

MAKING WISE SUBJECT CHOICES IN GRADE 9

WHAT IS THE BIG DEAL ABOUT MAKING WISE SUBJECT CHOICES IN GRADE 9?

Thinking about your career choices and what to study after matric may seem far in the future for you in Grade 9. However, what subjects you choose in Grade 9 for your senior phases in high school (i.e. Grades 10 to 12) will open some study options for you and close down others even if you obtain good matric results.

Hence, it is important in Grade 9 to give attention to aligning your subject choices you are required to make for Grades 10-12 with your intended studies and career goal after matric.

SCENARIO 1:

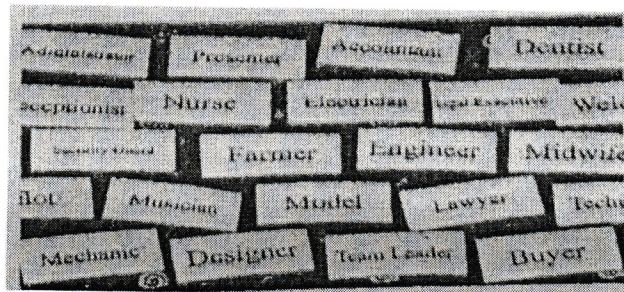
Let's take Thabo, for example, may have intentions to become an architect, but if he does not have matric Mathematics he will not be considered for the B. Arch degree or his second choice in engineering. Thabo could pursue studies in drawings and designing at a college or university of technology with a good pass in Mathematical Literacy but he may become frustrated because he will not be allowed to follow his first career choice.

Be wise like Thabo and think about your future career plans by considering:

- What degree course is needed for your intended career after matric?
- What are the subject requirements needed for your intended university degree course?
 - What matric marks are needed in the required subjects?

SCENARIO 2:

Amanda wishes to study Law after matric. She will have to work hard to get a good matric pass to be able to apply to follow her career ambition. While there are no subject requirements to the legal profession, Amanda will be competing with many other matriculants for the limited places in the legal course. Universities are likely to choose applicants with the better matric results (i.e. those who passed their subjects with very good marks).



LEARNING OUTCOMES

Mathematics

- Number and Number Relationships
- Functions and Algebra
- Space, Shape and Measurement
- Data Handling and Probability

KEY SKILLS THAT WILL BE DEVELOPED

- Problem solving skills – the learner is able to recognise, describe, represent and work with numbers and their relationships to estimate, calculate and check solutions.
- The learner is able to investigate, analyse, describe and represent a wide range of functions and solve related problems.
- The learner is able to describe, represent analyse and explain properties of shapes in 2- and 3-dimensional space with justification.
- The learner is able to collect, organise, analyse and interpret data and establish statistical and probability models to related problems.

TOPICS COVERED OR CONTENT OUTLINE

- General Algebra – numbers and exponents. Sections introduced: number patterns, simple and compound growth and converting between fractions and decimals.
- General Algebra – manipulation of algebraic expressions, solving linear equations/inequalities and general graphs. Sections introduced: exponential equations, trigonometric and exponential functions and mathematical modelling.
- Geometry and Trigonometry – volume and surface areas of right prisms, polygons, similarity of triangles and solving triangles. Sections introduced: analytical geometry, transformations and history of geometry and trigonometry.
- Statistics and Probability.

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination - 75%
- Continuous Assessment - 25%

MINIMUM ENTRANCE REQUIREMENT GUIDELINES

Based on Grade 9 achievement in Mathematics

TERTIARY EDUCATION

Mathematics is the basis of many careers in the South African system. Most university studies in Science, Engineering, Medicine, Architecture and Commerce require Mathematics, as do some diplomas at colleges or universities of technology.

Mathematical Literacy

LEARNING OUTCOMES

- Number and Operations in Context
- Functional Relationships
- Space, Shape and measurement
- Data Handling

KEY SKILLS THAT WILL BE DEVELOPED

- The learner is able to use knowledge of numbers and their relationships to investigate a range of different contexts which include financial aspects of personal, business and national issues.
- The learner is able to recognise, interpret, describe and represent various functional relationships to solve problems in real life and simulated contexts.
- The learner is able to measure using appropriate instruments, to estimate and calculate physical quantities, and to interpret, describe and represent properties of and relationships between 2- and 3-dimensional objects in a variety of orientations and positions.
- The learner is able to collect, summarise, display and analyse data and to apply knowledge of statistics and probability to communicate, justify, predict and critically interrogate findings and draw conclusions.

TOPICS COVERED OR CONTENT OUTLINE

- General Algebra – fractions, decimals exponents, rate, ratio, direct/inverse proportion, simple and compound growth and scientific notation.
- General Algebra – Cartesian co-ordinate system, tables/formulae/graphs depicting relationships between variables, rates of change.
- Geometry and Trigonometry – measurement (length, distance, volume, area, perimeter, time), polygons, circles, angles, Pythagoras, conversions of units in the metric system, scale drawings, basic transformation geometry.
- Statistics and Probability.

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination - 75%
- Continuous Assessment - 25%

TERTIARY EDUCATION

At present some Universities will not recognise Mathematical Literacy as a Mathematical Qualification for certain degrees.

What is the difference between mathematics and mathematical literacy?

Your choice between mathematics (maths) and mathematical literacy (maths lit) is an important decision, think carefully about it. Deciding between taking maths or maths lit should depend on your future goals. Whether your goals involve higher education or getting a job, both pathways need numerical (mathematical) understanding.

What is the difference between mathematics and mathematical literacy?

Mathematics and mathematical literacy both teach you important numeracy skills. People often think that maths lit is a lower level or easier version of maths, but this is not true. The reality is that maths and maths lit are two very different numeracy subjects. They both work with numbers but apply it differently. In maths lit, you will learn practical maths that apply to everyday situations, such as budgeting, interest and rates. In maths, you will learn technical and theoretical maths such as algebra, trigonometry and basic calculus. Both subjects will develop your critical thinking and problem-solving skills.

Mathematics:

You will learn concepts such as algebra, trigonometry and basic calculus. You will develop practical problem solving and reasoning skills. It is needed to enter most universities, and you will have more course and programme options.

You can change to maths lit if you are struggling with maths.

Maths is harder than maths lit because it deals with theoretical concepts and equations, not used in everyday life.

Mathematical Literacy:

It is a highly practical and realistic subject.

It teaches you practical maths skills to apply to everyday situations and helps you solve real life problems. For example, understanding a bank statement,

What are employers looking for?

Employers look for people who have strong basic numeracy skills because it shows that you have practical problem-solving skills. In maths and maths lit you will develop good numeracy skills that you can use in the workplace.

JobStarter's learning can help you develop these numeracy skills, click to [Get Ready \(http://jobstarter.co.za/user/signup\)](http://jobstarter.co.za/user/signup).

Did you know?

- It is better to get 40% in maths than it is to get 100% in maths lit!
- It is harder to get into university if you have taken maths lit. You need an A or level 7 code to enter most universities with maths lit.
- Maths is one of the most important subjects you need to study further and get into university
- You need maths if you are interested in doing engineering, science, health, computer science and business courses at a university.
- All colleges and universities have different subject requirements for acceptance. Check what the university or college has to offer before choosing or changing your high school subject.

Deciding between maths and maths lit is a big decision that can impact your whole career! If you are still unsure, the best option is to take maths. You can always switch over to maths lit later.

CORE MATHEMATICS VERSUS MATHEMATICAL LITERACY

WHY CORE MATHS?

Core Mathematics is an intellectual discipline, an art form and a challenging game. Core Mathematics is an abstract course, and develops thinking and problem solving skills which are in high demand in the workplace.

Careers in Mathematics include, all types of Engineering, Mathematical Sciences, IT, Medicine, Maths Education, Statistics, Finance and Actuarial Fields, Biomathematics and Biostatistics, Computer Science, Operations research.

If a learner is coping well with the course, we recommend that it is taken so as not to limit career choices later on.

HOWEVER, YOU CAN STILL GO ON TO TERTIARY STUDY WITH MATHEMATICAL LITERACY!!!!!!

WHAT IS MATHEMATICAL LITERACY?

Mathematical Literacy is a course, driven by life-related applications of Mathematics. It develops the ability and confidence of the learners to think numerically and spatially, which leads to critical analysis and interpretation of everyday situations. Mathematical Literacy is a more concrete subject than core Mathematics and suited to many careers.

WHAT IS THE PURPOSE OF MATHEMATICAL LITERACY?

The purpose of Mathematical Literacy is to provide the learner with the ability and skills to understand mathematical terminology, and make sense of numerical and spatial information encountered in every day life, (e.g. tables, statistical trends, quotations, areas, volumes, percentages, graphs, diagrams, text, finance, bond rates, interest rates, budgets, ratio and proportion)

Mathematical Literacy focuses on developing a self-managing individual and a contributing and participating employee when exposed to mathematical issues. Mathematical literacy contributes to entrepreneurial success.

A BRIEF COMPARISON BETWEEN MATHS AND MATHS LITERACY (NEW FET CURRICULUM)

<u>MATHEMATICS</u>	<u>MATHEMATICAL LITERACY</u>
Mathematics focuses on the discipline of Mathematics, incorporating abstract and hypothetical thinking.	Mathematical literacy focuses on the role of mathematics in the real world using relevant examples in day to day life.
Applications are most important, not necessarily in real life contexts.	The contexts chosen are employment based being current and relevant.
Content is also emphasized.	The contexts become more advanced as the learners progress annually.
Content is expanded on as the learners progress annually.	Maths Literacy is designed for learners wanting to pursue tertiary qualifications in the social and life sciences, e.g. law, marketing, advertising etc, or entrepreneurs who wish to start their own businesses

Physical Sciences

LEARNING OUTCOMES

- Use process skills, critical thinking, scientific reasoning and strategies to investigate and solve problems
- Explain, interpret and evaluate scientific and technological knowledge and apply it in everyday contexts.
- Critically evaluate scientific knowledge and its impact on the quality of socio-economic, environmental and human development

KEY SKILLS THAT WILL BE DEVELOPED

- conducting investigations
- interpreting data
- solving problems
- communicating and presenting information and scientific arguments
- recalling, stating and discussing prescribed concepts
- applying and evaluating scientific knowledge

TOPICS COVERED OR CONTENT OUTLINE

PHYSICS

- Mechanics (Force, energy and motion)
- Waves (Sound and light)
- Electricity and magnetism

CHEMISTRY

- Systems
- Chemical Change

INTEGRATED

- Matter and materials

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination - 75%
- Continuous Assessment - 25%

MINIMUM ENTRANCE REQUIREMENT GUIDELINES

Based on Grade 9 achievement in:

- Mathematics (a minimum of 65%)
- Natural Science (a minimum of 60%)

TERTIARY EDUCATION

Physical Science is the basis of many areas of scientific study, including Electronics, Engineering, Medicine, etc. Many of the technology diplomas at require or recommend it, as do many degrees in the faculties of Science, Engineering, Medicine, Veterinary Science, etc.

Life Sciences

LEARNING OUTCOMES

- Scientific Inquiry and Problem-solving skills
- Construction and Application of Life Sciences Knowledge
- Life sciences, Technology, Environment and Society

KEY SKILLS THAT WILL BE DEVELOPED

- Identify and question phenomena
- Plan an investigation
- Data collection and manipulation
- Analyse, synthesize and evaluate data
- Communicate findings
- Interpret and make meaning of knowledge
- Application to everyday life
- Explore and evaluate scientific ideas – past, present and future
- Motor skills relating to laboratory work translation

TOPICS COVERED OR CONTENT OUTLINE TISSUES, CELLS AND MOLECULAR STUDIES

- Colloids, emulsions, solutions etc...
- The microscope and its history
- The cell and all organelles in detail
- Osmosis and turgidity
- Microscopic investigation of cells
- Membrane practical
- Differences between plant and animal cells
- Cell differentiation and cell growth
- Uncontrolled cell growth – cancer
- Chromosome structure (briefly)
- Cell division – mitosis
- Tissues – plant tissues and mammalian tissues
- Cell biotechnology – tissue cultures and stem cells

ENVIRONMENTAL STUDIES

- Biodiversity – meaning
- Levels of biodiversity - genetic diversity, species diversity and ecosystem diversity
- Biodiversity under threat – monoculture, deforestation, pollution, alien plants
- Medicines and biodiversity
- Fynbos and Rocky Shores

STRUCTURE, CONTROL AND PROCESSES

- Biochemistry of life
- Human Nutrition and balanced diet
- Vitamins and minerals
- Energy requirements linked to anorexia, bulimia and obesity
- Nutrient deficient diseases – kwashiorkor etc ... and food allergies
- Photosynthesis and respiration
- Photosynthesis and respiration practicals
- Breathing and gaseous exchange
- Smoking and your lungs

DIVERSITY, CHANGE AND CONTINUITY

- Classification
- Fossil studies
- History of life on earth

METHOD OF ASSESSMENT IN GRADE 12

- Written and Practical Examinations - 75%
- Continuous Assessment - 25%

Information Technology

TOPICS COVERED OR CONTENT OUTLINE

- **Solution Development** (60% of the course)
Algorithms, Web Development (XHTML), Introduction to Solution Development, Application Development, Software Engineering Principles
- **Communication Technologies**
Networks, E-communication
- **Systems Technologies**
Hardware, Software, Computer Management
- **Internet Technologies**
Internet, WWW, Internet Services
- **Data and Information Management**
Data Representation, Database Design and Management
- **Social Implications**
Legal, Ethical, Social, Environmental and Health Issues

SPECIFIC AIMS

A learner will:

- use appropriate techniques and procedures to plan solutions and devise algorithms to solve problems using suitable techniques and tools
- understand and use appropriate communication technologies for information dissemination
- appreciate and comprehend the various systems technologies used in the developing of a computer-based system
- understand that all ICT systems are built upon software engineering principles
- understand and use Internet technologies for various tasks
- comprehend and apply the concepts of data and information management to understand how a knowledge-driven society functions
- understand the social implications of ICT and how to use ICT technologies responsibly

METHOD OF ASSESSMENT IN GRADE 12

- Written (Theory) Examination – 25%
- Practical (Programming) Examination – 25%
- Practical Assessment Task – 25%
- Continuous Assessment – 25%

MINIMUM ENTRANCE REQUIREMENT GUIDELINES

Based on:

- Grade 9 achievement in Mathematics (a minimum of 65%)
- Levels of personal organisation and analytical skills

RESOURCES REQUIRED

- Access to a computer running Windows XP (or later version)
- Access to a computer with MS Office XP (or later version)
- Access to the Internet
- A USB memory stick
- At least an hour (or more) per day spent on this subject.

THINGS YOU NEED TO KNOW BEFORE ATTEMPTING THIS SUBJECT

- This is a highly specialised subject that will require complete dedication and hard work.
- There are no short cuts. You cannot get away with doing the minimum academically.
- You should have the character traits of a programmer: attention to detail, tenacity, the ability to work under pressure and good time management.
- You will probably have to spend a great deal of time over weekends programming.

Accounting

LEARNING OUTCOMES

- Financial information
- Managerial accounting
- Managing resources

KEY SKILLS THAT WILL BE DEVELOPED

- Communication
- Problem solving
- Organisation and management skills
- Analytical evaluation of information
- Create "financial awareness" – LIFE SKILL

TOPICS COVERED OR CONTENT OUTLINE

- Ethics
- Budgeting
- VAT
- Salaries and Wages
- The Accounting Cycle – Source Documents
- Journals
- Ledgers
- Trial Balance
- Final Accounts
- Financial Statements

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination - 75%
- Continuous Assessment - 25%

TERTIARY EDUCATION

Its main function is to prepare those who will go into the general field of business directly after school, or after qualifying at a university or colleges and universities of technology. It is recommended for those who intend to study for a B.Com at university or any of the business-related diplomas at colleges and universities of technology.

TOPICS COVERED OR CONTENT OUTLINE

Business Studies

- **Business environment**
 - Micro, market and macro environments
 - Business sectors
 - Contemporary socioeconomic issues
- **Business venture**
 - Entrepreneurship
 - Business opportunity and related factors
 - Business Plan
 - Management and Leadership
 - Forms of ownership
 - Setting up a business
 - Contracts
 - Business location
 - Investment: securities and insurance
 - Presentation of business information
- **Business role**
 - Creative thinking and problem-solving
 - Self-management, professionalism and ethics
 - Human rights, inclusivity and environmental issues.
 - Social Responsibility
 - Stress, crisis, change and conflict management
 - Relationship and team performance
- **Business operation**
 - Business functions
 - Quality of performance

SPECIFIC AIMS

A learner will:

- acquire and apply essential business knowledge, skills and principles to productively and profitably conduct business in changing business environments
- create business opportunities, creatively solve problems and take risks, respecting the rights of others and environmental sustainability
- apply basic leadership and management skills and principles while working with others to accomplish business goals
- become motivated, self-directed, reflective lifelong learners who responsibly manage themselves and their activities while working towards business goals
- be committed to developing themselves and others through business opportunities and ventures
- be able to secure formal employment, and are in a position to pursue sustainable entrepreneurial and self employment career pathways

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination – 75%
- Continuous Assessment – 25%

Geography

LEARNING OUTCOMES

- Identify and solve problems
- Collection, analysis and organisation of information
- Critical and creative thinking skills
- Effective communication using a variety of media
- Organisation and management of self

KEY SKILLS THAT WILL BE DEVELOPED

- Observation
- Application of skills
- Analysis
- Research
- Data handling
- Map Reading
- GIS (Grade 10)
- Spatial analysis

TOPICS COVERED OR CONTENT OUTLINE

Grade 10

- Climate
- Geomorphology
- Population
- GIS
- Development
- Mapwork

Grade 11

- Mapwork
- Water Masses
- Ecology
- Development and Sustainability
- People and their Needs

Grade 12

- Mapwork
- Climate
- Geomorphology
- Climatology
- Regional

METHOD OF ASSESSMENT IN GRADE 12

- Written Examination (Theory Paper, Mapwork Paper) - 75%
- Continuous Assessment - 25%.

TERTIARY EDUCATION

Geography is recommended for career fields such as Cartography, Climatology, Education (primary, secondary and tertiary teaching), Environmental Management, Journalism, Marketing, Regional and Urban Planning, Remote Sensing, Research, Tourism and Travel, Hydrology, Geology, Economics, Public Relations and Health Sciences.

ENGINEERING GRAPHICS & DESIGN

With the advent of the new curriculum, the subject Technical Drawing has been replaced by

“Engineering Graphics and Design”(EGD).

Background

Drawing is the only international language as a means of communicating information. Daily we come across graphics on the roads, shopping malls, airports etc. and as consumers we have to be able to read and interpret graphs, instruction manuals, adverts, house plans, kitchen designs and so forth. At work designers, architects, illustrators, surveyors produce graphics to be used by builders, engineers, town planners and the general public.



The ability to think in three dimensions.

To be successful in this subject the learner must be able to visualize objects in space. A high degree of spatial perception, the ability to reason and plan and to use constructive imagination is required to master this subject.

HISTORY

Why Choose History?

Some think that History is not an appropriate subject choice for Matric, and base their objections to History on the following points;

1. History is boring,
2. You can't do anything with History in the job market.
3. History involves a lot of hard work, most of which is meaningless.
4. It involves the writing of essays.
5. History is an inexact science, is subjective, and can convey bias and propaganda
6. It is hard to get good marks in Matric.



This will shed light on the nature, relevance and direction of History, enabling you to make an informed decision whether to do History.

Boring?

Many parents remember with horror the bad old days of History - the long, boring lectures. At Northwood, History is no longer a series of boring monologues, but has become an exciting, participative subject. Films are available, excursions and tours are undertaken, and pupils are encouraged to take part in the various academic competitions that are arranged by the subject association.

History in the Job market.

History enjoys great utility in the job market, let there be no doubt of this. The skill-based approach to History, that is now followed, enables the pupil to perfect a wide range of skills that are not only very useful, but also very marketable. Some of these skills are:

Comprehension, Histogramic understanding, the ability to determine context, the ability to infer, to emphasise, to determine cause and effect, to evaluate, to cross-reference, to reason, to argue, to research, to synthesise, to analyse and to write in a lucid and methodical manner. A successful History learner will have acquired many of these skills, but most importantly, he will have clear evidence that he can THINK logically and coherently and can express these thoughts in a clear and logical fashion. It is an interesting fact that the upper echelons of the business world are anxious to acquire the services of those who have studied History. Some History graduates of note are H. F. Oppenheimer and Prof John Labaud – *Rope of Sand*. While there is no prospective 'History Career' for high school graduates, there is clear evidence that the History skills acquired at school are valued by the tertiary institutions. It is a fact that History high school graduates produce far better written work than high school graduates who have chosen other options.

While History is a valuable preparation for all forms of tertiary study, it is particularly useful for those who wish to study law, politics, journalism, tourism and the hospitality industry.

REQUIREMENT FOR UNIVERSITY ENTERANCE

MINIMUM REQUIREMENTS FOR ADMISSION TO THE HIGHER CERTIFICATE, DIPLOMA AND BACHELOR'S DEGREE

Higher Certificate

The minimum admission requirement is a National Senior Certificate (NSC) as certified by the Council for General and Further Education and Training (Umalusi). Institutional and programme needs may require appropriate combinations of recognised NSC subjects and levels of achievement. For example, an institution may determine that a Higher Certificate in Architectural Design requires, in addition to the NSC, a specified level of attainment in Design and an associated recognised subject.

- * At least 40% in English.
- * At least 40% in two other subjects.
- * At least 30% for four other subjects.

Diploma

The minimum admission requirement is a National Senior Certificate (NSC) as certified by Umalusi with an achievement rating of 3 (Moderate Achievement, 40-49%) or better in four recognised NSC 20-credit subjects. Institutional and programme needs may require appropriate combinations of recognised FETC subjects and levels of achievement. For example, a Diploma in Datametrics might require a pass at a prescribed level in Mathematics or Information Technology.

- * At least 40% for English.
- * At least 40% for 3 other subjects (excluding Life Orientation).
- * At least 30% for 2 other subjects.

Bachelor's Degree

The minimum admission requirement is a National Senior Certificate (NSC) as certified by Umalusi with an achievement rating of 4 (Adequate Achievement, 50-59%) or better.

Satisfactory Achievement in four designated NSC subjects provides the primary basis for admission to a Bachelor's Degree programme. An institution is entitled to specify an appropriate level of subject achievement for a particular programme. For example, admission requirements for a Bachelor's Degree in Fine Art or Music might include a specified level of achievement in the corresponding recognised NSC subjects. Similarly, an institution will be entitled to specify subject requirements for a particular programme. For example, Mathematics and Physical Sciences might be considered as requirements for admission to a Bachelor's Degree in Science.

- * At least 40% for English.
- * At least 50% for 4 other subjects (excluding Life Orientation).
- * At least 30% for 1 other subject.

SUBJECT CHANGES

Learners and parents should understand that, as SBAY/CASS happens throughout the year and is a requirement for promotion, it is not advisable (and sometimes not even possible) for learners to change subjects during the academic year. The June examination mark, for example, is an integral part of the final year mark.

According to National Education Department policy, subject changes are allowed in the following instances:

GRADE 10	A learner may change a maximum of TWO subjects	Before 30 June
GRADE 11	A learner may change a maximum of TWO subjects, if the school deems it to be in the best interest of the learner In exceptional cases a learner may change ONE additional subject at the end of Grade 11 change	Before 31 March Before 15 December of the Grade 11 year
GRADE 12	NO SUBJECT CHANGE IS ALLOWED in the Grade 12 year	Not applicable

Subject changes must be avoided, unless it is regarded as absolutely essential, in which case the following procedure will apply:

- The parent/guardian must apply for the subject change in writing to the school.
- The decision whether to effect the necessary subject change will be based on the learner history, the performance of the learner in the old subject and the reason for the change.
- Consultation will take place, where necessary, with the learner, parent/guardian, the subject teacher and the curriculum advisor in order to decide whether or not it is in the best interest of the learner to change a subject.
- If there is agreement regarding the subject change, the parent will be required to sign a memorandum of agreement with the school and subject teacher.
- Requests for the approval of subject changes must be submitted by the school to the WCED.
- In order to facilitate the administration of these applications, the requests for subject changes must be sent to the school at least one week before the dates indicated in the table above. The WCED requires us to adhere to these dates.

PLEASE NOTE: Due to these constraints, learners need to think very carefully when choosing subjects such as Mathematics and Physical Sciences.

If there is any possibility that you may have to change to Mathematical Literacy, you should not choose to do Physical Sciences.

(Bear in mind that Physical Sciences becomes very Mathematical in Grades 11 and 12)

ADDITIONAL SUBJECTS

Since the National Senior Certificate is a three-year qualification, each subject must be offered in Grades 10, 11 and 12. Learners **MAY NOT** apply at the beginning of the Grade 12 year to register for an extra subject, according to the prescripts of the Western Cape Education Department.

ENTRANCE REQUIREMENTS FOR TERTIARY STUDIES

Please note that these are the minimum requirements, and that each institution has additional requirements for particular courses. Achievement of these minimum requirements does not guarantee a learner's admission to any programme of study in higher education. The number of places at any institution is limited, and many thousands of applications are received annually. Learners should, therefore, always aim for the best results possible in their FET examinations.

1. **MINIMUM REQUIREMENTS FOR ADMISSION TO THE HIGHER CERTIFICATE:**

A National Senior Certificate, with a minimum of 30% in the Language of Learning and Teaching (i.e. English)

2. **MINIMUM REQUIREMENTS FOR ADMISSION TO A DIPLOMA:**

A National Senior Certificate, with a minimum of 30% in the Language of Learning and Teaching (i.e. English), and with an achievement rating of 3 (40-49%) or better in four subjects (excluding Life Orientation)

3. **MINIMUM REQUIREMENTS FOR ADMISSION TO A BACHELOR DEGREE:**

A National Senior Certificate, with a minimum of 30% in the Language of Learning and Teaching (i.e. English), and with an achievement rating of 4 (50-59%) or better in four subjects

NOTE:

In most degree programmes there is fierce competition for places, and acceptance is based on quotas and a points system.

Mathematical Literacy is recognised for acceptance to degree courses, except for programmes where Mathematics is a requirement.

FACULTY	POSSIBLE CAREER OPPORTUNITIES	RECOMMENDED OR REQUIRED SUBJECTS
MEDICINE AND HEALTH SCIENCES	Medical doctor; dietician; physiotherapist; occupational therapist; speech-language therapist.	Mathematics, Physical Sciences and Life Sciences.
ARGISCIENCES	Forest manager; food scientist; careers in animal and crop production; conservation ecologist; agricultural economist; winemaker; cellar manager; agronomist; careers in agri-tourism; general farming; consultant	Mathematics, Physical Sciences and Life Sciences
ARTS & SOCIAL SCIENCES	Human resource manager, sport scientist; information specialist; politician; psychologist; social worker; actor; theatre scientist; graphic designer; artist; civil servant; language practitioner; musician; journalist (postgraduate programme); project planner; teacher.	Mathematics or Mathematical Literacy (<i>depends on choice of programme</i>)
ECONOMIC & MANAGEMENT SCIENCES	Chartered accountant; management accountant; financial accountant; actuary; economist; entrepreneur; investment manager; financial manager; marketing manager; human resource manager; logistics manager; risk manager; computer scientist(IT); Industrial psychologist;	Mathematics, Afrikaans and English (<i>*Exception: BCom Management Sciences – Afrikaans or English</i>)
EDUCATION	Teacher: foundation, intermediate or senior phase (R to 9); educational psychologist (to become a high-school teacher, you must first obtain a B degree with the subject(s) that you would like to teach and then the Postgraduate Certificate in Education (PGCE).	Mathematics or Mathematical Literacy
ENGINEERING	Chemical, civil, electric and electronic, mechanical, mechatronic or industrial engineer.	Mathematics and Physical Sciences

LAW	Advocate; lawyer; legal advisor.	Mathematics or Mathematical Literacy(<i>depends on choice of programme</i>)
SCIENCE	Ecologist; physiologist; biochemist; microbiologist; Biokinetics; sport scientist; psychologist; physicist; geologist; GIS specialist; teacher; computer scientist(IT); mathematical statistician.	Mathematics and Physical Sciences. <i>Life Sciences strongly recommended if you wish to study a programme in Biological Sciences.</i>
THEOLOGY	Minister of religion; pastor; youth worker; pastoral therapist; careers in community development.	Mathematics or Mathematical Literacy

Requirements for Passing

To do a **DEGREE** programme:

You need a National Senior Certificate (NSC) with an achievement rating of 4 (50-59%) or better in four recognized 20-credit NSC subjects
Note that each university will have its own minimum entry requirements over and above these per faculty.

To do a **DIPLOMA** programme

You need a National Senior Certificate (NSC) with an achievement rating of 3 (40-49%) or better in four recognised NSC 20-credit subjects.

To do a **CERTIFICATE** programme

You need a National Senior Certificate.

