

Pre registration assessment

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1. Introduction

The paper will start with a theoretical overview of the literature on Pre Registration Assessment. An overview will be provided on the different admissions requirements that is used at some of the other major Technikons and Universities in South Africa. A focus will be placed on the role of pre registration assessment in the admission requirements. Specific emphasis will be given to the University of the Free State and Technikon Free State. The implications of the new academic policy document for the future of pre registration assessment at tertiary institutions in South Africa will also be dealt with. The advantage and disadvantages of each model will be discussed. The cost and ease of implementation will also be discussed. From this discussion it will be clear why the region chose to implement the pre registration model using the m scores.

An overview will then be given on the Pre registration assessment project of 2001 in the Free State region. During 2001 the Free State region of Technikon SA conducted a pilot study to firstly determine the relationship between success in the matriculation examinations and success during the first year at Technikon SA. The matriculation

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results were used to calculate an M Score. The second aim of the study was to determine the success of using the M Score as a placement tools to channel learners into the different learner support programmes that is offered by the regional office. This intends to solve the problem that the same learner support programmes target a very diverse group of learners. The aim of the project is to improve the throughput rate of the learners in the region.

As a follow-up to the first project the Academic Development Centre at Technikon SA have developed its own Pre registration assessment process. The project is being piloted in the Free State Region during 2002. The lessons learnt in the process of implementation and a prediction on the success of impact of the model will be made in the second part of the paper.

As a conclusion some suggestions will be made for the improvement of the current pre registration assessment processes at Technikon SA.

2. An overview on the admission requirements and pre registration assessment processes at tertiary institutions in South Africa.

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2.1 Admission requirements at Technikon SA.

Technikon SA (2002:1) follows the basic admission requirements that allow learners entry into most of the technikons and universities in South Africa.

Learners are allowed to enrol under the following conditions:

To be admitted to the main stream to study at Technikon SA you require at least one of the following:

- A **matriculation certificate (grade 12)** issued by the Matriculation Board
- A **national senior certificate** (grade 12)
- A certificate endorsed by the **South African Qualifications Authority** as an equivalent to the minimum admission requirements for Technikons
- Any **other certificate deemed to be equivalent and approved by the Senate of the Technikon.**

The following requirements have to be met to be allowed to study provisionally at Technikon SA:

- If you do not meet the minimum admission requirements for study at TSA and you are 23 years or older by the first day of the relevant registration cycle, you may apply for provisional registration.

For example, you may apply for provisional registration if you passed one of the official languages on the lower grade, or if you have a standard 8 or 9/grade 10 or grade 11 certificate (non-practical), a standard 10/grade 12 certificate (practical) or a certificate with more than two subjects on the lower grade.

The biggest different with the admission requirements at Technikon SA and other tertiary institutions is the fact that no selection process is in place. The only exception on the policy of no selection for learners who wants to enter Engineering.

Engineering learners needs to obtain at least a D Standard grade or E Higher Grade for Mathematics and Science in Matric to enter a diploma in Engineering. If the appropriate marks were not obtained the learner is channelled into an access programme to enhance the Mathematics and Science skills of the learner.

The main advantage of this policy of open access is the fact that it allows learner with the potential, but who did not had the relevant learning opportunities in the past, the opportunity to enter higher education. At career exhibitions held in Bloemfontein and Free State lots of interest from learners not qualifying to enter the other two tertiary institutions directly into the main stream are received who wants to make use of the open access opportunity at Technikon SA. These potential learners believe that they have the potential to make a success of tertiary education.

This policy of open access had the disadvantage that the many learners that do not necessarily prepared for distance education and tertiary education are allowed to enter the Technikon SA. Because the institution wants to give as many learners as possible the opportunity to develop their human potential the challenge exists on how to channel these learners into a successful study career at Technikon SA.

2.2 Admission requirements at Technikon Free State

Technikon Free State is the residential Technikon in Bloemfontein. It offers the same programmes as Technikon SA. The Technikon Free State can be seen as a substitute

for many of the prospective learners of Technikon SA. Factors influencing the learner's decision to study at the different institutions is the cost of study, the mode of delivery and the access to the institution.

According to the Technikon Free State it follows the same minimum requirements to enter the Technikon as those set by Technikon SA (Technikon Free State, 2002:1).

Potential learners at Technikon Free State are also being submitted to a potential test as part of the admission procedure.

Admission of students at Technikon Free State takes place on the basis of the following principles:

- The quality of the application
- The availability of space
- The maintenance of a suitable balance between different courses.
- The learners' M Score
- According to the Technikon Free State (2002:2) candidates enrolling for a degree, diploma or certificate for the first time, and who obtained 27 or more points on the Technikon point scale in the Grade 12 July examination, or 30 points or more on this scale in the Grade 11 final examination, can be admitted without further selection, except in the case of courses for which specific selection is required. The courses in Art and Design are an exception, where a point of 22 at Grade 12 level, and 25 at Grade 11 level, is required. Students in these courses are also required to submit a portfolio and to be interviewed.

- Such candidates must, however, still comply with the subject requirements of a course.
- Candidates who obtained **less** than 27 points on the Technikon point scale in the July Grade 12 examination, or **less** than 30 points on the Swedish Scale in the Grade 11 final examination, can still qualify for admission after completing a potential-test.
- Applications of candidates received after 31 July must be accompanied by the July Grade 12 examination marks.
- Departments reserve the right to use specific selection procedures for certain courses.
- Candidates who achieved 16 points or less on the Technikon point scale in the Grade 12 July examination, or 19 points or less in the Grade 11 final examination, are considered to be candidates who do not have the skills to make a success of their Technikon studies under their present circumstances. Such candidates will not be allowed to enrol at the Technikon.

From these guidelines it is clear that Technikon Free State is using the M Score to exclude learners from studying at the institution. This is based on research at the institution proving that learners with an M Score lower than 16 have a limited chance of succeeding in tertiary education.

2.3 Admission requirements at the University of the Free State.

2.3.1 The standard admission requirements.

The university is the biggest residential university in the Free State region enrolling more than 12 000 learners during 2001(UFS,2002:2).

The university was included in this study as it can also be seen as a substitute for studying at Technikon SA. A strong tendency wrongly still exists amongst the potential learners to rate studies for degree purposes at a university higher than studies at a Technikon.

To enrol at the University of the Free State you need to have obtained Matriculation exemption. Learners are also measured on the M score. A score of at least 27 is needed to enter the main stream (UFS,2002:1).

The learners are also provisionally enrolled if they are older than 23 years of age with a grade 10 certificate.

Learners with an M score of between 12 –26 are enrolled for the career preparation programme (CPP). After the learners have completed the CPP he can then enter the main stream with two credits on a first year level.

2.3.2 The Career Prep Programme.

The programme was started in 1993 to address the backlog created by the schooling system. According to the UOFS (2000:1) the aim of the programme is offer learners an opportunity to study at higher and further education institutions despite their relatively poor performance at school. The Programme provides disadvantaged students with an opportunity to enter any Technikon, the University of the Free State or any Technical College in the region after the successful completion of a one-year bridging year.

The learner can follow the Economic and Management Science, Science or Human and Social Sciences access routes. The different access courses are structured as follows:

- The learner will have to complete two first year subjects from the University of the Free State
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- Introductory Communication & N4 Communication
- Introductory Information Processing & N4 Computer Practice presented at a participating Technical College
- Foundation Course in Lifelong Learning. The programme will improve the learners' general life skills, personal skills, academic skills as well as generic competencies.

The programme have a good track record with various learner achieving Masters degrees after entering the University of the Free State on completion of the Career Preparation programme.

2.4 The role of English Language Literacy in Pre registration assessment.

One of the most important issues in terms of Pre registration assessment is the impact of a non-English mother tongue speaker of English on the chance of success at tertiary studies. As part of the Career Preparation programme Van Wyk (2002) did a study to develop and implement an English language and literature programme for low-proficiency tertiary learners. As part of the study the success rate of learner who went

through an English Language programme versus a test group was measured. The study concluded that the learner with the improved English capacity performed substantially better at tertiary level than learner who did not attend an English language literacy programme.

Blue (1993:10) also discussed research that showed the importance of language literacy. Learners scoring 6.5 in the English Language Testing Service (ELTS) had a 6 percent failure rate. Learners scoring 5.5 in the same test only obtained a 70% pass rate.

The notion of Blue to indicate the importance of English Language literacy is supported by a study of Tucker (1988). Tucker also measured the link between academic success and English Literacy and concluded that academic success is closely linked to language proficiency.

The results from the survey of admission and pre registration assessment practices at other leading tertiary institutions indicated the value of the M Score as a method to determine the possible future success of learners at tertiary level. The M Score also have the advantage that is relatively easy and cheap to administer with a minimum impact on the administrative capacity of the regional office of Technikon SA in Bloemfontein.

Although the ideal would be to supplement the M Score with some psychometric testing to determine the potential of prospective learners. This was not viable in a distance education setting due to staff and budgetary constraints at the initial stages of

the pre registration assessment project in the Free State region. The region did not had the services of a registered psychologist with the first round of the pre registration assessment project to perform the potential tests of prospective learners.

The notion on the importance of English Language capacity was fully acknowledged and was taken into account in developing the second round of the pre registration assessment process at Technikon SA.

3. The 2001 Technikon SA Pre-registration project.

As part of the learner support process at Technikon SA 260 learners has been assessed at registration in the Bloemfontein Office. The aim of the assessment was to channel the learners into the correct learner support programme. The aim is also to determine the validity of the matriculation results as an indicator for success in tertiary studies.

The difference between our approach and other institutions using the same instrument is that it is not used to exclude the learners from tertiary studies but only to channel them.

The M-Score is calculated as follows:

Subject on HG.	Subjects on SG
A = 8	A = 6
B = 7	B = 5
C = 6	C = 4
D = 5	D = 3

E = 4

E = 2

F = 3

F = 1

The success of learners with an M Score higher than 27 will be measured against learners with a score between 16 -27. The group with an m score of lower than 16 will also be evaluated.

For the 2001 pre registration assessment project the success was determined in terms of the correlation between the m score performance in the assignments, the yearmark³ and the final mark⁴ in the examination.

The group of learners that took part in the pre registration assessment pilot was also targeted to attend the HELP programme. The HELP programme is a generic academic and life skills programme preparing learners for the challenges that they will face studying through the mode of distance education. The original intention was to determine a m score to channel learners into the HELP programme. Experience has however indicated that all learners irrespective of their M scores will gain from the HELP programme.

Evaluation of the assignment marks.

³ At Technikon SA the yearmark is calculated as the average mark of the best three assignments. The calculation differs between subject and subject but did not influence the results of the study

⁴ Yearmark counts only 10% of the final mark. The examination mark is counts for 90% of the final mark at most programme groups.

In the evaluation of the assignment marks obtained by the candidates no correlation between the M Score and the assignment marks were evident. The majority of the learners obtained a yearmark. This might be an indication that the assignment is not an appropriate method of formative assessment of learners at Technikon SA

3.2 Overview of the process.

An Excel programme to enable an ETOP learner to calculate the M Score by entering the relevant symbol into the programme. The programme then calculates the M Score.

The learner was in the process also informed about the role and functions of the tutor and enrolled for the HELP programme.

The information was entered on a form and supplied to Mr. Mostert on a weekly basis. The Chief Learner Support Officer ensured that all first entrants' scores were calculated before the registration forms was forwarded to Florida.

3.3 Results of the first pre registration assessment in the Free State Region.

A total of 224 learner were evaluated in the project. Table 1 gives a summary of the results of the test.

M Score	Number of learners	% of learners
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27 or higher	49	21,9
22-26	42	18,75
16-21	87	38,8
15 and lower	46	20.53

Fig 3.1 Results of the Free State Pre registration assessment project

From the results it is clear that 21% of our learner would not have been allowed to register at Technikon Free State which is a residential institution. Only 21,9% would have entered the Technikon Free State directly.

It can be concluded that the majority of learners entering Technikon SA will need learner support on the relevant level to ensure success. The second conclusion is that the result tends to place doubt over the success of an open access policy like the one at Technikon SA.

Despite the fact that it can happen that some learners will outperform their M Score in their first year of tertiary study the findings seem to support the fact that the M score is a good predictor of success at tertiary level

4. The Pre registration process 2002

Due to the statistical significance of the 2001 Pre registration assessment process the procedure was again implemented during 2002.

The pre registration assessment process in the Free State Region was extended to include the process developed by the Academic development Centre at Technikon SA (ADC,2002:1). The Academic Development Centre at Technikon SA is responsible for academic development programme including the HELP programme, Career guidance and counselling, job placement and learners with special educational needs (LSEN).

An overview about the second pre registration assessment process will now be given.

4.1 Overview.

The first part of the process of creates an awareness of Pre registration assessment amongst the learner. The awareness campaign included adverts in the local newspapers. Some orientation sessions were also conducted to brief groups of learners on the process.

In the pre registration assessment awareness briefing to the learners it was highlighted that the pre registration assessment process is voluntarily and part of a pilot programme to refine the programme. The programme was offered free of charge to the learners.

On the motivating factors for the learners to become involved in the process was the availability of counselling services of a registered psychologist for the learners.

Before this project the learners had to pay to get the same career guidance at the counselling services at University of the Free State and Technikon Free State.

4.2 The pre registration assessment process.

The pilot project in the region is only for five programme groups namely:

- Applied Natural Sciences
- Applied Communication
- Information Technology
- Business Management
- Police Practice

The pre registration assessment process can be divided into three phases:

1. The career guidance and counselling process
2. The writing of the pre registration assessment test
3. The placement procedure

Each one of these phases will now be discussed at the hand of the following pre registration assessment implementation process map

PRE REGISTRATION ASSESSMENT PROCESS MAP

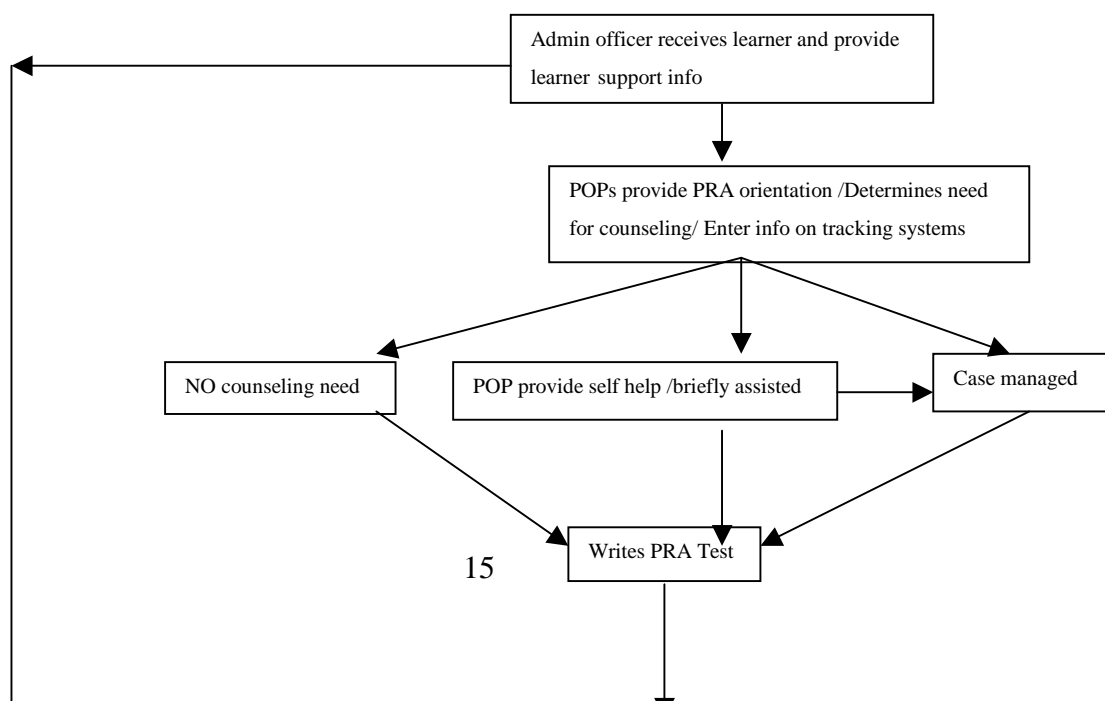


Fig 1 Pre registration assessment implementation process map

4.2.1 Career guidance and counselling process

When the learner enters the office they are briefed by an administrative officer to determine whether the learner wants to register for any one of the five pilot programme groups.

If the learner wants to register for one of the five programme groups the need for counselling is determined by the POP leaders. All the learners in need of counselling will have the opportunity to use a self-help service. The self-help service gives the learner an opportunity to access a career resource centre of Technikon SA⁵. Part of the centre is assessment test in terms of personality and careers. The advantage of the systems is the fact that the learner receives immediate feedback.

⁵ The career resource centre can be accessed on the Internet at <http://www.tsa.ac.za/career>

The POP leaders will also then briefly assist the learner. This service entails the discussion of the results from the self-help computer programme. The POP leaders will also assist the learner by sharing information on career that is made available to the learner.

If the learner is still uncertain about his future career and appointment with a registered psychologist can be arranged. This service is the case managed service. The psychologist takes down the necessary psychometric tests and give proper career guidance the learner. As was indicated earlier, this service is provided with no cost to the learner. The learner will then be channelled to the Pre registration assessment tests.

4.2.2 The writing of the pre registration assessment tests.

The learners that wants to register for the any course except for Applied natural science will be writing an academic literacies test compiled by the of the University of Cape Town in conjunction with the Academic Development Centre of Technikon SA.

The test covers the following competencies:

English Literacies, Academic Literacies and basic numeracy.

The test has to be completed within 2.5 hours. The test is compiled in such a manner that it gets progressively more difficult. It can happen that a learner will find that the learner cannot continue writing after one hour.

If the learner wants to enrol for Engineering or Applied Natural Science the learner have to write the Mathematics Pre registration assessment test. This test also runs over 2.5 hours. It also gets progressively more difficult. The competencies tested covers the skills needed to pass matric mathematics.

4.2.3 The placement process.

Depending on the results the learner is recommend to take part in the placement process. Because the pre registration assessment project was a pilot the learners had the opportunity to reject the recommendation and register for the main stream in any case.

The learner accepting the recommendation were placed in either into one of three programmes to enhance the competencies needed to cope at the Technikon SA or into the main stream registering for the national diploma of choice. The three programmes developed to improve the skills and competencies of the learners are the NQF 4 programme, the literacies plus programme or the police practice literacies programme.

As it will be indicated all three programmes runs for one year. It was developed to enhance the skills level of the learners. The curriculum of the NQF4 and literacies plus is attached to the paper as Annexure A. After one year the learner will be able to join the main stream of Technikon SA. As part of the quality assurance on the placement procedure a pre test post test is being considered. The learner will then have to rewrite the Pre registration assessment tests after any one of three placement

programmes have been completed. The results of these post test assessment tests will provide a good indication of the success of the placement programmes.

A tracking programme on Excel have been developed to monitor the progress of learners participating in the Pre registration assessment project versus the learner who choose not to take part in the project

At the stage that this paper was prepared no results of the second pre registration assessment process was available.

5. The impact of the New Academic Planning document on Pre registration assessment.

An important consideration in any future developments in any Pre registration programme is the recommendations made on Pre registration assessment and the widening of access in the New Academic Planning document in Chapter 7.(Department of Education,2002:1)

The document highlights the fact that the current admission requirements do not fit the strong equity agenda of the government. An another problem is the declining number of school leavers with matriculation exemption. This lead to the practise that an increasing number of learners were allowed into universities by means of Senate Discretionary Conditional Exemption (Department of Education,2002:2)

Another development that informed the New Academic policy documents recommendations on access is the fact that institutions are expecting learners to write institution specific entry examinations. It is not seen as effective to have the learner writing a school leavers examination and an entry examination into higher education.

The Department of Education (2002:9) proposes the following qualifications to enable students from poor learning backgrounds to develop their full academic potential. The first qualification is Bridging Certificates at Level 4 offered by technical colleges, private Further Education and Training providers, often in partnerships with higher education institutions, could enable learners to 'catch up' or 'fill the gaps' in the content or disciplinary knowledge that they require to meet the entry requirements of the higher education programme of their choice. These bridging programmes should also build on the generic skills base developed through the FETC.

- Foundation Certificates at Level 5 could focus on developing basic generic academic skills such as functional numeracy, English language proficiency, communication and presentation skills - reading, expository -, and essay writing, note-taking, end-user computing, and basic library skills. Where appropriate, the foundation curriculum could also include the learning of a second South African language. Foundation programmes should also equip students for the task of academic learning in specific fields of study, by making explicit the epistemic demands of the disciplines concerned. Foundation programmes could be offered by higher education institutions on a Faculty-wide basis, thus providing maximum economies of scale and also ensuring that the skills developed are integrated into faculty specific material.

- Undergraduate Diplomas should demonstrate that exiting students have a sound platform of basic, generic, lifelong learning skills which they can effectively apply to a

workplace or further learning context. Although it is unlikely that an exit qualification of 240 credits at Level 6 will be meaningful and marketable in all programmes, this possibility should be explored with employers in all fields.

If the route promoted in the New Academic Policy can be implemented it will provide learners the opportunity to write one pre registration assessment test and complete one access programme and be able to gain entry into any tertiary institution. At this stage learners who complete an access programme at for instance Technikon SA will only gain access with the programme at Technikon SA.

The proposal also has the potential benefit to tertiary institutions of saving some of the cost and effort of developing institutionalised pre registration assessment programmes.

6. Recommendations and proposals for future research.

The first recommendation would be to do further research with a view to refine the placement programmes that are available to Technikon SA learners. Some of the current placement programmes like the NQF 4 was developed to serve other needs than providing the necessary skills to cope with distance education at Technikon SA.

The second recommendation would be to determine the impact of the English proficiency of learners from school on the future success at tertiary level. In this study the marks obtained for English were part of the total M Score evaluation. The study might be improved by only looking at the English marks of potential learners as

indication of possible success at tertiary level. As indicated earlier a literature review indicated the importance of English Language proficiency as indicator for success at tertiary level. At the University of the Free State Medical School a minimum pass rate of 65% in English is required when selecting first year learner to enter their programme in physiotherapy.

The results of the tracking of the learners who took part in the second pre registration assessment pilot will also inform the planning for the future implementation of the pre registration assessment process at Technikon SA.

The cost and administrative burden of the project have to be taken into account in planning the continuation of the project. The possibility exists that the project might lead to a small increase in class fees for Technikon SA learners.

In view of the interim proposals of the new academic policy document and the increasing importance of regional Higher Education initiatives, a proposal is to form a collaborative workgroup with representatives from other interested institutions to develop a standardised regional pre registration assessment process to be implemented at all interested institutions. The regional initiative on pre registration assessment be coordinated on a national level as a second phase initiative.

6. Conclusion.

From the discussion it is clear that to meet the goal set in the national plans in terms of equity and redress and the current skills levels of prospective learners entering Technikon SA that the development of a pre registration assessment programme will

increasingly become more important. The development of successful academic development programmes to ensure the success in the main stream is of crucial importance. It is also imperative that the institutional pre registration assessment effort links up with the national policy directives from the National Department of Education.

The first two pre registration assessment projects in the Free State region have provided valuable input in refining the pre registration assessment process at Technikon SA.

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Annexure

NQF 4

NQF4 CERTIFICATE

1. Structure of the NQF4 Certificate

It consists of **4 subjects**.

1.1 Two compulsory subjects:

- English Language Development Course
- Applied Numeracy

1.2 Two choice subjects:

- Bookkeeping
- Business Management
- Economics
- Introduction to law
- Tourism awareness
- Entry Level Computing

Successful candidates will have one credit towards the NQF4 Certificate.

Literacies plus

The Technikon SA Certificate: Literacies Plus is ideal for you if you need to improve the skills required for further learning at tertiary level – more specifically, English language skills, academic skills, computer skills and library and information skills (these are the “literacies”). In addition, the certificate allows you to enrol for a single first-year course of your choice towards a national diploma - the “PLUS” part of the certificate.

Course details

Qualification: Technikon SA Certificate: Literacies Plus (Course code: TSLITP)

Subjects:

English Language Literacy: Module 1 (LANLIT1) and Module 2 (LANLIT2)

These modules will improve your English language proficiency – your ability to understand, speak, read and write English and to think about what you have heard, read, said and written in English.

Academic Literacy: Module 1 (ACALIT1) and Module 2 (ACALIT2)

The Academic Literacies will equip you with specific academic skills for succeeding in higher education. They include topics, such as reading and writing for academic purposes and the making of notes.

Computer Literacy : End-User Computing - a practical module (EUCPRAC)

Computer Literacy will introduce and apply the principles of word processing and spreadsheets. You will receive a computer-based training package, including Word and Excel (Introduction and Intermediate). You may choose either to work through the material on your own or to attend a 40-hour practical

training session at an approved computer training centre. To register for this course you must have access to a computer, printer and necessary software (for approximately two hours per week). You may submit assignments using any suitable software.

Library and Information Literacy: Module 1 (LIBLIT1) and Module 2 (LIBLIT2)

These modules will help you improve your ability to use the library and to access and process information for completing assignments.

In addition - as mentioned above - you will do one first year course of your choice towards a national diploma.