play in poverty alleviation.

Soil is an important production factor in agriculture. The Republic of South Africa extends over 122.3 million hectares of which 16 million hectares are used for crop production. Around 1.5 million hectares have established trees and 83 million hectares are covered by natural grazing. Soils with optimum physical and chemical conditions are scarce and localized, but there are various unique soil/climate interactions that allow for the cultivation of products for niche markets.

South Africa is a water scarce country. Around 30% of the country receives less than 250 mm rain per year, around 34% receives between 250 and 500 mm, 25% between 500 and 750 mm per year and only 1% of the country receives more than 750 mm of rain per year. In most regions rainfall is uncertain and periodic droughts occur. As a result of these and other factors, South Africa is dependent mainly on catch-dams and subterranean water sources. Just over 1,2 million hectares are irrigated. At present, agriculture is one of the largest users of water, almost 50%, but the farming sector faces increasing pressure for more water for industrial and residential users. Only 10% of agricultural soil is viable without irrigation. Water and irrigation management in South Africa consequently demands thorough knowledge of the subject.

South Africa is an agricultural gem. Due to the varying climatic conditions and topography, practically any crop can be cultivated. The country is currently self-sufficient in most primary food and fibre requirements for its rapidly growing population. Food crops in which there are not yet self-sufficiency, but which grow in large quantities are oil seeds, rice, tea and coffee. More than 33% of our horticultural production is exported, deciduous fruit comprising the largest volume. Further examples of South African exports are subtropical fruit, maize, sugar, vegetables, wine, cut flowers, flower bulbs, mohair and karakul pelts. 81% of agricultural land is natural grazing used mainly for extensive stock farming. This is almost 70% of South Africa's total area.

A variety of animals are reared: large and small stock, pigs and poultry. Aquaculture and game farming are rapidly growing industries with great potential. After-harvest handling, processing, storing and preserving of products and foods are different ways in which value is added to fresh produce. The ultimate quality of the product enjoyed by the consumer is dependent on the quality of the soil or the animal from which it is derived. Sustainable and responsible pest and disease control is therefore required.

From the above, it is clear that specialised knowledge, expertise, production and management skills are required for sustainable agricultural production. Graduates can enter various careers in agriculture and related sectors. Careers in farming

management, cellar technology, research, education and training, consultation, as well as installation management (e.g. cellars) and service delivery (e.g. suppliers), offer challenging options.

*(Information obtained from University of Stellenbosch Year Book)*

## **The profile of an agriculturalist**

The graduate agriculturalist has the necessary knowledge, skills and attitude to function independently, or in a team, in an agricultural environment. This includes the judicious application of science to the management of the value chain of a variety of food and fibre products in an economical, environmentally friendly and sustainable way for the benefit, betterment and welfare of humanity. To make this contribution, the agriculturalist displays the following professional characteristics:

### **Knowledge**

The knowledge of the applicable scientific concepts, the interaction between the biological and abiotic factors in the environment and the basic principles of research methods and methodology. The ability to create new knowledge, generate ideas and act innovatively. The ability to function effectively in an interdisciplinary environment. An understanding of sustainable development and sustainable resource management. Management of information and making informed decisions. A systems approach to the analysis of environmental problems.

### **Attitudes**

Respect for the environment and its users.

Acknowledgement of own limitations in terms of knowledge and skills. A positive approach to continuous professional development. Involvement in and service to the wider community. A positive example in terms of social responsibility and obligations. Acceptance of and a striving towards the highest academic standards.

## **Skills**

The ability to collect, integrate, interpret and apply knowledge and to use this information in problem-solving.

Effective communication with role players from various environments and backgrounds. Sufficient skills to function as an agricultural scientist, either independently or as a member of a team. The ability to interpret and apply relevant subject literature. The ability to utilize relevant resources in the work environment effectively. *(Information obtained from the University of Stellenbosch Year Book)*

## **ACADEMIC RULES: HIGHER CERTIFICATE**

This set of Academic rules was compiled specifically for the Higher Certificate programme of the Elsenburg Agricultural Training Institute. In case of any contradiction with the general rules of the University of Stellenbosch, these will apply.

### **GENERAL STIPULATIONS FOR THE HIGHER CERTIFICATE PROGRAMME**

#### **1. ADMISSION REQUIREMENTS**

The minimum requirements for admission according to the new school curriculum (as from 2008) are as follows:

- 1.1 For admission, a prospective student is required to be in possession of a National Senior Certificate (NSC) or school-leaving certificate from the Independent Examination Board (IEB) as certified by Umalusi, with admission to diploma studies (which requires a performance level of at least 3 (40-49%) in each of four designated university admission subjects, or an exemption certificate issued by the South African Matriculation Board to students with other school qualifications.
  
- 1.2 The prospective student is also required to take the National Benchmark Tests (NBT). Prospective students should write the Academic and Quantitative Literacy Test (AQL) and those who have Mathematics as a subject is required to write the Mathematics (MAT) test as well.
  
- 1.3 In addition to the general admission requirements, admission to the programme requires at minimum:

- Students must obtain an aggregate of at least 40% (excluding Life Orientation).
- Afrikaans OR English (Home Language OR First additional language) – **3 AND**
- Mathematics 3 or Mathematical Literacy - 4 **AND**
- Physical Science - 3 **OR**
- Life Science - 3 **OR**
- Agricultural Science - 3

**PLUS**

- One of the following subjects as recommended for admission by the Institute, also on at least a 3
- Business Studies
- Dramatic Arts
- Economics
- Geography
- History
- Religious Studies
- Information Technology
- Engineering Graphics and Design
- Music
- Accountancy
- Consumer Studies
- Visual Arts
- Languages (1 language of learning and teaching at an higher education institution and 2 other recognised language subjects)

**OR**

The minimum requirements for admission according to the old school curriculum (prior to 2008) are as follows:

- A Senior Certificate
- A minimum of 50% (D-symbol) aggregate and

- A minimum of 40% (E symbol) on SG for Biology or Science or Mathematics;
- 1.3.1 Because of the limited availability of places and our strategic and purposeful enrolment management, not all undergraduate applicants who meet the minimum admission requirements for a particular programme will necessarily be accepted.
- 1.3.2 Prospective students who do not meet the admission requirement at the time of registration will not be admitted to register for the programme.

## **2. ATTENDANCE AND ABSENTEEISM OF LECTURES, PRACTICALS, TESTS AND EXAMINATIONS**

Students are expected to attend all classes, practicals, tests and examinations. Lecturers keep attendance records, copies of which are submitted every semester to the Head of Student Affairs for record purposes. The following rules apply:

### **2.1 Absence from lectures**

If the class attendance of a student during the semester is unsatisfactory, less than 80%, it will be reported to Student Affairs who will warn the student about their absenteeism behaviour. After two warnings the student may be denied access to the examination.

### **2.2 Absence from practicals**

Attendance of all practicals is compulsory. If the practical attendance of a student during the semester is unsatisfactory, less than 100%, it will be reported to Student Affairs who will warn the student about their absenteeism behaviour. After two warnings the student may be denied access to the examination.

2.3 Permission for absence

Permission for absence is granted only as an exception (see 2.4). The onus then rests with the students to arrange with the lecturer concerned to do the relevant practical component and/or be evaluated.

2.4 Absence without authorisation

In a case of absence without authorisation from a practical, students are given a zero mark for any evaluation and also forfeit the right to a later evaluation.

2.5 Absence from tests and examinations

In all modules minimum two tests per semester should be written during normal class time as a means of continuous evaluation. These tests, with practical, are the only scheduled opportunities to obtain a predicate mark. If students are absent from the main examination or test opportunities (due to illness or any other reason, see 2.3), they forfeit that opportunity. The supplementary examination / test is then the only other and **final** opportunity to write an examination / test on that module.

2.6 If students do not write any examination, they are given a zero.

2.7 Students who cannot attend the main examination / test opportunity must submit valid medical certificates and/or other motivating documents to Student Affairs **within 2 working days** after the missed event (i.e. test or examination). The decision of the Faculty Management is final.

- 2.8 Students forfeit admission to the supplementary examination if no supporting documents are received and/or documents are received too late.

### **3. AUTHORISED ABSENCE FROM LECTURES, PRACTICALS, TESTS AND EXAMINATIONS**

- 3.1 Authorised absence is granted only as an exception and the student must make all relevant arrangements.

- 3.2 Any request for authorised absence must be submitted to the Head of Student Affairs in writing and must include the necessary motivation and/or proof.

- 3.3 Categories of authorised leave

- 3.3.1 Leave in this category will be granted to a student by the Institute and lecturers are compelled (as far as practically feasible) to accommodate such a student if he/she has missed lectures, practicals, a tests or examination.

- a) Proven illness of a student, supported by a medical certificate;
- b) A death in the close family of the student, viz. the death of parents, siblings and grandparents, supported by a death certificate and affidavit.
- c) Compulsory attendance, e.g. witness in court, supported by relevant documentation;

- 3.3.2 Leave in this category will be granted on condition that he/she is able to make prior satisfactory arrangements with the lecturer concerned regarding lecturers, practicals and assessments.

- a) Absence with regards to individual participation in international and national events by invitation supported by relevant documentation;
- b) Absence with regards to representation of Stellenbosch University or the Institute at National or International level supported by relevant documentation;
- c) All sporting activities at International, National and Provincial level supported by relevant documentation.

3.3.3 Requests for compassionate leave must be arranged with the Head of Student Affairs. Exceptional cases will be considered by the Faculty Management on receipt of a written request/motivation.

3.4 Students who are not granted leave of absence shall receive a letter in which a warning follows that section 2.1 – 2.3 will come into effect.

#### **4. DETERMINATION OF THE PREDICATE MARK (EXAMINATION ADMISSION MARKS)**

4.1 Predicate marks are earned through scheduled and non-scheduled tests, assignments, practical tasks and library work.

4.2 In all modules minimum two tests per semester should be written during normal class time as a means of continuous evaluation. These tests, with practical, are the only scheduled opportunities to obtain a predicate mark.

4.3 The predicate mark is calculated as follows:

The scheduled tests: minimum 70% of the predicate (refer to 3.2);

Other prescribed forms of evaluation: a maximum of 30%;

Non-scheduled forms of evaluation: a maximum of 10%;

The specific composition is determined by each module.

- 4.4 A sub-minimum of 50% is required for the practical component (refer to 3.2). If the sub-minimum of 50% for the practical component is not achieved, students do not obtain a predicate mark.
- 4.5 A predicate mark of 40% is required for examination admission in **ALL** modules.
- 4.6 It is the responsibility of students to ascertain whether they obtain a predicate mark in the various modules, without which they will be denied admission to the examination. Enquiries must be made to the Faculty Management within 1 work day after the predicate marks have been published.

## 5. EXAMINATIONS

- 5.1 Students are assessed in all the modules for which they are registered. Valid photo identification should be presented at all tests and examinations.
- 5.2 Examinations cover the entire module. Students are responsible to familiarise themselves regarding the content of the required modules (**Refer to Content of modules.**).

- 5.3 Modules where no tests or examinations are written are continuously evaluated. Each assignment / assessment contributes towards the final mark. A final pass mark will be determined as per module.
- 5.4 Only two 1 - 3 hour equivalent examinations are conducted at the close of each module. The two examinations for a module are known as the **main examination** and the **supplementary examination**.
- 5.5 A student who writes the first examination for a module, and fails, but has a calculated final mark between 40 and 49% shall be permitted to write the supplementary examination.
- 5.6 Supplementary examinations take place immediately after the main examination has been completed.
- 5.7 However, if a student fails the first examination of a module, and has a predicate mark of at least 60%, the student shall be permitted to write the supplementary examination.
- 5.8 If a first examination of a module cannot be written because of illness or other valid reasons, the supplementary examination can be written. Refer to 2.4 for the procedures.
- 5.9 If students lack 30 credits (not more than two modules) to obtain a qualification, the Director may grant a **Director's Discretionary Examination**,

provided that they obtained a predicate and therefore initial access to the examination opportunity.

5.10 Application for re-mark of an examination paper

5.10.1 Examination papers of students are moderated before the results are published.

5.10.2 A student who wishes to have an examination paper re-marked, must apply in writing at Student Affairs, and pay the required amount at the cashier, within 1 work day of the final results of a module having been made known by the academic staff. No re-mark will be considered without the necessary receipt.

5.10.3 The re-mark of an examination paper is done by external moderators and the results could be made known only shortly before the supplementary examination takes place. The result of the re-mark will be considered as the final mark.

## 6. PASS REQUIREMENTS

6.1 Allocation of predicate

6.1.1 No student shall be admitted to the examination in a module unless he/she obtained a predicate of at least 40% (refer to 4.3).

6.2 If a module consists of a practical component, a mark of at least 50% must be attained in that practical as set out in the **Content of Modules**.

6.3 Allocation of final mark

6.3.1 A weighted average of at least 50% (predicate mark plus examination mark) must be attained, in addition to which the following requirements must also be met:

- a) The examination mark must comprise 60% of the final mark.
- b) A minimum of 40% must be attained in the examination.
- c) The final mark is calculated as follows:

Final mark = Predicate mark (40%) + examination mark (60%)

6.3.2 A mark of at least 50% is required in supplementary examinations, irrespective of predicate and main examination marks.

6.4 If the supplementary examination is the student's first examination opportunity, the final mark is calculated as described in 6.3.1.

6.5 A mark of at least 50% must be attained in special examinations (as described in 6.3.2).

6.6 Students who write and fail a Director's Discretionary examination shall not be entitled to the re-evaluation of the examination script.

6.7 Pass with distinction

6.7.1 Students pass an instructional programme with distinction if their average mark for all the modules in the programme is 75% or more.

6.7.2 Students pass a module with distinction if a final mark is 75% or more.

## 7. CONDONATION

A Predicate mark and a Final mark may be condoned at the discretion of the Faculty. The Faculty decision is informed by the class attendance record of the student as well as overall competence (knowledge, skills and attitude) displayed by the student during the semester. The Faculty's decision to grant or not to grant condonation is final. The Institution reserves the right to a mark adjustment.

## 8. REPETITION AND CONTINUATION OF THE MODULES

Students who fail(s) (a) modules may repeat the modules on the conditions set out in 8.1 – 8.5.

### 8.1 Repetition of modules

Registration for repeating modules is done during registration for the specific academic year (refer to Academic Calendar for registration dates).

- a) Pass prerequisite (PP) modules, for subsequent modules, must first be repeated and **passed**.
- b.) Prerequisite (P) modules must first be repeated to obtain a **predicate** before subsequent modules may be followed or a predicate should have been obtained in the previous year to continue with the subsequent module.
- c.) Co-requisite (C) modules must be registered in the **same academic year** as the subsequent module.

8.2 If there are clashes in the test or examination timetable, students will only be allowed to register for **one** of the modules. A clash is considered when a test or examination is scheduled for the same date and time.

- 8.3 Students must repeat, in full, any failed module(s) which includes attending all classes, must write all scheduled tests, complete all assignments, seminars and class activities.
- 8.4 When a module is repeated and a request is submitted for exemption of a practical and / or module, the student must apply in writing (Application form: Practical / Module Exemption) and submit the form with the relevant documentation (results, module content from other Institutes) on the day of registration. The outcome of the request to have a practical and / or module exemption is ratified by the Faculty Management. The student will be notified of his/her request via SMS or e-mail. If no request is received before the due date for exemption (Refer to Academic Calendar) and the student does not attend the practical and write tests and examinations, a zero mark will be allocated on the student's academic record. Students who are exempted from practical must write all scheduled tests, complete all assignments, seminars and class activities to obtain a predicate. The responsibility rests on students to keep them informed of the content of modules, changes in the content of modules and of due dates, arrangements and requirements for assignments, class activities, tests and examinations.
- 8.5 Students are **only allowed to register twice** for any module which includes discontinued modules after the final date for subject changes (refer to Academic calendar). A module will not count as a registered module on his/her academic record when discontinuation was done before the final date for subject changes (refer to Academic calendar) and there will be no financial implication for the student. Should the student fail after two consecutive discontinuations of any module, the student will be asked to leave the Institute.

8.6 Full registration and class fees, as prescribed, are payable for each module(s) that is repeated.

8.7 Continuation of instructional programme

HEMIS is an acronym for Higher Education Management Information System and is used to determine continuation of study and re-admission. One HEMIS credit equals the minimum number of module credits required in a particular year of study of a programme.

8.7.1 The modular credits of each year of study – namely first year, second year, third year, etc. – are linked to a specific fraction of the value of one HEMIS credit, which is calculated as follows:

Module credits per year of study converted to HEMIS credits

1 first-year modular credit = 1 divided by the minimum number of module credits required for the first year = the fraction of a HEMIS credit

1 second-year modular credit = 1 divided by the minimum number of module credits required for the second year = the fraction of a HEMIS credit

**Example:**

Higher Certificate in Agriculture with Animal Production major

The minimum numbers of modular credits required for the three years of study are assumed to be 125, 130 and 135, respectively. Correspondingly,

A 10-credit first-year module =  $10/125 = 0,079$  HEMIS credits

A 15-credit second-year module =  $15/130 = 0,115$  HEMIS credits

A 10-credit third-year module =  $10/135 = 0,074$  HEMIS credits.

8.7.2 A student, at the end of every year of study, who has not obtained the number of HEMIS credits required for the programme, in terms of the Sliding Scale, shall not be further admitted as a student. The provision is that all students who have obtained no less than 0,8 HEMIS credits in a particular academic year gain automatic readmission, even though they may not meet the relevant sliding scale requirements.

The following requirements must be met for all instructional programmes:

Sliding scale A: applicable to mainstream programmes

Historical years	1	2	3
HEMIS-credits	0.48	1.23	2.03

(HEMIS is the acronym for Higher Education Management Information System).

Sliding scale B: applicable to extended programmes and re-admission

Historical years	1	2	3
HEMIS-credits	0.33	0.70	1.23

(HEMIS is the acronym for Higher Education Management Information System)

8.7.3 A student in a full-time higher certificate programme who, at the end of every year of study, has not obtained the number of HEMIS credits required for his programme in terms of Sliding Scale A and Sliding Scale B respectively shall not be further admitted as a student.

8.7.4 Students who for the first time in their period of study discontinue their studies before or on **end of March (First semester) or end of August (Second semester) of a given year**, or who, on grounds of academic considerations, are not allowed to continue their studies, will not be debited with such academic year costs. Rules for the application of re-admission will apply if

any further discontinuations by the same student occurs. This stipulation does not apply in cases of extraordinary circumstances, e.g. justifiable medical reasons.

#### 8.8 Readmission After Unsuccessful Study

8.8.1 Where students have interrupted their studies for a year or more, they are required to apply for admission to the Institute again; such application must be received on or before **06 January** of the year in which they propose to resume their studies in accordance with the requirements of 8.7 be met.

8.8.2 Any student whose academic record does not comply with the requirements for readmission to the Institute for the following year will be informed accordingly by sms and e-mail before **24 December of the current year**. They shall have the opportunity to lodge a **typed** appeal to the Institute, accompanied by substantiated documentation, until **06 January** in which they explain why the Institute should consider allowing them to resume their studies. Every application for readmission must be accompanied by an application fee. Irrespective of the decision reached by the Faculty Management, the money shall not be refundable. No late applications for readmission shall be accepted.

8.8.3 A fully substantiated application for readmission must be typed by the student him/herself and be directed electronically or on paper to the Head: Student Affairs along with supporting documents. By "fully substantiated" is meant that the student must provide all relevant information, showing cause why his studies were not successful and why he/she hopes to study successfully in future. Such information may be of a personal and very sensitive nature; it is nevertheless required that the student shall take the Faculty Management into his/her confidence completely. Supporting documents that substantiate the reasons adduced for poor performance must be attached with the

completed application form. All information presented shall be treated in strict confidence.

- 8.8.4 Every applicant should bear in mind that the Faculty Management needs to have full information before it can make a fair decision in the applicant's own best interest. Where an application has been turned down, no information in further substantiation shall be accepted afterwards. The decision of the Faculty Management shall be final, and no second appeal from the same applicant shall be considered.
- 8.8.5 Although the Institute informs students who do not meet the requirements for readmission accordingly by sms and e-mail and offers them an opportunity to lodge an appeal against expulsion from the Institute, the responsibility shall be on the students to determine for themselves whether or not they fulfil the requirements for readmission, and to do so before the final date for appeal by means of their study records and the rules for readmission, as set out in 8.7.
- 8.8.6 A student who has been refused readmission may apply for readmission as a student for the following year, provided that such application is accompanied by a written substantiation and received prior to **06 January** of the year for which readmission is being sought. All such applications shall be considered by the Faculty Management. As a rule, the Faculty Management shall expect of a student to prove him-/herself academically at another Institution, in the year that readmission has been refused, or thereafter, before a subsequent application for readmission from such student shall be considered.

### 8.9 Discontinuation Of Studies

The Head: Student Affairs must be informed in writing of discontinuation of studies. The date for discontinuation of studies is very important and must be provided, since it determines to what extent exemption from the payment of study and accommodation fees may be granted. If discontinuation of studies is due to a medical reason, a valid medical certificate must be submitted along with the completed discontinuation form, which will simplify readmission to the Institute in subsequent years.

### 8.10 Extended Programme

The Extended Programme (EP) was introduced to assist students with proven potential but without the ability to master the academic requirements of the programme. An additional year of study is added to a mainstream programme to form an EP. In the EP the first year of study consists of only half of the required modules of the first year of the programme and the student is expected to pass all of these modules to continue to the second year of study. The remainder of the modules of the first year is done during the second year of study. All prescribed modules for these two years must be passed to gain admission to the second year of the mainstream programme. The modules are specifically selected to provide additional academic support and to facilitate the transition between school and university.

Any student that failed three or more modules in the first test series will be registered in the EP and any other student who is admitted to a mainstream programme may apply for admission to the EP.

### 8.11 Tutorial programme

Any first year student that did not have the following school subjects or obtain a minimum of 50% for the subject in Grade 12 is expected to attend the tutorial programme for the particular subject:

- i. Mathematics **AND**
- ii. Physical Science **AND**
- iii. Life Science **AND either**
- iv. Accountancy **or** Business Studies **or** Economics

Satisfactory performance during the first test series will exempt the student from the tutorials for the remainder of the first semester. Any student that failed a first semester module will be compelled to attend the tutorial programme for the particular module.

## 9. HOSTEL RESIDENCE

- 9.1 Admission to hostel residence is subject to the availability of rooms.
- 9.2 Students must apply for hostel residence each year.
- 9.3 Admission to hostel residence for students who will be repeating is subject to the availability of rooms and screening. Preference is given to academically successful students.
- 9.4 Re-admission to hostel residence is subject to the HEMIS credits obtained/ years of study.

## PROGRAMME FOR HIGHER CERTIFICATE

### STUDY OPTIONS

#### FIRST YEAR

FIRST YEAR – STUDY OPTIONS			
PLANT- & ANIMAL PRODUCTION (A)	PLANT PRODUCTION (B)	ANIMAL PRODUCTION & (C)	EXTENSION (D; E; F; G)
<b>(ABM)</b> Agribusiness 110, 130 <b>(BIO)</b> Biology 110, 130 <b>(BLW)</b> Mathematics 110 <b>(VOL)</b> Extension 110 <b>(GRK)</b> Soil Science 110, 130 <b>(GWB)</b> Crop Protection 110 <b>(ING)</b> Agric Engineering 130 <b>(REK)</b> Computer practice 130 <b>(AGR)</b> Agronomy 130, <b>(AGR)</b> Vegetables 140 <b>(DPR)</b> Beef cattle 130, <b>(DPR)</b> Small stock science 140	<b>(ABM)</b> Agribusiness 110, 130 <b>(BIO)</b> Biology 110, 130 <b>(BLW)</b> Mathematics 110 <b>(VOL)</b> Extension 110 <b>(GRK)</b> Soil Science 110, 130 <b>(GWB)</b> Crop Protection 110 <b>(ING)</b> Agric Engineering 130 <b>(REK)</b> Computer practice 130 <b>(HRT)</b> Horticulture 130 <b>(WIB)</b> Viticulture 130	<b>(ABM)</b> Agribusiness 110, 130 <b>(BIO)</b> Biology 110, 130 <b>(BLW)</b> Mathematics 110 <b>(VOL)</b> Extension 110 <b>(GRK)</b> Soil Science 110, 130 <b>(GWB)</b> Crop Protection 110 <b>(ING)</b> Agric Engineering 130 <b>(REK)</b> Computer practice 130 <b>(AGR)</b> Agronomy 130 <b>(DPR)</b> Beef cattle 130, <b>(DPR)</b> Small stock science 140 <b>(DPR)</b> Animal Nutrition 150	<b>(ABM)</b> Agribusiness 110, 130 <b>(BIO)</b> Biology 110, 130 <b>(BLW)</b> Mathematics 110 <b>(VOL)</b> Extension 110, 130, 140 <b>(GRK)</b> Soil Science 110, 130 <b>(GWB)</b> Crop Protection 110 <b>(ING)</b> Agric Engineering 130 <b>(REK)</b> Computer practice 130  And 1 of the following groups  <b>GROUP D</b> <b>(DPR)</b> Beef cattle 130, <b>(DPR)</b> Small stock science 140  <b>GROUP E</b> <b>(AGR)</b> Agronomy 130, <b>(AGR)</b> Vegetables 140  <b>GROUP F</b> <b>(WIB)</b> Viticulture 130  <b>GROUP G</b> <b>(HRT)</b> Horticulture 130
k = 125	k = 135	k = 130	k = 130 - 135

SECOND YEAR

SECOND YEAR – STUDY OPTIONS			
PLANT- & ANIMAL PRODUCTION (A)	PLANT PRODUCTION (B)	ANIMAL PRODUCTION & (C)	EXTENSION (D; E; F; G)
<p><b>(ABM)</b> Agribusiness 210, 230  <b>(ING)</b> Irrigation 210,  <b>(ING)</b> Spraying machines 230  <b>(NHB)</b> Environmental Studies 210</p> <p><b>(AGR)</b> Wheat production 210  <b>(AGR)</b> Tunnel Vegetables 220  <b>(AGR)</b> Production practices 230  <b>(AGR)</b> Post Harvest handling 240</p> <p><b>(DPR)</b> Dairy Cattle 210  <b>(DPR)</b> Small Stock, wool, meat 220  <b>(DPR)</b> Dairy herd management 230  <b>(DPR)</b> Sheep management 240</p>	<p><b>(ABM)</b> Agribusiness 210, 230  <b>(ING)</b> Irrigation 210,  <b>(ING)</b> Spraying machines 230  <b>(NHB)</b> Environmental Studies 210</p> <p><b>(HRT)</b> Post-harvest physiol..210,  <b>(HRT)</b> Fruit Production practices .220  <b>(HRT)</b> Citrus, Pests &amp; Diseases 230  <b>(HRT)</b> Citrus, Pests &amp; Diseases 240</p> <p><b>(WIB)</b> Wine grape cult. 210,  <b>(WIB)</b> Integrated wine production 230  <b>(WIB)</b> Table &amp; Raisin Grape cult 240</p>	<p><b>(ABM)</b> Agribusiness 210, 230  <b>(ING)</b> Irrigation 210,  <b>(ING)</b> Spraying machines 230  <b>(NHB)</b> Environmental Studies 210</p> <p><b>(AGR)</b> Wheat production 210  <b>(AGR)</b> Production practices 230</p> <p><b>(DPR)</b> Dairy Cattle 210  <b>(DPR)</b> Small Stock, wool, meat 220  <b>(DPR)</b> Dairy herd management 230  <b>(DPR)</b> Sheep management 240  <b>(DPR)</b> Aquaculture 215  <b>(DPR)</b> Poultry 235</p>	<p><b>(ABM)</b> Agribusiness 210, 230  <b>(ING)</b> Spraying machines 230  <b>(NHB)</b> Environmental Studies 210</p> <p><b>(VOL)</b> Decision making 210  <b>(VOL)</b> Group approach 220  <b>(VOL)</b> Extension management 230  <b>(VOL)</b> Project planning 240                      And 1 of the following groups</p> <p><b>GROUP D</b>  <b>(DPR)</b> Dairy Cattle 210  <b>(DPR)</b> Small Stock, wool, meat 220  <b>(DPR)</b> Dairy herd management 230  <b>(DPR)</b> Sheep management 240</p> <p><b>GROUP E</b>  <b>(ING)</b> Irrigation 210,  <b>(AGR)</b> Wheat production 210  <b>(AGR)</b> Tunnel Vegetables 220  <b>(AGR)</b> Production practices 230  <b>(AGR)</b> Post Harvest handling 240</p> <p><b>GROUP F</b>  <b>(ING)</b> Irrigation 210,  <b>(WIB)</b> Wine grape cult. 210,  <b>(WIB)</b> Integrated wine production 230  <b>(WIB)</b> Table &amp; Raisin Grape cult 240</p> <p><b>GROUP G</b>  <b>(ING)</b> Irrigation 210,  <b>(HRT)</b> Post-harvest physiol. .210,  <b>(HRT)</b> Fruit Production practices .220  <b>(HRT)</b> Citrus, Pests &amp; Diseases 230  <b>(HRT)</b> Citrus, Pests &amp; Diseases 240</p>
k = 130	k = 120	k = 120	k = 120 – 130

## CONTENT OF MODULES

### AGRIBUSINESS MANAGEMENT (ABM)

#### **110 (10) Introduction to agribusiness management (4l + 3p)**

Introduction to South African Agriculture. A comparison of the South African Agricultural sector with agricultural sectors in the rest of the world. Role players in agriculture and the whole process of the agricultural value chain. Some agro-economic concepts and terminology used in farming analysis and focusing on the changing agribusiness environment. Output and input terms. Economic and financial criteria to indicate the various levels of economic and financial surpluses or shortages. The strategic management and decision-making process and responsibilities of management.

#### **130 (10) Economic planning principles for agribusiness (4l + 3p)**

Production economic principles such as marginality, the production function and declining marginal yield. Input/output ratios, Cost principles and the application of it. The compilation of management information and farm-record systems for agribusinesses: The requirements; the definition, composition and format of financial statements with the relevant financial analysis.

Practical: The drawing up of a computerised financial management information system for a given agribusiness; case studies for the production economic planning principles and the various financial statements.

*C Agribusiness Management 110, Computer practice 130*

#### **210 (10) Planning techniques for agribusiness managers (4l + 3p)**

Farm planning: budgets, financing and financing sources. Introduction to obtaining credit, credit assessment, repaying ability, security, risk and rules when obtaining credit and providing credit, credit analysis plan and the cost of capital. Labour management: Employment, remuneration, staff empowerment and training,

management styles, motivation and productivity, staff administration, Labour legislation, Trade unions.

Practical: Practical examples with regard to the analysis of management information will be dealt with on an ongoing basis.

*P Agribusiness Management 110, 130, Computer practice 130*

### **230 (10) Risk management and marketing (4l + 3p)**

Types of risks, Risk management techniques, Risk calculation. Project planning and investment decisions in agribusiness. Evaluation of investment alternatives, capital budgets and various investment instruments/approaches.

Basic principles of marketing management. Micro and macro environment analysis of South African agriculture. Market analysis, Consumer behaviour, marketing information and research, market segmentation, elements of a marketing plan, added value, international trade and marketing alternatives.

Practical: Calculations with regard to risk management. Project planning and investment decisions will also be practically illustrated.

*P Agribusiness Management 110, 130, Computer practice 130, Agribusiness Management 210*

## **AGRICULTURAL ENGINEERING (ING)**

### **130 (10) Components: Agricultural Structures (4l + 3p)**

Agricultural structures: Farm buildings, Plans and specifications, Planning and selection of terrain, Building materials, Foundations: floors and walls, Layout of buildings, Sewerage systems, Calculation of material quantities.

Practical: Practicing of the basic techniques of welding (arc welding and gas welding)

*PP Principles of Agricultural Science 110*

### **210 (10) Irrigation (4l + 3p)**

Irrigation terminology, Water, Crop water relationships and climate, Rainfall, evaporation, evapotranspiration. Water measuring, Irrigation accessories, Selection of irrigation system, Planning of irrigation, Irrigation system evaluation. Pumps.

*PP Principles of Agricultural Science 110*

### **230 (10) Spraying machines (calibration) (4l + 3p)**

Types of machines. Working principles and application. Advantages of different types of pumps, blowers atomizers and hydraulic systems. Calibration examples and formulae.

Practical: Adjustments of different types of machines for calibration of spray in orchards, vineyards, vegetables and grain crops.

*PP Principles of Agricultural Science 110*

## **AGRONOMY (AGR)**

### **130 (5) Introduction to Agronomy (2l + 3p)**

Introductory overview of the agronomy industry in the Western Cape. Growth and development of small grains. Influence of climate on plant growth. Adaptation of cool weather crops. Physiological aspects of grain yields.

*P Biology 110, Soil Science 110; Crop Protection 110*

*C Biology 130*

### **210 (10) Production of grains (4l + 3p)**

General crop management, crop rotation principles and planning, soil preparation and fertilization, conservation tillage principles and practices. Production practices of wheat, barley, oats, triticale, canola, lupines and alternative crops.

*P Agronomy 130; Biology 110, 130; Soil Science 110, 130*

### **230 (10) Weeds, insects, and diseases and harvesting and quality aspects of cool weather crops (4l + 3p)**

Crop and harvest protection practices, harvesting practices and harvesting machinery, uses, storage, grading principles and standards of different small grains, oilseed and legume crops.

*P Biology 110, 130; Soil Science 110, 130; Agronomy 130, 210*

### **140 (5) Introduction to Vegetable Production (2l + 3p)**

Introductory overview of the vegetable industry in South Africa. Influence of the environment on vegetable production. Seed, Seedling production. The cultivation of cabbage, legume and root crops.

*P Biology 110, Soil Science 110, Crop protection 110*

*C Biology 130*

### **220 (10) Vegetables under controlled conditions (4l + p)**

The cultivation of vegetables under controlled conditions.

The cultivation of tomatoes and sweet potatoes.

*P Crop protection 110, Soil Science 110, 130; Biology 110, 130; Agronomy 140*

### **240 (10) Cultivation practices and post-harvest handling (4l + p)**

The cultivation of lettuce, potatoes, onions, cucurbit crops. The post-harvesting handling of vegetables.

*P Biology 110, 130; Soil Science 110, 130; Agronomy 140*

## **ANIMAL PRODUCTION (DPR)**

### **130 (5) Beef cattle (2l + 3p)**

Introduction to beef cattle. Breeds, Adaptation of breeds to ecology and Breeding and selection of beef cattle. The feeding of beef cattle. Management of a beef cattle herd.

Production systems.

*P Biology 110*

*C Biology 130*

### **210 (10) Dairy cattle (6l + 3p)**

Introduction to dairy cattle. Dairy cattle breeds. The care and feeding of calves. The feeding of replacement heifers. Principles and management of dry cows. Feeding and management of the lactating dairy cow. Feeding standards of dairy cows. Feeding and care of the bull. Mineral supplements.

*P Biology 110, 130; Animal production 130*

### **230 (10) Management of Dairy herd (6l + 3p)**

Management of a dairy herd: Milk composition. Milk harvesting. Breeding and selection of dairy cattle. Disease management. Record keeping.

*P Biology 110, 130; Animal Production 130*

### **140 (5) Small Stock Science (2l + 3p)**

Introduction to small stock production. History of sheep farming. The main types of sheep and their distribution. Developmental possibilities. Breeds: Merino, Dohne Merino, South African Mutton Merino, Dormer, Dorper and Boer goat

*P Biology 110*

*C Biology 130*

### **220 (10) Small stock breeding, Wool and Meat Science (6l + 3p)**

Reproduction guidelines, Selection techniques, Record keeping.

Wool Science: The organisation in the shearing-shed, Infrastructure. The physical properties of the wool. The class standards of the NWGA. The physical handling of wool. Trade types / Analysis of shearing reports. Baling and transportation of wool.

Meat Science: Growth and development. Treatment of slaughter animals and meat. By-products at the abattoir. Carcass classification of sheep meat. Breeding systems for slaughter lamb production. Preparation of skins.

*P Biology 110, 130; Animal production 140*

### **240 (10) Sheep management Practices (6l + 3p)**

Management guidelines for sheep farming in the Western Cape. Ewe and ram management, infrastructure, animal health, feeding, feeding guidelines, strategic feeding, rations, animal health, disease control, parasite control, metabolic diseases.

P Biology 110,130; Animal Production 140, Animal Production 220

### **150 (10) Animal Nutrition (4l + 3p)**

Introduction to animal nutrition. Anatomy of digestive systems for monogastric- and ruminant farm animals. Digestion, Composition, Nutritional value, Energy and protein standards of feeds.

Practical: Feeding of different farm animals. Introduction to feed formulation

*P Biology 110*

*C Biology 130*

### **215 (10) Aquaculture (4l + 3p)**

Species and their biology. Water quality and environment. Choice of premises. Development of production systems. Nutrition, Marketing and processing of products. Management plan.

*P Biology 110, 130; Animal Production 150*

### **235 (10) Poultry Production (4l + 3p)**

Poultry industry in South Africa. Behaviour and biology of poultry. Poultry housing. Production of broilers. Egg production. Hatching of eggs and rearing of young hens. Disease control. Ostriches.

*P Biology 110, 130; Animal Production 150*

## **BIOLOGY (BIO)**

### **110 (10) Cell biology (4l + 3p)**

Cell biology, morphology and anatomy of plants and animals. Taxonomy of the plant and animal kingdom.

Practical: Demonstrations and activities related to morphology, anatomy and taxonomy of plant and animals.

### **130 (10) Biological processes (4l + 3p)**

Plant and animal physiology that includes photosynthesis, transpiration, respiration, growth regulation, digestion, gas exchange and excretion. Basic genetic principles and application.

Practical: Demonstrations and activities related to photosynthesis, transpiration, respiration, gas exchange and excretion.

*P Biology 110*

## **COMPUTER PRACTICE (REK)**

### **130 (5) Basic computer skills (2l + 3p)**

Course is presented with the aid of practical, relevant assignments in each section, in which the theoretical concepts are applied and consolidated. Hardware components: Identification and the function of each, putting together a basic system and basic maintenance. Windows: Basic concepts and skills of the Windows operating system, file management, basic Windows programmes. MS Office: Identification of the components of Microsoft Office applications and their uses, import of data/ information, formatting of the document and its export. Internet:

Connecting to the Internet and its navigation, components of an email, application and navigation. Spread sheets: Navigation in sight page application, importing data, changing data, format, data calculations and formulas, data export.

## **CROP PROTECTION (GWB)**

### **110 (15) Crop protection (6l + 3p)**

The state of plant protection practices. What is plant protection, Review of inception, Grouping of problems, Control components. Plant pests, Grouping of plant pests, Control strategy. Plant diseases, Grouping of diseases, Control strategy. Weeds, Grouping of weeds, Control strategy. Application of control measures, Selection of method. Selection of remedies, Safe handling of remedies, Grouping of remedies, Toxicity of remedies, Storing and handling. Application methods and equipment, Principles of techniques. Influence of climate.

## **EXTENSION (VOL)**

### **110 (5) Introduction to Livelihoods and Academic Literacy (2l + 3p)**

Influence of social and cultural factors on rural dynamics. Differences in innovations and ideas based on cultural norms, values and traditions. Changes and differences in farming conditions and practice and its effect on livelihood. Understanding the "Sustainable Livelihood Approach" and the complexity of farmers' livelihoods: distinguishing and mapping of assets, perceiving differences in attitudes and perceptions about risk, uncertainty, quality, safety, etc.; identification of strategies towards sustainability. Introduction to persuasive communication and academic literacy.

### **130 (10) Communication for innovation (4l + 3p)**

Basic principles of communication. Extension, agriculture and rural development. The way adults learn. Ethics and philosophy of extension for empowerment. Target group practices and need identification. Overview of extension practices.

*P Extension 110*

### **140 (5) Farming Systems and Sustainable Livelihoods (2l + 3p)**

Social and cultural factors and efficiency in extension communication. Interconnectivity of farming systems and livelihoods. Farming systems and changing practices: effects on the system and its components. Farm production, food security and risk management.

*P Extension 110*

### **210 (10) Behavioural change and decision-making (4l + 3p)**

Perception and empathy. Understanding farmers' practices. Logic in decision making. Extension's role in decision making. Diffusion adoption theory. Diffusion adoption process.

*P Extension 110, 130, 140*

### **220 (10) Group approach in Extension (4l + 3p)**

Group dynamics: Conditions and reasons, personality features, conflict situations in groups. Leadership: Styles, qualities, leadership and group decision making, delegating, transparency and accountability.

*P Extension 110, 130, 140*

### **230 (10) Extension Profession and Management (4l + 3p)**

The quality of Extension service supply and the institutional environment. Extension staff qualities and performance. Extension management principles and skills. Functional networking.

*P Extension 110, 130, 140, 210, 220*

*C Extension 240*

### **240 (10) Programme and Project Planning (4l + 3p)**

Need and importance of effective project planning. Techniques in planning and project management. The programme cycle – Stages and procedures of programme planning, Programme requirements regarding relevance, sustainability and ecological impact.

*P Extension 110, 130, 140, 210, 220*

*C Extension 230*

## **HORTICULTURE (HRT)**

### **130 (15) Introduction to Horticulture (6l + 3p)**

Climatic zones and main production areas. Economic importance, Main markets and competitors of the South African deciduous fruit industry. Stages of tree development. Classification and morphology of deciduous fruit trees. Climate and fruit cultivation, Fertilisation, fruit set, Fruit development and thinning. Introduction to production practices.

*P Biology 110; Soil Science 110*

*C Biology 130; Soil Science 130*

### **210 (10) Ripening and post-harvest physiology (4l + 3p)**

Ripening, maturity indexing, harvesting and post-harvest handling of fruit,

*P Biology 110, 130; Soil Science 110, 130; Pomology 130*

### **220 (10) Fruit production practices (4l + 3p)**

Production practices, Soil preparation, Fertilisation, Pruning, Irrigation, Weed control and cover crops. Propagation and top-working of fruit trees, Rootstocks.

*P Biology 110, 130; Soil Science 110, 130; Pomology 130*

### **230 (10) Citrus Cultivation (4l + 3p)**

Citrus Cultivation: Introduction, Origin, characteristics and economic importance of citrus, Climatic requirements, Production areas and economic importance, Citrus types, cultivars and rootstocks, Plant material, Citrus cultivation practices, Fertilisation, irrigation, weed control, Pruning, Manipulations to improve fruit set, size and quality, Ripening, maturity indexing, harvesting and post-harvest handling

*P Biology 110, 130; Soil Science 110, 130; Pomology 130*

### **240 (10) Pests and Diseases of Deciduous Fruits (4l + 3p)**

Diseases and pests: identification, monitoring and management; principles of integrated fruit production.

Practical: Doing an orchard monitoring course.

*P Biology 110, 130; Soil Science 110, 130; Pomology 130*

## **NATURAL RESOURCE MANAGEMENT (NHB)**

### **210 (10) Environmental studies (4l + 3p)**

The earth - a holistic view. Soil-climate-vegetation relationships with specific reference to SA biomes. The state of South African resources. The philosophy with regard to sustainable agriculture. Introductory ecology

*P Biology 110, 130*

*C Soil Science 110, 130*

## **PRINCIPLES OF AGRICULTURAL SCIENCE (BLW)**

### **110 (5) Mathematical calculations (2l + 3t)**

Units and conversion. Calculations by means of ratios. Calculation of the unknown by means of an equation. Changing the subject of an equation. Geometric calculations (areas, volumes, angles, inclines and spacing). Setting up tables and graphs and their uses.

Tutorials

## **SOIL SCIENCE (GRK)**

### **110 (10) Soil formation and -physics (4l + 3p)**

Soil and its formation. Soil physics. The organic and biologic fraction of soils

### **130 (10) Chemical properties of soil (4l + 3p)**

The colloidal and chemical properties of soils. Introductory chemistry. Soil fertility and the description of the soil profile and classification of soils. Water and soil for irrigation purposes.

*P Soil Science 110*

## **VITICULTURE (WIB)**

### **130 (15) Introduction to Viticulture (6l + 3p)**

The introduction, history and scope of the vine; the classification, morphology, physiology and anatomy of vine. The influence of climate and soil on the performance of the vine. The different vineyard areas in South Africa. The correct way to use and prepare soil for vineyard cultivation. Planning and planting of vines, establishing methods and plant spacing. Different types of trellis systems for wine and table grapes. The different amplification, propagation and nursery techniques for the vine.

Practical: Identification and monitoring of phenological stages. Winter pruning and balancing vines. Training of young vines (if possible). Visiting farms with different types of trellis systems. Visit a nursery for propagation techniques. Application of summer foliage treatments such as suckering, tipping, topping and leaf removal.

*P Biology 110, Soil Science 110*

*C Biology 130*

### **210 (15) Wine grape cultivation (6l + 3p)**

Cultivar identification. Development of young vines and winter pruning. Summer foliage treatments - suckering, tipping, topping and leaf removal. Water requirements and irrigation of the vineyard. Identification of deficiency symptoms in the vines; inventory, maintenance and corrective fertilization; types of cover crops and tillage. Vineyard weeds, control and chemical agents. Monitoring and control of pests and diseases.

Practical: Identification of cultivars. Harvest planning. Demonstration of different irrigation systems for vineyards. Identification of weeds. Identification and monitoring of pests and diseases. Microvinification.

*P Biology 110, 130; Soil Science 110, 130, Viticulture 130*

### **230 (10) Integrated production of wine (4l + 3p)**

Integrated production of wine: Introductory wine preparation. Micro-organisms and wine, alcoholic fermentation, wine preparation techniques, preparation of grapes, fermentation, table wines/ sparkling wine/ fortified wines, wine appreciation and - evaluation, distilling of wine, Wine of origin system.

Practical: Wine evaluation and wine evaluation techniques.

*P Biology 110, 130; Soil Science 110, 130, Viticulture 130*

### **240 (10) Table and Raisin Grape cultivation (4l + 3p)**

Table Grape Cultivation: Introduction to table grape cultivation. Planting widths and trellis systems for table grapes. Vine development and pruning of table grapes. Dormancy and rest breaking. Spring and summer practices for table grapes, use of growth regulators. Physiological and other disorders affecting quality of table-grapes. Table grape cultivars and rootstock cultivars. Ripening, maturity indexing, harvesting, and post-harvest handling of table-grapes.

Raisin Grape Cultivation: Production and production areas for raisin grapes, Cultivars and clones for raisin production, Drying techniques.

Practical: Pruning of table grapes. Identification of table grape cultivars. Maturity indexing and post-harvest handling farm visit. Visit to raisin producer.

*P Biology 110, 130; Soil Science 110, 130, Viticulture 130*

## **NOTE:**

Prerequisite abbreviations

C – Co-requisite

P - Prerequisite - minimum predicate mark of 40% achieved

PP – Pass prerequisite – minimum performance mark of 50% (calculate as predicate x 40% + exam x 60%)

## Other programmes offered at the Elsenburg Agricultural Training Institute

### Higher Education

#### B.Agric (three years)

Specialise in:

- Plant & Animal production;
- Plant Production;
- Animal Production;
- Extension & Animal Production / Plant production

Admission requirements:

Students must be in possession of a National Senior Certificate as certified by Umalusi;

Students must have a 4 (50% - 59%) in each of FOUR school subjects from the list of recommended University admission subjects;

Students must obtain an aggregate of at least 55% for the NSC.

LIST of admission subjects

- Afrikaans OR English (Home Language OR First Additional Language) - 4  
AND
- Mathematics 4 or Mathematical Literacy - 5 AND
- Physical Sciences - 4 OR
- Life Sciences - 4 OR

- Agricultural Sciences - 4 PLUS
- one of the subjects recommended for admission by the Institute, also on at least a 4

### **Diploma in Agriculture (one year)**

- **Experiential Training** specialising in: Agronomy; Horticulture; Large Stock; Poultry Production; Small Stock; Vegetable Production; Viticulture.

Admission requirements: Higher Certificate in Agriculture with 60% average in the subject of specialisation and a farm with a mentor for the period of study that is approved by the Faculty Management.

- **Extension:** Modular teaching programme dealing with various aspects of Extension Science.

Admission requirements: Higher Certificate in Agriculture or an equivalent qualification with 60% average in Extension and a project/farm with a mentor for the period of study that is approved by the Faculty Management. .

- **Cellar technology:** Modular programme aimed at training candidates as winemakers.

Admission requirements: : Higher Certificate in Agriculture with 60% average in Oenology and a cellar with a mentor for the period of study that is approved by the Faculty Management.

- **Equine studies** (two years): National Instructor's Course for Riders (full-time students). Part-time training in general handling of horses, as well as riding lessons for riders.

Admission requirements: National Senior Certificate and possession of own horse not a necessity.

### **Further Education and Training**

- Various short courses in: General Agriculture ;Vegetable Production; Fruit Production Viticulture; Animal Husbandry; Agricultural Engineering; Agricultural Management and Economics; Human and Social Sciences
- Learnerships: National Certificate in Plant Production NQF level 1 or level 4 in the following study fields: Viticulture; Vegetable Production; Fruit production

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Provincial Website: [www.westerncape.gov.za](http://www.westerncape.gov.za)

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Western Cape  
Government

Agriculture