

# Grade 9 Subject Choice

Information Booklet  
2021

(for 2022)

## **AN INTRODUCTION**

At the end of Grade 9 you will have completed the General Education and Training (GET) phase of your education. If you satisfy the academic requirements you will be promoted to Grade 10. The Further Education and Training (FET) phase of your education is a three-year programme which ends in Grade 12 with you writing the National Senior Certificate (NSC) Examinations. There are a few key differences between GET and FET that you need to note:

- 1) In Grades 10-12, there is a far greater focus on exams in the compilation of your marks. Your final year mark will be calculated as follows:  
75% Examination + 25% Continuous Assessment = 100%
- 2) FET is a three year programme. Although you are technically allowed to change a subject in Grades 10 and 11, it is not recommended or encouraged. Thus, we want to help you make the right subject choice for your future at the end of Grade 9.
- 3) Some subjects change their form from Grade 10 (e.g.: Natural Sciences divides into Physical Sciences and Life Sciences and Social Sciences becomes History and Geography). When you sign up for a subject it is **very important** that you have a good understanding of what you will study and the competencies (skills) you will need to be successful in this subject.
- 4) You will no longer take the same core subjects as everyone else in your grade, but will study only seven (7) or eight (8) subjects that demand “high knowledge – high skills”.
- 5) Everyone is expected to complete the basic 7 subject National Senior Certificate.

At MECS School we work towards and write the Independent Examination Board Examinations (IEB) in matric.

### **The IEB actively strives to:**

- Set well-constructed, probing assessments that test the learners' understanding of what information applies in a certain circumstance
- Test learners' understanding of how and why specific knowledge is applied
- Direct teachers in their teaching to develop clear logical thought in learners with a good understanding of the subject matter
- Communicate their learning clearly

The IEB is a recognised body in the South African education landscape, committed to building a robust system for all learners in our country. The significance of its independence now is to provide an alternate voice on curriculum and assessment matters, to contribute positively to debate on educational issues and to provide an approach that ensures that independent schools are accommodated in respect of their needs and desires within the South African education framework, for the greater good of our country. The IEB sees itself as a partner in our country's education system, supporting that which needs to be supported with whatever we have to contribute.

### **The IEB produces consistent, reliable results in the Grade 12 National Senior Certificate:**

- Average pass rate is between 97% and 98%
- Pass with entry to degree study, between 78% and 80%

(Source: extracted from [www.ieb.co.za](http://www.ieb.co.za))

To enter the National Senior Certificate examination, a learner must offer a 7 subject package, with the following specifications:

### **(1) COMPULSORY SUBJECTS:**

- English Home language
- Afrikaans First Additional Language (FAL)
- Mathematics (core) OR Mathematical Literacy
- Life Orientation (LO)

### **(2) ELECTIVE SUBJECTS:**

The elective subjects are offered in 3 lines and you will have to choose one subject in each

line. Your selection will thus be restricted to the subject lines.

MECS offers the following elective subjects\*:

- Accounting/Geography
- Life Science/Business Studies
- Physical Sciences/ Computer Applications Technology (CAT)

All subjects carry 20 credits, except for Life Orientation which is a 10-credit subject.

\* The offering of a subject is considered based on the demand for the subject.

## **ENGLISH HOME LANGUAGE**

### PHILOSOPHY:

“Language is a tool for thought and communication. Language constructs and expresses cultural diversity and social interaction. Learning to use language effectively enables learners to think and acquire knowledge to express their identity, feelings and ideas, to interact with others and to manage the world.” (National Curriculum Statement, April 2005). With this understanding it is the main aim of the MECS English Department to promote the learner’s intellectual, emotional, social and cultural development through developing their competence in using language as well as their understanding of more advanced concepts in literature and language study.

### OBJECTIVES:

The MECS English Department embraces the spirit of the Constitution of South Africa, whereby the curriculum aims “to heal the division of the past and to encourage learners to participate and contribute towards a society based on democratic values, social justice and fundamental human rights.” The aim is for MECS learners to exit Grade 12 fully equipped with the skills of the English language that will enable them to contribute fully and competently to these values. The Department also strives to promote excellence in English as the primary medium of communication at MECS. It will strive to ensure that spoken and written English is of a high standard.

### TEACHING APPROACH:

The MECS English Department encourages students to be sensitive to cultural, ethnic, racial, class and gender issues. Students are encouraged to challenge bias, stereotypes and discrimination found in texts.

The skills approach is implemented whereby learners are given opportunity to demonstrate the skills of speaking, listening, writing or presenting, reading or viewing wherein they use the appropriate structures and conventions.

Learners are presented with opportunities to critically study events, literature and experiences as presented from a variety of points of view.

Learners are given the opportunity to familiarise themselves with new technologies and to utilize this technology for presentations and research.

A text-based approach is encouraged to enable learners to become critical readers, writers, viewers and designers of texts. A wide variety of texts is used and each is understood and studied within its context. Learners are exposed to increasingly complex texts as they progress through Grades 10 to 12.

A communicative approach is used whereby learners learn by *doing*. The teacher is a facilitator of this action and provides the opportunity for learners to use language in class, in its various forms to speak, to read, to write and to view.

**MEANS OF ASSESSMENT** (Matric Assessment is composed of):

External Examination	Paper I	3 hours	100 marks
	Paper II	3 hours	100 marks
Internal Assessment	Portfolio		100 marks
Internally assessed and externally moderated	Oral		100 marks
	<b>TOTAL</b>		<b>400 MARKS</b>

**REQUIREMENTS** (Grades 10 - 12)**Paper 1:** UNDERSTANDING TEXTS

The paper will include:

1. A comprehension
2. A summary
3. Contextual questions on poetry (both seen and unseen)
4. Visual literacy: adverts and cartoons
5. A selection of questions from:
  - a. dictionary skills
  - b. grammatical corrections/explanations
  - c. editing skills

**Paper 2:** WRITING

Section A Drama: Shakespeare  
 Prose: Novel  
 Film: Selected films

Section B Transactional writing: Short

pieces

**Continuous Assessment:** PORTFOLIO

In Matric each candidate is required to present his / her assignments in a folder for the teacher and subsequent transmission to the IEB for moderation before Preliminary Exams.

This should be a powerful motivator for the student to take responsibility for his/her own learning. Section A Extended Writing

Section B Common Assessment Task (Set by the IEB) Section C Literature: Fourth Genre (usually film)

Section D Tests ( a specific range of tests)

Section E Preliminary Examination

**Oral and Listening Assessment**

Listening and Speaking.

This section is assessed internally and moderated externally. It consists of the following:

Prepared speaking (including an oral) and relevant discussion / conversation which shows a relevant and up to date knowledge of the world around us.

Discussion around 7 novels read during the year.

Prepared and unprepared reading and relevant conversation / discussion. Communication activity throughout the year

Listening  
 strategies  
 Speaking  
 strategies

## **AFRIKAANS EERSTE ADDISIONELE TAAL**

Die volgende informasie is relevant tot Afrikaans Eerste Addisionele as vak:

In Graad 10-12 word leerlinge aan 'n Afrikaanse kurrikulum blootgestel wat hulle in staat stel om aan die vereiste standaard van Graad 12 te voldoen. Hierdie standaard moet sodanig wees dat leerders hul addisionele taal op 'n hoë vlak kan gebruik om hulle vir verdere of hoër onderwys of vir die arbeidsmark voor te berei.

### **Spesifieke doelstellings vir die leer van addisionele tale:**

Die aanleer van 'n Eerste Addisionele Taal behoort leerders in staat te stel om:

- taalvaardighede te verwerf wat nodig is om akkuraat en gepas te kommunikeer, met inagneming van die teikengroep, doel en konteks;
- die addisionele taal vir akademiese leer oor die kurrikulum heen te gebruik;
- met vertroue en genot te luister, te praat, te lees / kyk, en te skryf / aan te bied. Hierdie vaardighede en houdings vorm die grondslag vir lewenslange leer;
- eie idees, sienings en emosies, mondeling en skriftelik, met vertroue uit te druk en te regverdig ten einde selfstandige en analitiese denkers te word;
- die addisionele taal en verbeelding te gebruik om menslike ervarings uit te beeld en te verken. Dit sal hulle in staat stel om hulle eie ervarings en bevindinge oor die wêreld mondelings en skriftelik uit te druk;
- die addisionele taal te gebruik om inligting te verkry en te bestuur vir leer oor die kurrikulum heen en in 'n wye verskeidenheid ander kontekste. Inligtingsgeletterdheid is 'n noodsaaklike vaardigheid in die "inligtingseeu" en vorm die grondslag vir lewenslange leer; en
- die addisionele taal te gebruik as 'n instrument vir kritiese en kreatiewe denke; opinies oor etiese kwessies en waardes uit te druk; krities in interaksie te tree met 'n wye verskeidenheid tekste perspektiewe, waardes en magsverhoudings in tekste te herken en te bevraagteken; tekste vir 'n wye verskeidenheid doelwitte soos genot, inligting en navorsing krities te lees.

Die volgende leeruitkomst is van toepassing:

#### **1. Luister en praat**

Die leerder is in staat om te luister en te praat vir verskillende doeleindes en teikengroepe en in 'n verskeidenheid kontekste.

#### **2. Lees en kyk**

Die leerder is in staat om te lees en te kyk vir begrip, om krities te evalueer en om op 'n wye verskeidenheid van tekste response te lewer.

#### **3. Skryf en aanbied**

Die leerder is in staat om vir 'n wye verskeidenheid doeleindes en teikengroepe te skryf en aan te bied deur konvensies en formate gepas vir verskillende kontekste te gebruik.

#### **4. Taal**

Die leerder is in staat om taalstrukture en -konvensies gepas en doeltreffend te gebruik.

### **Oorsig van taalvaardighede en inhoude Luister en praat:**

**Praat:** Om in formele en informele omstandighede gesprek te voer, te debatteer en argumenteer. Om sowel voorbereide as onvoorbereide lees te kan doen.

**Lees en kyk:** Om 'n verskeidenheid tekste (literêr en nie-literêr) te lees, te analiseer, evalueer, vergelyk, afleidings te maak, opinies te gee en op te som.

**Skryf en aanbied:** Die skryf van 'n verskeidenheid tekste - kreatiewe skryfwerk en transaksioneel.

- Kreatief: sluit in verhalende, beskrywende opstel ensomeer.
- Transaksioneel: sluit in e-pos, dagboekinskrywing, blog, dialoog ensomeer.

**Taalstrukture en -konvensies:** Taalstrukture en -konvensies word in die konteks van bostaande vaardighede onderrig en ook as deel van 'n sistematiese taalontwikkelingsprogram.

**Eksamen:** Die eksamen word verdeel in twee vraestelle van 2½ uur elk:

**Vraestel 1:** Afdeling A - Leesbegrip (30)

Afdeling B -

Opsomming(10) Afdeling

C - Gedigte (30)

Afdeling D - Kommunikatiewe Grammatika (30) (Totaal 100 punte)

**Vraestel 2:** Afdeling A - Voorgeskrewe Prosa (60) en Transaksionele skryfwerk (40) (Totaal 100 punte)

**Let wel: Hierdie punteverdeling geld vir grade 10-12 en mag in graad 9 verskil. Vraestelle mag korter wees en die puntetotaal minder, bv. 1½ uur vraestel – 60 punte ens.**

**Deurlopende Assessering van Jaarwerk (Portefeulje):** Samestelling van werk bestaande uit toetse, skryfwerk (produk- en prosestake) en enige ander opdragte soos deur die sillabus voorgeskryf. (100 punte)

**Mondeling:** Verskillende mondelinge werk soos deur die sillabus voorgeskryf bv.(on)voorbereide lees, (on)voorbereide mondeling, rolspel, informele besprekings, dialoë, letterkundige besprekings, debat, paneelbesprekings ens. (100 punte)

TOTALE PUNT: 400 (Verwerk na 'n persentasiepunt)

## MATHEMATICS

MATHEMATICS IS **COMPULSORY** for all pupils in all schools in one of two forms: Core Mathematics or Mathematical Literacy.

### (CORE) MATHEMATICS

Core Mathematics is a focused formal study, where a pure formal approach is taken. It focuses on CONTENT that is able to be seen in context. Just as it can be seen as a severe challenge to those with Mathematical limitations, it can be seen as a wonderful opportunity to develop one's powers of thinking and to be exposed to the modern world.

Those pursuing high level professions like Finance, Engineering, Research, Computer Technology and Medicine will study at universities who will demand high level achievement in Mathematics.

If you are not sure and probably in the 40 – 55% bracket for Mathematics in Grade 9, then at least try Core Mathematics in Grade 10. There are demands – meet them and then the doors open. However, if you do not attain a Mathematics pass mark for Grade 9, it is recommended that you start Grade 10 doing Maths Literacy.

Is it possible for a non-genius to do CORE MATHEMATICS?

Yes, simply because 30% is a pass and 50% of the work is based on knowledge and routine and 50% is acceptable. If you choose (core) Mathematics you have to work hard and develop.

What is the role of Portfolios ?

25% of the final mark in matric comes from the pupil's portfolio. This incorporates the following:

June Exams	June Exams / Formal Tests	Long Pieces	Short Pieces (x2)
30%	20 %	30%	20%

Short pieces are great. They are little issues that make Mathematics interesting. Mind-maps, metacogs, realizations – the list is eternal. Investigations are great especially if they lean to new knowledge. These are the tools that teach pupils to Mathematise.

## MATHEMATICAL LITERACY

**Mathematical Literacy** offers a refreshing pragmatic course where Mathematics is used to understand everyday situations and solve real problems. Mathematical problems are set in contexts that the learner

can relate to. The subject matter is different and the method of presentation is different to Core Mathematics. It is a totally different subject. Pupils will emerge Mathematically literate and able to control their own lives or their own business without the onerous pressure of formal proofs and high order thinking.

Learners opting to continue with Mathematical Literacy must be able to deal with text and have an inquiring mind to solve problems.

#### The 4 levels of Assessing

Questions in Papers will be set and then assessed at one or other of the levels.

Testing KNOWLEDGE	Testing ROUTINE processing	Testing MULTI-STEP procedures	REASONING & REFLECTING
K	R	C	P
30%	30%	20%	20%

#### What is the role of Portfolios ?

25% of the final mark in matric comes from the pupil's portfolio. This incorporates the following:

Prelim Exams	Formal Tests	Alternate Assessment	Additional Assessments (x 2)
40%	20%	20%	20%

#### **Are Core Mathematics and Mathematical Literacy Similar?**

No, they are two totally different subjects. Mathematical Literacy is not a watered down course. It is not a Higher Grade/ Standard Grade dichotomy. The differences are not only in the CONTENT but in the METHOD of teaching and of ASSESSING.

Changing from Core Mathematics to Mathematical Literacy any later than Grade 11 is not recommended, although certain individuals have done so even as late as the start of their Grade 12 year with excellent results in matric.

## **LIFE ORIENTATION**

*Life orientation is the study of the self in relation to others and to society.*

Life Orientation guides and prepares learners for life's responsibilities and possibilities.

It is a unique subject in the Further Education and Training Band in that it applies a holistic approach to the personal, social, intellectual, emotional, spiritual, motor and physical growth and development of students. This encourages the development of a balanced and confident individual who can contribute to a just and democratic society, a productive economy and an improved quality of life.

Life Orientation addresses skills, knowledge, values and attitudes about self, the environment, responsible citizenship, a healthy and productive life, recreation and physical activity and career choices. It is an interdisciplinary subject in that it integrates the knowledge, values and skills embedded in various disciplines such as Sociology, Psychology, Political Science and Human Movement Science.

The topics for Life Orientation are as follows:

<b>TOPIC 1:</b> Development of the self in society
<b>TOPIC 2:</b> Physical Education
<b>TOPIC 3:</b> Study skills (not for assessment purposes in Gr 12)
<b>TOPIC 4:</b> Careers and career choices
<b>TOPIC 5:</b> Democracy and Human rights ; Social and environmental responsibility

Learners are encouraged to participate fully by communicating their own views and feelings about the topic under discussion and classes are thus interactive and stimulating for all.

The growth in the learners is on an emotional and spiritual level as well as intellectual.

The marking system for Life Orientation is the same as for any other subjects at MECS School: marks

are obtained by the writing of Tests (only grade in 12) and assignments throughout the year. There is presently no end of year exam in the FET phase, but the same portfolio requirements exist. In addition to this portfolio, each learner is expected to produce two certificated tasks per year, totalling six for Grade 12. The learners are informed as to the nature of these tasks.

The Life Orientation marks are weighted as follows:

In Grade 10 - 12	Life Orientation	75% (of the term mark)
	Physical Education	25% (of the term mark)

Life Orientation is one of the subjects that participates in the Matric One Research Task Option. (Any student who does not take any of the other subjects that participate in the project must choose an investigation in Life Orientation.)

## THE HUMANITIES:

***“The skills the humanities set out to instill: close reading, analysing, arguing and writing, are generic skills needed in every place of work and every moment of life.”*** (Source: [www.asaf.org.za](http://www.asaf.org.za))

The disciplines that make up the humanities work to produce an essential set of **analytical skills**, along with vital bodies of knowledge. It is the humanities that encourage informal analysis, judgement (evaluation) and creative critique. Opting for History or Geography or both as FET subjects thus provides students with skills that are useful and applicable in all professions.

## GEOGRAPHY

Geography is the Science subject of the Humanities, a subject that links to all other subjects:

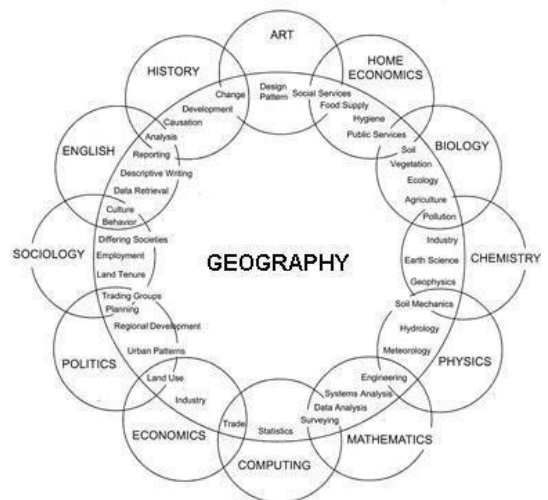
Man, his position in the world and how he interacts with the natural and built environment, stand central in this multi-skilled subject, skills which include map interpretation, developmental, environmental and research skills.

**Any learner may choose to take Geography as a subject in the FET phase.** Learners are encouraged to have a positive and adventurous spirit when tackling Geography, as well as an open, enquiring mind, eager to explore natural processes.

This is the subject where we do try to explore our environment through a variety of means and where possible through outings and excursions. Research tasks will tackle local, regional and global issues, and self-discovery and exploration of issues becomes a part of this subject. Theory is backed up by map work; discovery of the physical or spatial components being investigated wherever possible.

The content of the subject is balanced by the acquisition of important geographical skills: To investigate processes, to acquire information from fieldwork and a variety of other sources, to access and interpret information graphically, pictorially and diagrammatically and to analyse information gained from a variety of sources, such as Geographic Information Systems (GIS).

The content focus in the FET Phase moves from a global scale to a continental and then to national focus. Besides the important skill of being able to work with a variety of maps and photographs, Geography also investigates the physical and human environment: Climatology, Geomorphology (the continually changing factors that form the Earth), Ecosystems and Human Geography issues are investigated. Each sub-section is covered annually.



**Curriculum Overview:**

(The broad themes are unpacked each year showing growth and development in depth and breadth annually)

Geography is divided into two main areas:

- **Physical Geography**
- **Human**

**Geography Topics****covered in GRADE 10**

Geographical skills and techniques: topographic maps, GIS

1. The composition and structure of the atmosphere
2. Plate tectonics, folding, faulting, volcanoes and earthquakes
3. Population: structure, growth, and movement
4. Water resources: Water in the world: oceans, flooding and water management

**Topics covered in GRADE 11**

Geographical skills and techniques: topographic maps, aerial photos, orthophoto maps, GIS

1. Global air circulation, Africa's weather and climate
2. Rocks and landforms, slopes, mass movements
3. Development: differences, issues, and opportunities
4. Resources and sustainability: soil, energy

**Topics covered in GRADE 12**

Geographical skills and techniques: topographic maps, GIS, synoptic weather maps

1. Climate and weather: cyclones, local climate
2. Geomorphology: drainage systems and fluvial processes
3. Rural and urban settlement
4. Economic Geography of South Africa:

**Assessment Requirements:****1. Examinations**

Two exams will be written in each examination session. Both papers are completed on the same day. **Paper 1:** The longer, theory paper is completed first and is followed by

**Paper 2:** Map-work, practical paper

In Matric the THREE hour theory paper counts for 200 marks, and the Map-work practical paper counts for 100 marks (1,5 Hours).

**2. The Portfolio - Continuous Assessment**

It is important to realize that assessments is a continuous, on-going process. Assessment is done in a variety of ways, including S-tests, assignments, projects, research tasks and presentations. Every piece of work has validity and helps the teacher to develop the individual. The best samples of work will be chosen for a portfolio of work compiled in August of the matric year. Samples will cover content spanning the year and the various types of assessment covered.

Individual and group research, discussion and investigation form an integral part of this subject and learners need to be prepared to tackle individual and group research and field work.

Geography is one of the subjects that participates in the Matric One Research Task Option.

MANY PEOPLE THINK THEY KNOW WHAT GEOGRAPHY IS ABOUT...

WHAT'S THE HIGHEST MOUNTAIN IN IRELAND?

FACTS ABOUT CAPITALS OF THE WORLD ARE IMPORTANT BUT GEOGRAPHY IS SO MUCH MORE THAN THAT...

REYKJAVIK LONDON DUBLIN PARIS LISBON BERLIN MADRID ALGIERS

PHYSICAL HUMAN BIOLOGICAL

GEOGRAPHY

GEOGRAPHY HELPS US UNDERSTAND HOW THE WORLD WORKS!

IT EXPLORES THESE SYSTEMS... THROUGH SPACE AND TIME!

GEOGRAPHY IS SOMETHING YOU DO!

EMPLOYERS ACROSS ALL SECTORS VALUE THE WIDE-RANGING RESEARCH, ANALYTICAL, PRACTICAL, AND COMPUTER SKILLS THAT GEOGRAPHY STUDENTS OFFER...

ALONG WITH THEIR EXTENSIVE KNOWLEDGE ABOUT PHYSICAL AND HUMAN PROCESSES!

SD GEOGRAPHY. GET INTO IT!

(Source: <http://liminalentwinings.com/geography> Accessed 30 Aug 2017)

**GEOGRAPHY HELPS YOU UNDERSTAND HOW THE WORLD WORKS.**

GEOGRAPHY EXPLORES DIFFERENT SYSTEMS—THE PHYSICAL, THE HUMAN, AND THE BIOLOGICAL—THROUGH SPACE.

PHYSICAL HUMAN BIOLOGICAL

GEOGRAPHY

FOR EXAMPLE: THE PHYSICAL SYSTEM INCLUDES LANDFORMS, CLIMATE, AND RIVERS;

THE HUMAN SYSTEM INCLUDES CULTURE, MIGRATION, ECONOMICS AND POLITICS;

AND THE BIOLOGICAL SYSTEM LOOKS AT HABITAT, SPECIES DISPERSAL, & ADAPTATION.

HOWEVER, GEOGRAPHY IS MORE THAN JUST SYSTEMS.

GEOGRAPHIC PERSPECTIVE

GEOGRAPHY ADDS A SPATIAL PERSPECTIVE.

FOR EXAMPLE: AN ECOLOGIST MIGHT STUDY HOW INDIVIDUAL SPECIES DEPEND ON ONE ANOTHER,

WHILE A BIOGEOGRAPHER MIGHT STUDY HOW THOSE DEPENDENCIES INFLUENCE & ARE INFLUENCED BY LOCATION.

## **COMMERCE:**

### **BUSINESS STUDIES**

Business Studies is a stimulating and challenging course that has relevance to everyday life as it also prepares the student to become an enlightened consumer.

The syllabus is intended to lead to courses that will encourage students:

- To understand and appreciate the nature and scope of business, and its role in society.
- To develop a critical understanding of organisations, the markets they serve and the process of adding value.
- To be aware that business behaviour impacts on a range of stakeholders - both internal to the business and externally.
- To be aware of the economic, environmental, ethical, governmental, legal, social and technological issues associated with business activity.
- To develop skills in:
  - Decision making and problem solving
  - The quantification and management of information
  - Effective communication

The emphasis should be on the application of concepts and issues to the local context. Therefore, pupils are encouraged to be aware of current trends and affairs.

Pupils are expected to demonstrate the following skills during assessments:

1. Knowledge and critical understanding of the content.
2. Application of this knowledge to a specific theme.
3. Analysis of problems, issues and situations by
  - distinguishing between statements of fact, statements of value and hypothetical statements.
  - making valid inferences from material.
  - organising ideas.
  - making valid generalisations.
4. Evaluation of the reliability of material, checking that conclusions drawn are consistent with given information and discriminating between alternative explanations.

#### **Final Assessment**

Pupils write two examinations at the end of Grade 12. These examinations together with their School Based Assessments (SBA) make up their final result. The breakdown of the final result (out of 400) is given below:

- **Paper 1:** Application of Business Knowledge
  - Marks: 200
  - Time: 2 Hours
- **Paper 2:** Problem-solving and Analysis
  - Marks: 100
  - Time: 2 Hours
- **SBA:** Various tasks and assessments
  - Marks: 100
  - Time: School Year

Business Studies is a subject that participates in the One Research Task Option.

## ACCOUNTING

Accounting is one of the skills learnt at school level which will stand students in good stead in whatever they choose to do in the future. It is one of the skills which is needed in all walks of life.

Accounting is a reasonably easy subject at school level and should be chosen by students with good logical interpretation and reasoning. It is also a subject that will require a high work ethic and students must have an interest in business.

### Recommendations for students choosing to do Accounting:

- They should find Accounting in Grade 9 relatively easy with a recommended minimum Grade 9 mark of 60% in the June exam.
- They should enjoy Accounting in Grade 9.
- They should have good competency in Core Mathematics and good English comprehension skills.
- They should also have good logical reasoning and organizational skills.

### Topics covered in Accounting:

- Bookkeeping up to trial balance level.
- Management Accounting, including the preparation of bank reconciliations, asset management, budgeting and stock valuations.
- Preparation of Financial Reports (e.g. Income Statement, Balance Sheet and Cash flow statements) at year end including all adjustments for the following forms of ownership:
  - Sole traders
  - Partnerships
  - Companies
    - Analysis and interpretation of financial statements
    - Costs and manufacturing accounting
    - Internal control within a business
    - Vat.

In Grades 10 - 12 the promotion marks are determined by combining the final exams, weighted at 75% with the continuous assessment (CASS) mark, weighted at 25%.

## COMPUTER APPLICATIONS TECHNOLOGY (CAT)

*“So, what does an employer look for in a graduate? You need to do the basic things well. Can you compose documents on Word faster than anyone else? Can you express yourself clearly and confidently in the English language? Can you do basic analyses on an Excel spreadsheet at the drop of a hat? Can you generate a Powerpoint presentation en route to work? Unless you can do all these things, and more, in the 21<sup>st</sup>-century workplace, you are out of the race for a decent job **no matter what your degree.**”*

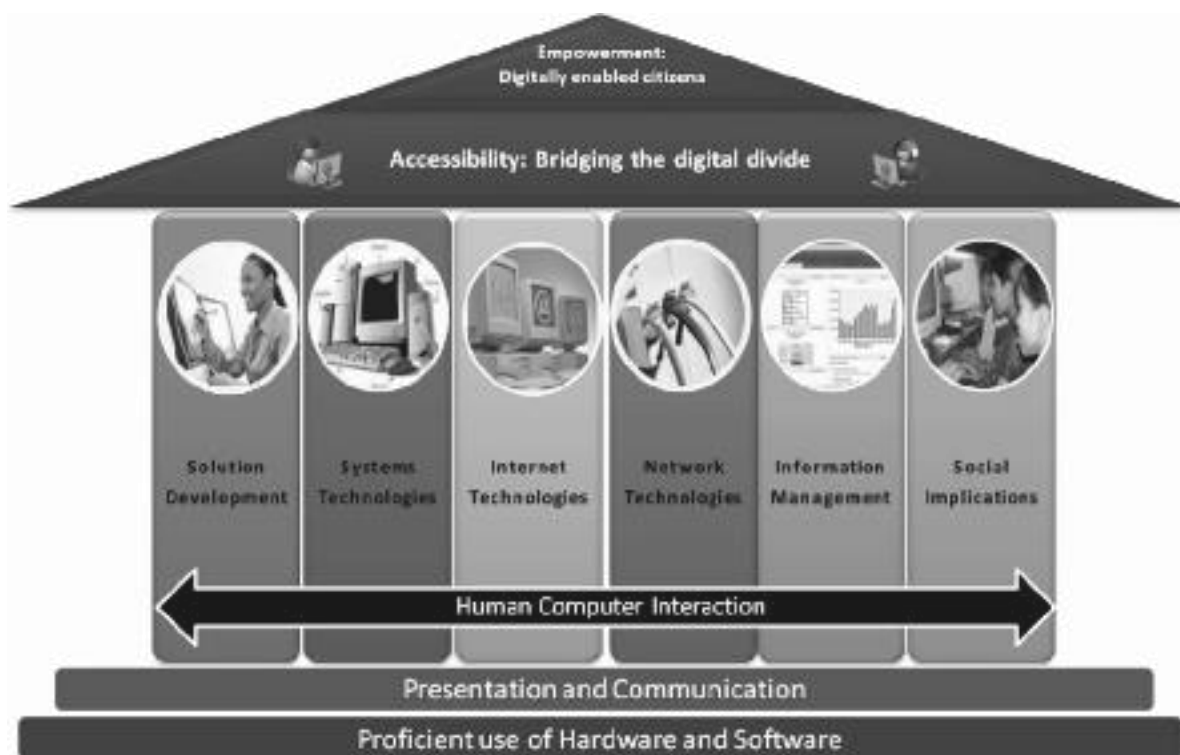
Work is hard – Prof Jonathan Jansen

(TimesLive) <http://www.timeslive.co.za/opinion/columnists/2013/08/12/it-s-hard-work-to-work>

### **What is CAT?**

Computer Applications Technology is the study of the integrated components of a computer system (hardware and software) and the practical techniques for their efficient use and application to solve every day problems. The solutions to problems are designed, managed and processed via end-user applications and communicated using appropriate information and communication technologies (ICTs). ICTs are the combination of networks, hardware and software as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge.

### **Main topic areas:**



### What will a student learn in the CAT class?

The content of Computer Applications Technology encourages the development of creativity, critical thinking, research skills, and reading proficiency and interpretational skills.

A CAT student will:

- use end-user software applications proficiently to produce solutions to problems within a defined scenario.
- understand the concepts of ICTs about the technologies that make up a computing system.
- understand the various technologies, standards, and protocols involved in the electronic transmission of data via a computer-based network.
- use the Internet and the WWW and understand the role that the Internet plays as part of the global information superhighway.
- find authentic and relevant information, process the information to draw conclusions, make decisions and communicate the findings in appropriate formats.
- recognise the legal, ethical, environmental, social, security and health issues related to the use of ICTs and learn how use ICTs responsibly.

### Software used in CAT (as prescribed by the IEB)

- Word processing: Microsoft Word
- Spreadsheets: Microsoft Excel
- Databases: Microsoft Access
- Presentations: Microsoft PowerPoint
- Web design: HTML

### Assessment

Formal Assessment			
25% (during the year)	75% (end-of-year)		
SBA Tasks	PA T	End-of-year Exam (50%)	
25%	25 %	25 %	25%

Grades 10 & 11	Project	Written exam	Practical exam
<ul style="list-style-type: none"> <li>• 5 tests</li> <li>• 1 exam (mid-year)</li> </ul>	Software development project including aspects of planning, research as well as use of software to present planning, research and solutions.	2 - 3 hours Theory aspects of all content, concepts and skills of all topics	3 hours Solution Development
<b>Grade 12</b> <ul style="list-style-type: none"> <li>• 4 tests</li> <li>• 2 exams (mid-year &amp; prelim)</li> </ul>			

**Please note:** the above represents the minimum assessment requirements – more assessment will be done to the discretion of the teacher.

### Grade 12 Practical Assessment Task (25% of the total mark of CAT)

The Practical Assessment Task is a project that assesses the learner's procedural skills and individual interaction with data and information as well as the way in which he or she processes, manipulates and presents the information. The information will finally be presented in several documents. These must be presented in the application programs studied. The PAT is done in class facilitated by the teacher and it is done over an extended period of approximately 3 months.

### Why choose CAT?

CAT has strong links to all the other subjects offered at school, and in fact to all spheres of life. After completing the CAT curriculum, students will possess advanced skills using Microsoft Office applications. This will enable them to apply their skills using similar software applications, and will prove to be an advantage in whatever career they choose to follow.

## THE SCIENCES:

### PHYSICAL SCIENCE

Physical Science is a three year course which culminates in two three hour exams – that of Physics and Chemistry.

The final mark in matric comprises of a 25% continuous assessment (CASS) component and 75% of the final exam. The CASS marks in matric are comprised as follows: June exams = 20%  
Practical Investigations = 40%  
Alternative investigation or practical = 10% Prelim exam = 30%

Chemistry essentially considers the make-up and interaction of materials, while Physics broadly studies the effect of motion, forces and other phenomena (such as heat and electricity) in our daily lives. The Chemistry section relies significantly on the application of a large content base, while Physics generally tests thinking and mathematical skills.

The Grade 10 Science curriculum is structured to develop competence in the following three focus areas:

- the construction and application of scientific and technological knowledge;
- scientific inquiry and problem-solving in a variety of scientific, technological, socio-economic and environmental contexts;
- the nature of science and its relationship to technology, society and the environment.

The six core knowledge areas have the following foci:

- two with a chemistry focus – Systems; Change
- three with a physics focus – Mechanics; Waves, Sound and Light; Electricity and Magnetism
- one with an integrated focus – Matter and Materials.

A fair amount of practical work is done to facilitate a better understanding of the concepts being taught. Experience has shown that significant difficulties with Mathematics hinder success in this subject.

### Reasons to strongly consider taking Science as a subject:

- It is a wonderful experience trying to understand why, from the smallest sub-atomic particles to the stars and galaxies, behave and interact the way they do.
- It is an entry requirement for a wide variety of University Faculties and careers.
- Science helps you to develop your ability to reason logically and provides you with the skills on how to do valid investigations or theoretical modelling.

Natural Science in Grades 8 and 9 consists of a combination of Biology and Physical Science. Natural Science is thus not necessarily a good indicator for success in Physical Science in the later grades. The content, nature and demands of Physical Science differs significantly from that of Natural Sciences - if in doubt, consider taking the subject for at least the first 6 months in Grade 10 and/or taking more than the minimum number of subjects required.

Each concept in Grade 10 builds on the fundamental knowledge done before and is the basis for Grade 11 and Grade 12 work. This makes it extremely difficult to start Physical Science as a subject in Grade 11. The matric syllabus starts in Grade 11 as it takes two years to complete.

It is vital that a candidate must be willing and able to work hard on a daily basis to understand and practice each concept as it is covered. Each concept on its own is not difficult to understand - you really do not have to be a top achiever to enjoy and pass Physical Science with a good mark. If you are not able to cope with the content in Grade 9 and the first 6 months in Grade 10 however, there is a low probability that you will be able to cope later on.

It is also important to understand that merely having Science as a subject does not open many career paths. It usually requires a mark at least above 60% ,and for many University courses a mark of 70% or above, to have any chance of getting in. Again, this is really attainable if you work on a daily basis and diligently memorise the definitions and basic theory needed to apply that basic knowledge.

## **LIFE SCIENCES**

The Life Sciences curriculum is learner-centred, integrated and holistic and relevant to the learner's lives and needs of the country; and promotes critical and creative thinking and problem solving.

### **Requirements:**

- A satisfactory pass and a genuine interest in the study of living organisms – big and small.
- Content:
- **Core content for Grade 10 includes:**
  - Cell and tissue studies (plant and animal)
  - Biological compounds, nutrients and enzymes
  - Human physiology: Nutrition and gaseous exchange.
  - Energy transformation: photosynthesis and respiration.
  - Ecology: biodiversity and topical environmental issues.
  - Fossil Studies
- **Core content for Grade 11 includes:**
  - Each theme within Grade 11 requires application, with a focus of diseases associated with each topic.
  - Study of micro-organisms (bacteria, viruses and fungi) Plant and Animal Diversity
  - Biogeography
  - Human life systems:
    - Support (plant and animals)
    - Transport (plant and animals)
    - Excretory system.
    - Nervous system and sense organs.
  - Environmental studies
- **Core content for Grade 12:**
  - The inheritance in living organisms, chromosomes (DNA), genetic engineering and Biotechnological application.

- Meiosis.
- Male and Female reproductive systems.
- Plant reproduction and its benefits.
- Diversity, change and continuity: Evolution.
- Population Ecology

### ● **Practical Work**

- Practical work is an important part of Life Sciences.
- Through experiments and experimental design learners will acquire and be assessed on a range of 8 identified skills – observational, measuring, manipulative, procedural, inference, investigative and evaluation skills.
- Assessment has also moved more towards a task-based rather than only a test-based exercise. Pen and paper examinations still have a place to assess skills in the cognitive domain.
- Practical work, like experimental design, demands time and thus a regular afternoon is required in Grade 12 to fulfil the IEB portfolio requirements.

Life Sciences is a subject that participates in the One Research task Option.

## **UNIVERSITY REQUIREMENTS AND THE FET**

The designated list of subjects has been removed (via a government gazette notice on 2 March 2018). Since the removal of the designated list, a learner may be admitted to degree studies, provided that the learner:

- passes ANY 4 subjects from the recognised 20-credit subject list at 50% or more. (The only NSC subject that does not have 20-credits is Life Orientation).
- passes one official language at Home Language at 40% or more.
- passes 2 subjects at a minimum of 30%
- meets the language requirement for entry to further study.
  - One of the two official languages offered by the learner must be either English or Afrikaans. To meet the language criterion to qualify for entry to study at a tertiary institution, the learner must pass either English or Afrikaans at the First Additional level, i.e. at 30% or more.

Individual university faculties have very specific requirements for their courses. In making subject choices it is important that the different university requirements are investigated. Grade 9's and their parents are encouraged to investigate the different universities and their requirements thoroughly before making final subject choices.

The universities are in the process of introducing their own specific entrance tests and these are weighted against matric results when considering the acceptance of a candidate. All those who wish to study at the country's universities are required to write the **National Benchmarking Test (NBT)** in their matric year. These dates can be accessed on the university websites or the NBT website itself. Matric students are required to register to write these tests online. They will receive an examination number once a session has been booked and payment made. There are a number of opportunities to write the NBTs and families must manage the process sensitively.

All applicants are required to write the Literacy Test, and those wishing to study Commerce, Engineering & Built Environment, Health Sciences and Science are required to write the Mathematics test.

The universities are using the access test results (or NBTs) as provisional filters in working with admissions. Specific details need to be accessed and followed on the various university websites.

Many of the universities are stating that provisional admission will be based on the final Grade 11 results with final admission based on final Grade 12 results.

MECS is an academic institution that strives to provide each student with every opportunity to

earn a Bachelor Degree Pass in Matric which will provide access to university study. At the same time, we do recognise that the university pathway is not meant for each of our students, but will endeavour to guide them to achieve the best results possible within the subject constraints of what we offer.

Some information from a variety of universities follows:

UCT

<http://www.uct.ac.za/>

[http://www.students.uct.ac.za/sites/default/files/image\\_tool/images/434/prospective/ug\\_prospectus/ug\\_prospectus.pdf](http://www.students.uct.ac.za/sites/default/files/image_tool/images/434/prospective/ug_prospectus/ug_prospectus.pdf)

STELLENBOSCH

<http://www.sun.ac.za/english>

[http://www.sun.ac.za/english/maties/Documents/2018%20Minimumvereistesboekie\\_Eng.pdf](http://www.sun.ac.za/english/maties/Documents/2018%20Minimumvereistesboekie_Eng.pdf)

NMMU

<https://www.mandela.ac.za/>

<https://www.mandela.ac.za/www/media/Store/documents/apply/admission/how/12-Undergrad-Guide-2018.pdf>

UNIVERSITY OF WESTERN CAPE

[www.uwc.ac.za/](http://www.uwc.ac.za/)

RHODES

<https://www.ru.ac.za/>

WITS

<https://www.wits.ac.za/>

PRETORIA

<http://www.up.ac.za/>

NORTH-WEST (POTCHEFSTROOM)

<http://www.nwu.ac.za/>

FREE STATE

<https://www.ufs.ac.za/>