# Considering a career in..





Media, Information and Communication Technologies Sector Education and Training Authority Accelerating quality skills towards an information savvy society



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## 1. Foreword

Well wishes on your decision to consider a career in the Media, Information and Communications Technology (MICT) sector. More than any other industry today, ICTs offer a diverse range of opportunities that allow you to explore your own areas of interest and expertise throughout your professional growth.

Since ICT is so universal and provides the enabling infrastructure for every other industry, professionals in this field can choose to work in industries as diverse as finance, retail, manufacturing, telecommunications, mining, fashion, multimedia, government, entertainment and other industries. The possibilities are only limited by your interest, drive and imagination.

Nowadays society demands people to be capable of self-directing their professional and private lives. Everyone has to make choices, has to handle changes, and has to deal with uncertainty. The responsibility for career management has shifted to you; the individual. Achieving success in your career is an active process of:

- Identifying market needs
- Defining your personal intentions
- Developing yourself as a project
- Marketing your personal bran.

This practical guide will assist you in taking charge of your career, and driving it forward step-by-step. Achieving an excellent education is about (to name a few):

- Becoming a well-educated citizen
- Gaining knowledge for thoughtful and well-considered decisions
- Engaging your curiosity
- Developing skills that will contribute to the personal achievement and greater good

In addition, your education also prepares you to pursue a wide variety of career paths.

The future, it appears, is in such fields as bioengineering, power grid informatics, digital media, and social and mobile application software, where interesting, creative and social 'mashed-up' hybrid jobs will combine MICT with business of every imaginable field. The challenge is to get this message out to students and young professionals alike.

Nonetheless, perhaps the MICT sector has the easiest task in taking on this challenge. Simply because "when it comes to a rewarding and challenging career that keeps you engaged, offers the chance to make a significant contribution and ensures an outstanding quality of life, it's hard to beat the MICT sector".

You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future. You have to trust in something - your gut, destiny, life, karma, whatever.

Steve Jobs

## 2. Quick Glance at the MICT Sector

The MICT sector is made up of five subsectors that are inter-related but also quite distinct and identifiable in their own right.

These are:



The sector is anchored by the role of unified communications and the integration of telecommunications, computers as well as necessary enterprise software, middleware, storage, and audio-visual systems.

Principally, the sector enables access, storage, transmission, and manipulation of information.

The MICT sector is estimated to be made up of over 23,000 companies spread across the five sub-sectors. Nearly 50% of the sector employer base is constituted by organisations in the Information Technology sub-sector, followed by Electronics at 12% and Advertising with 11%; while the Film and Electronic Media and Telecoms sub-sectors represent 10% and 9% respectively.

The vast majority of employers are located in the industrialised provinces of the country. Gauteng has the largest share of employers at 42%, followed by Western Cape and Kwazulu-Natal with 9% each. The remainder of the provinces have a  $\pm 1\%$  representation each.

It is important to understand the occupational make up of employees in the sector as

this ultimately has implications on the types of skills development intervention required. There are more professionals than any other occupational category in the sector. Professionals constitute 39% of all employees in the sector. Managers as well as Technicians and Associate Professionals each represent 15% of the reported total workforce, whilst clerical support workers represent 14% of the workforce.

Employment within managers, professionals and associate professionals categories typically require a degree, diploma or NQF level 6 qualifications as an entry.

In 2015, the MICT sector employers are reporting a 6.29% labour need as a percentage of total employment. For over 72% of occupations in need, employers have cited lack of skilled people in the labour market as the main reason for such need. Geographical location accounts for 19% of need whilst employment equity considerations account for 9%.

The latest available data for the sector is from surveys by Career Junction (2015); and Ad Talent (2015).

Across the subsectors, salaries range between a minimum of R9 061 - at a skilled level - and top range of R57 026 - at a senior level. Please note these are just indicative of market averages.



The following are some of the drivers of skills gaps:

- In the Advertising sub-sector, the notion of digitisation means advertisers have to constantly trace latest trends and ensure that their employees are able to offer bespoke solutions in line with such trends. Employers have indicated that they are now employing conceptual thinkers who can quickly adapt to changes and learn on the job as technical skills are rapidly changing.
- The Electronics sub-sector has to grapple with deployment of improved manufacturing processes to attain efficiencies in the production processes. Given that South Africa cannot compete with Asian countries on cost and scale, and at the same time cannot compete with top end western countries such as Germany, US and Finland because of their advanced technologies, employers in South Africa must either improve manufacturing processes or close shop. Thus employee skills have to be constantly improved.
- In the ICT sector the constant advancements in broadband technologies from 3G. 4G and now talk of 5G means telecommunication companies should grapple with training and certification of their staff to deploy, implement and manage the new infrastructure systems and that makes these advanced connectivity methods possible. Furthermore, the convergence of cloud computing with telecommunications means employees in the sector need to learn new skills and constantly collaborate with others to develop new solutions.

The following are broad categories of critical skills gaps that exist amongst employees working across the five sub-sectors of the MICT SETA:



"Choose a job you love, and you will never have to work a day in your life".

Confuciu



**mict**seta

## 3. MICT Education and Training Ecosystem

#### 3.1 University Programs

Most universities offer MICT-related courses. These may be within an ICT faculty, or else found in Business, Engineering or Arts faculties.

Many institutions offer broadly-titled courses such as a Bachelor of Computer Science that allow you to major or specialise in one or more areas as you progress through the course. Other institutions offer a variety of niche degrees, each one targeting a special area of the market such as the Bachelor of Engineering (Microelectronic Engineering) or Bachelor of Multimedia/Multimedia & Digital Arts.

TVET comprises formal, non-formal and informal learning for the world of work

#### 3.2 Technical Vocational Education and Training (TVET) colleges

MICT courses are often offered in combination with another discipline. Technical Vocational Education and Training courses are vocational or occupational by nature meaning that the student receives education and training with a view towards a specific range of jobs or employment possibilities. Comprehensive institutions, through special articulation arrangements. pathways to university (higher offer education), from TVET colleges.

If you have a base qualification in another field you may choose to take a graduate certificate or graduate diploma program to gain specialist skills. When deciding whether or not to undertake a fourth year of study, determine the market standard in the area in which you wish to work before enrolling. For example, research institutions may regard an honours year as a base qualification, while commercial enterprises usually place greater value on a combination of work and study experiences.

## 4. MICT SETA Opportunities

#### 4.1 Learnerships

#### What is a learnership?

A learnership is a work-based education and training programme that is linked to a qualification registered on the National Qualifications Framework (NQF) with the South African Qualifications Authority (SAQA).

Learnerships are occupationally directed programmes that consist of both structured theoretical learning and practical workplace experience.

#### What are the benefits of learnerships?

- Provide easy access to learning;
- Increase access to employment opportunities;
- Assist in Career-Pathing and Selfdevelopment
- Provide a monthly stipend to learners while they learn;
- Lead to the acquisition of a formal qualification;
- Fast track the development of current employees; and
- Serve as an entrance into the industry for unemployed learners.

#### For the Industry, learnerships help industry to

- Become competitive in the global market;
- Build a pool of skilled, qualified & more

professional workforce; and

• Develop their people to world-class standards.

#### How to apply for a learnership?

Although the SETA facilitates the recruitment and implementation of learnerships, the responsibility lies with the employer, the service provider and training provider to recruit learners. For more information on MICT SETA accredited learnerships, please visit our website or contact Thabo Mpulo at: thabo.mpulo@mict.org.za.

MICT Seta encourages stakeholders who are implementing learning programmes to search for candidates on the MICT Seta placement database. To upload CVs and view a list of MICT SETA registered learnerships programmes, go to the MICT Website at <u>www.mict.org.za</u>.

#### 4.2 Internships

#### What is an Internship?

An Internship is a programme designed to give University and TVET College graduates an opportunity to extend their academic qualifications through structured workplace exposure and specialised training. Participants are placed on a full-time basis for a period of eight to twelve months in stakeholder companies and government organisations, the purpose of which is to provide the learner with workplace experience that builds on the qualification.

The MICT Seta utilises the concept of Internships to fast track high level skills, to offer needed work experience to unemployed graduates and to empower graduates with practical knowledge commensurate with their gualification. In summary, an Internship focuses on practical training; the employer determines the duration and content of the Internship, so it can vary greatly; and the specific outcomes are not defined or regulated as in the case of Learnerships. Internships are ideal for graduates or those with tertiary qualifications but who lack experience. The primary benefit for the graduate learner includes obtaining "real world" workplace experience.

#### Why Internships?

- To fast track high level skills;
- To offer unemployed graduates with needed work experience; and
- To empower graduates with practical knowledge levelling with qualifications.

For information on the internship programme, please contact Tumelo Khoako at: tumelo.khoako@mict.org.za.

The MICT Seta provides training on short courses through skills programmes and vendor specific programmes.

#### 4.3 Skills Programmes

#### What is a Skills Programme?

A skills programme is a set or cluster of unit standards gathered or combined to form a short programme bearing credits on the National Qualifications Framework (NQF).

#### Why Skills Programmes?

The skills programmes are often implemented to meet the needs of the employer to enhance employees' knowledge for a particular skill. Skills programme can culminate into a qualification when an interested learner continues to pursue the completion of the remaining unit standards. Training is offered by an accredited provider.

At the end of the training learners receive a Statement of Results. Like the Learnerships, skills programmes are implemented by employers for both employed and unemployed learners.

#### 4.4 Vendor Specific Programmes

What is a Vendor Specific Programme?

The Vendor Specific Programmes are short courses that are industry centred based on international exams.

#### Why Vendor Specific Programmes?

These programmes are designed to meet the global technological advancement in specific multinational companies or in some local business units that are using such technology for operation.

For more information on short courses please contact Sindiswa Dabula: at sindy.dabula@mict.org.za.

#### 4.5 Bursaries

The MICT SETA provides bursaries for South African citizens to pursue full-time studies within any of the fields that fall within its sector. The bursary programme is offered through partnerships with the National Student Financial Aid Scheme (NSFAS) and most of the Technical Vocational Education and Training (TVET) institutions and universities to support deserving and financially challenged individuals.

For more information on the bursary programme, please contact Mpho Mpele at: <u>mpho.tumo@mict.org.za</u>.



## 5. Occupations in the MICT Industry

Often job roles will overlap and/or individuals might work in two or more functional areas. You should not rely on a job title only to determine what duties you will be undertaking in a particular occupation. Many industries and organisations have job titles that are specific to their setting. As such, research may be required in order to locate the job roles that best match your range of skills.

The broad occupational groupings, below, provide a guide to the kinds of roles the MICT workforce undertakes. The information below should not to be taken as an indication of positions available at a particular time rather as an expansive but not finite categorisation of roles within the sector.

#### 5.1 Analysts

ICT professionals may become analysts after spending two to three years in the field, during which time they gain broad industry knowledge and a range of technical skills related to their area of specialisation. They require excellent skills in communication, problem solving, analysis, leadership, time and project management, business acumen, methodical work habits, teamwork, strategic thinking, self-motivation and an ability to conceptualise and use intuition.

**Business Analysts** review, analyse and evaluate the overall business and information needs of an organisation to develop solutions to business and related technology problems. The role also encompasses strategic business research and analysis in developing business plans and market research to support an organisation's future directions.

**Database Analysts** develop and maintain databases, ensuring optimum performance and problem resolution. They analyse and design code for database access,

modification and construction and are also responsible for the tables, data dictionaries and monitoring of standards and procedures.

Market Research Analysts determine the market for new goods and services, develops advertising strategies, and evaluates the best business sites for commercial organisations

**Network Analysts** research and recommend policies and strategies for an organisation's network infrastructure. They design, install, analyse and implement computer systems/ networks, and ensure that the network is effective and meets emerging requirements of the organisation. The role can also include operational tasks such as monitoring system performance, software and hardware upgrades, backups, network maintenance and support.

**Systems Analysts** match business and system requirements, including developing data and system process flow diagrams, charts and specifications to suit different needs. They must specialise in one or more programming languages. Systems analysts plan and coordinate system feasibility studies, and analyse and make recommendations for the strategic direction of an organisation's systems architecture across a variety of operating platforms, environments and levels.

Test Analysts examine requirements documentation, develop system test cases, execute these test cases against requirements, examine results, and issue and manage defect reports using bugtracking systems. They work closely with developers throughout the development phase and possess an understanding of the data-and-traffic characteristics of an optimal system and quality standards. They may also give opinions on software quality issues.

#### 5.2 Developers

Generic skills that developers require include broad industry knowledge and an ability to conceptualise. The roles demand a creative approach, innovative thinking and excellent client consulting skills. Developers must be able to work autonomously, handle pressure, meet deadlines and be self-motivated. Essential skills needed include presentation, time management, interpersonal, problem solving and analytical capacity, and a methodical approach to work.

Developers must be process and team oriented, be able to work to a plan and have an excellent eye for detail.

**Multimedia Developers** use a range of creative software to create and manipulate graphic images, animations, sound, text and video into programs with instructional and graphic strategies. These programs are used to produce CD-ROMs, information kiosks, multimedia presentations, websites and entertainment/education products.

Multimedia developers may specialise as computer-based graphic designers, instructional designers, multimedia programmers, author-based programmers, project managers, digital video/sound editors, animators or a combination of these.

They may also consult with clients to develop specifications; determine the best platform and software required for a particular project; prepare code, instructional design and screen design concepts; design, create and maintain web pages; and manage the image and copyrights of the company.

**Software Developers/Programmers** create, maintain and modify computer and software programs such as operating systems, communications software, utility programs and compilers. They analyse and interpret technical designs and flow charts to construct specifications using a business functional model; test programs; and write technical documentation.

#### 5.3 Managers

Managers plan, direct, coordinate and evaluate the overall activities of enterprises, or of organizational units within them, and formulate and review their policies, laws, rules and regulations. They are accountable for day-to-day operations of resourcing, scheduling, prioritisation and task coordination, and meeting project milestones, objectives and deliverables within agreed timeframes and budget.

Sales, Marketing and Development Managers plan, organise, direct, control and coordinate the advertising, public relations, research and development, and sales and marketing activities of enterprises and organizations, or of enterprises that provide such services to other enterprises and organizations.

Advertising and Public Relations Managers plan direct and coordinate the advertising, public relations and public information activities of enterprises and organizations or of enterprises that provide related services to other enterprises and organizations.

Information and Communications Technology Service Managers plan, direct, and coordinate the acquisition, development, maintenance and use of computer and telecommunication systems. They consult with users, management, vendors, and technicians to assess computing needs and system requirements and specifying technology to meet those needs.

**ICT Project Managers** plan, organise, direct, control and coordinates quality accredited ICT projects. They are accountable for day-to-day operations of resourcing, scheduling, prioritisation and task coordination, and

meeting project milestones, objectives and deliverables within agreed timeframes and budget.

**Director (Film, Television, Radio or Stage)** Interpret and approve selection of scripts, and directs and instructs cast and crew during filming, recording or performance of productions. This occupation requires high levels of creative talent or personal commitment and interest as well as, or in place of, formal qualifications and experience.

#### 5.4 Specialists

Specialists are recognized as reliable sources of technique or skill whose faculty for judging or deciding rightly, justly, or wisely is accorded authority and status by peers or the public in a specific well-distinguished domain. They have extensive knowledge or ability based on research, experience, or occupation and in a particular area of study.

Advertising Specialists devise and coordinate advertising campaigns which encourage consumers to purchase particular goods or services. They advise managers and clients on strategies and campaigns to reach target markets, creating consumer awareness and effectively promoting the attributes of goods and services.

**Multimedia Specialists** create and manipulate computer animation, audio, video and graphic image files into multimedia programs to produce data and content for information kiosks, multimedia presentations, web sites, mobile telephone resources, electronic gaming environments, ecommerce and e-security solutions, and entertainment and education products. **ICT Systems Specialists** evaluate processes and methods used in existing ICT systems, proposes modifications, additional system components or new systems to meet user needs as expressed in specifications and other documentation.

Security Specialists manage the security of an organisation's system infrastructure, investigate and resolve incidents, monitor for intrusions, provide virus protection defences, enforce bandwidth policy, monitor data transactions in and out of a network environment and secure all servers from unauthorised use.

#### 5.5 Technical / Engineering Roles

Engineering roles require skills in analysis, problem solving and attention to detail. Staffs need to have a hands-on attitude and a methodical, results-oriented approach along with the ability to work autonomously, under pressure and to deadlines. Ideally they will also have business acumen and the capacity to think innovatively and strategically.

Hardware Engineers are responsible for the architecture, design, implementation, development and support of a computer's hardware infrastructure. They require a detailed knowledge of protocols operating across different environments, as well as a high level of competence in both the electronic and telecommunications industry.

Technical Engineers design, build, manufacture, implement and support computer systems. The role includes both hardware and software and the interaction between the two. Technical engineers have an excellent knowledge of the components of computer hardware and related peripheral devices as well as of networks, software applications,

electronics and operating systems. Industry certification is often required.

**Telecommunications Engineers** design, implement and support data communication systems including optical, frame relay, multicast, cable, wireless, ISP and other technologies. They create, update and follow protocols and maintain telecommunications equipment (e.g. satellite) using voice, radio, network, two-way, microwave and digital data.

**Lighting Engineers** set up the lights on stage, in a film or broadcasting studio or on location outdoors. They control the position, strength and colour of lighting during the production.

#### 5.6 Sales and Marketing Roles

Sales and marketing professionals require technical product knowledge as well as the ability to communicate this to clients. They must keep their knowledge up-to date and maintain strong relationships with clients and customers throughout the sales process, from initial contact through to post-delivery. High-level negotiation and problem solving skills are required, along with organisational and self-management expertise.

Account Managers sell computer hardware, software, telecommunications and IT services. They can also manage the sourcing and delivery of products to customers. An account manager may consult with current and potential clients to determine their technology requirements; prepare sales proposals and tender responses (including costings); deliver professional presentations; negotiate major deals; identify sales prospects; maintain key customer contacts; and keep customers informed of new product developments. **Corporate Communications Strategists** develop strategic marketing and communication strategies and advises executives on the implications of their policies, programs and practices.

After-Sales Consultants provide support during a product's warranty period and may assist with the bedding-in of new systems, hardware or software by acting as a link between technical staff and the customer. They may also provide information about upgrades, peripherals and further enhancements to the product or service. After-sales consultants often work for vendors and have detailed knowledge of the product range available.

## 6. Career Progression in the Sector

These are just three of the main forms of career progression within the MICT industry:

#### 6.1 Traditional Career Path

This often begins with an entry level role such as working as a helpdesk operator as a student or recent graduate before undertaking further training in a specialist area to become a network or database administrator. An operations manager position might follow, or even becoming the Chief Information Officer of a large corporation. Each progression has a higher level of responsibility usually accompanied by an increase in income and or benefits.

#### 6.2 Undertaking A Range of Roles Within One Organisation or Industry

For example, a person who works in a support or might spend time as a trainer, researcher, technical writer or project manager. This career path suits people who prefer a varied career to moving into management roles.

It also enables people who enjoy working for a particular organisation, field or industry (e.g. banking and finance, environmental engineering) to maintain their interest and keep learning. Sometimes this career progression takes people out of the ICT area altogether as they find other activities that incite their passion.

#### 6.3 Developing a specialisation

Becoming an expert in a particular area, for instance post sound production in film, assists a person boost market demand for their expertise. They become highly valued (and often highly rewarded) for their knowledge and expertise and might even find themselves travelling around the world. The down side of this is that they might become expert in an area that is superseded, so it is important to keep abreast of change and develop new expertise if necessary in order to maintain employability.



## 7. Popular Careers in the Sector

Below are some of the most popular occupations within the MICT Sector:



- Advertising Specialist
- Graphic Designer
- Copywriter
- Multimedia Designer
- Market Research Analyst

### Film and Electronic Media 💽

- Broadcast Transmission Operator
- Multimedia Specialist
- Film and Video Editor
- Director (Film, Television, Radio or Stage)
- Media producer

## Electronics

- Computer Network Technician
- Developer Programmer
- Software Developer
- ICT Sales Representative
- Electronic Engineering Technician

## Information technology

- ICT Systems Analyst
- Web Technician
- Management Consultant
- Computer Network Technician
- CT Project Manager



- Telecommunications Network Engineer
- Computer Network Technician
- Systems Administrator
- Electronic Engineering Technician
- Telecommunications Technical Officer or Technologist



## 8. Some MICT Related Qualifications

Most local institutions offer qualifications that possibly lead to a career pathway into the MICT sector.

University	Programme	Career Prospects/Job Roles
University of Cape Town	<ul> <li>Bachelor of Science majoring in:</li> <li>Business Computing</li> <li>Computer Engineering</li> <li>Computer Games</li> <li>Development</li> <li>Computer</li> <li>Science</li> </ul>	<ul> <li>ICT Systems Analyst</li> <li>Web Technician</li> <li>Systems Administrator</li> <li>Computer Network Technician</li> <li>Software developer</li> </ul>
University of the Witwatersrand	<ul> <li>Bachelor of Arts majoring in:</li> <li>Drama</li> <li>Film and Television</li> <li>Journalism</li> </ul>	<ul> <li>Actor</li> <li>Scriptwriter</li> <li>Copywriter</li> <li>Multimedia Specialist</li> <li>Film and Video Editor</li> </ul>
University of Johannesburg	<ul> <li>Bachelor of Engineering majoring in:</li> <li>Electronic Engineering</li> <li>Computer Engineering</li> </ul>	<ul> <li>Business Intelligence Analyst</li> <li>Business Analyst</li> <li>Chief Information Officer</li> <li>IT Project Manager</li> <li>IT Manager</li> </ul>
University of Pretoria	<ul> <li>Bachelor of Engineering majoring in:</li> <li>Electronic Engineering</li> <li>Computer Engineering</li> </ul>	<ul> <li>Computer Network Technician</li> <li>Developer Programmer</li> <li>Software Developer</li> <li>Telecommunications Technologist</li> <li>Electronic Engineering Technician</li> </ul>
University of KwaZulu- Natal	<ul> <li>BA Honours in:</li> <li>Film and Documentaries</li> <li>Media and communication</li> <li>Development and communication</li> </ul>	<ul> <li>Editor</li> <li>Director</li> <li>Journalist</li> <li>Content producer</li> <li>Communication specialist</li> </ul>
Vega School of Brand Leadership	<ul> <li>Bachelor of Commerce majoring in:</li> <li>Strategic Brand Management</li> <li>BA Creative Brand Communications</li> </ul>	<ul> <li>User Experience Designer</li> <li>Brand Strategist</li> <li>Art Director</li> <li>Brand Auditor</li> <li>Digital Marketing Strategist</li> </ul>

University	Programme	Career Prospects/Job Roles
IMM Graduate School	<ul> <li>Diploma in Marketing Management</li> <li>Bachelor of Business Administration iMarketing Management</li> <li>Bachelor of Commerce in Marketing and Management Science</li> </ul>	<ul> <li>Market Researcher</li> <li>Customer Service Representative</li> <li>Consulting Media strategist</li> <li>Media Strategist</li> <li>Public Relations Office</li> </ul>
Red and Yellow School	<ul> <li>Diploma in:</li> <li>Marketing &amp; Advertising Communications</li> <li>Art Direction Diploma</li> <li>Graphic Design</li> <li>Copywriting</li> </ul>	<ul> <li>Creative Director</li> <li>Campaign Coordinator</li> <li>Graphic Designer</li> <li>Social Media Coordinator</li> <li>Digital marketer</li> </ul>
AAA School of Advertising	<ul> <li>Bachelor of Arts in:</li> <li>Marketing Communication</li> <li>Creative Brand Communication</li> </ul>	<ul> <li>Advertising Media Buyer</li> <li>Advertising Media Planner</li> <li>Advertising Creative</li> <li>Advertising Account Planner</li> <li>Radio Producer</li> </ul>
Central Johannesburg TVET College	Diploma in: • Electronic Engineering • CCNA 1- 4	<ul> <li>Radio &amp; TV Technician</li> <li>Telecommunications Technician</li> <li>Computer Network Technician</li> <li>Systems Administrator</li> <li>Electronic Engineering Technician</li> </ul>

Please note that this is not an exhaustive list of all qualifications appropriate for employment in the MICT sector. For more options, please consult the websites of institutions listed at the end of the guide.

## 9. Getting There

Before even thinking about your career field, start by identifying your strengths.

Recognising your strengths is the first step to discovering a career fit that maximizes your opportunities for success and satisfaction. Significant strengths are motivated skills that are used repeatedly in experiences you have done well and enjoyed doing. The more you know about your strengths, the more you will understand how to adapt to the changing demands of the workforce. By using your strengths you will be able to improve interpersonal relationships, build your career, increase your job satisfaction, and reduce stress on the job.

#### Four Basic Steps...

1. Accept yourself as having a unique kind of excellence that is always growing within you.

2. Recognize that the elements of your excellence have been demonstrated from time to time throughout your life. These elements have most likely been demonstrated in experiences you identify as achievements: good experiences in which you did things well, you enjoyed doing them, and you are proud of what you did.

3. Believe that by carefully identifying and studying your Good Experiences, you will find the pattern of skills and talents you have repeatedly used to make those experiences happen.

4. Focus on using this pattern of skills and talents or strengths. They are the reliable elements of your special excellence.

This pattern of strengths provides clues to the kinds of career activities that are likely to be part of your future achievements regardless of your job titles or job descriptions.

## Regardless of the your chosen occupation focus on honing your skills

The top critical skills identified by employers in a recent survey were:

- Ability to communicate clearly
- Interpersonal / teamwork skills
- Problem-solving and decision-making abilities
- Ability to find and process information
- Ability to plan, organize, and prioritize
- The desire to engage in lifelong learning activities
- Flexibility and adaptability
- A 'can do' attitude.

## 10. Landing the Job

Organisations recruit by using one or more of the following means:

- Graduate programs
- Graduates who have worked for them while students, e.g. In vacation programs, Work Integrate Learning (WIL) programs etc.
- Graduate employment directories
- University job boards
- Referrals by people within the organisation
- Their own websites
- Recruitment companies
- Online job ads
- Networks e.g. Within industry group
- Transfers from other areas within the organisation
- Newspaper career sections

## Know what Employers Want: Personal and Work Attributes in Demand

MICT graduates compete with other graduates from South Africa and the world for the best jobs in across the economy. Building one's competitive edge starts long before leaving university, for example through on-the-job experience via vacation

work, and work integrated learning (WIL) programs offered by universities, or even through voluntary work.

Why is this important? Experience in the workplace enables students to understand how the world of work differs from that of the education arena. Also, many of the skills and attributes required by employers are difficult to gain purely from formal study.

Most people who work in the MICT sector need to be multi-skilled in order to combine technically-oriented activities with customer service, relationship building and workload management.

## 11. What Not To Do

#### Wanting too much:

Your first role as a graduate will usually be at an entry level with a base level of pay. If you are working for a large organisation you will probably begin with a formalised induction along with other graduates. If you start work in a smaller company the induction may be informal, but in all cases as a new graduate you should be working in a way that provides learning – about the organisation and its clients, the terminology and the systems and processes involved.

So, when you are applying for jobs be prepared to be flexible about the kind of role you want, the equipment you want to use, the programming language and the starting salary. You might even find yourself needing to be trained in something new, right from the start.

#### Focusing only on what is in it for you:

When speaking to potential employers or recruiters, try not to send the message that you are only interested in what they can do for you. Obviously you will want to get the most out of your employment, however, a final year student or recent graduate who appears to be interested only in the career development, training or fringe benefits an organisation can offer will fail to impress.

#### Failing to prepare:

When going for a job interview make sure you know as much as possible about the organisation and what it does. Phone ahead to ask questions if you need to, rather than being embarrassed when asked "What do you know about our company?" It is also important to dress appropriately for the role and the organisation. It is reasonable to ask about the dress code when offered an interview, or you might just like to go to the workplace a few days ahead of your appointment to see how people present themselves for work.

#### Presuming to know too much:

During an interview or networking session avoid sounding like you have swallowed a text book on the organisation, its financial standing and/or its latest acquisitions or losses. Provide knowledge about the company in a general sense, and take anything you read as advisory; the situation might have changed since it was written. For example, you might say, "I know that Company Y supplies software solutions to the field of architecture and that it has offices in around seven countries", rather than, "Company Y made an overall profit of seven billion dollars and won a court case against the government last year".

## 12. South African Universities and Universities of Technology

Province	Institution	Financial Aid Contact Details
Eastern Cape	Rhodes University	046 6038 248
	Nelson Mandela Metropolitan University	041 5043 182
	University of Fort Hare	040 6022 282
	Walter Sisulu University	043 7029 359
Free State	Central University of Technology	051 5073 375
	University of the Free State	051 4019 160
Gauteng	Tshwane University of Technology	012 3824 149
	Vaal University of Technology	016 9509 484
	University of Johannesburg	011 5593 575
	University of Pretoria	012 4202 389
	University of the Witwatersrand	011 7171 081
KwaZulu Natal	Durban University of Technology	033 8458 890
	Mangosuthu University of Technology	031 9077 189
	University of KwaZulu-Natal	031 2607 839
	University of Zululand	035 9026 307
Limpopo	University of Limpopo	015 2682 405
	University of Venda	015 9628 421
Mpumalanga	University of Mpumalanga	013 0020 001
North West	North-West University	018 2992 045
Northern Cape	Sol Plaatje University	053 8075 300
Western Cape	Cape Peninsula University of Technology	021 9596 594
	University of Cape Town	021 6502 125
	University of Stellenbosch	021 8089 111
	University of the Western	021 9599 753
National	University of South Africa	011 4712 366

## **13. Public TVET Colleges**

Province	Institution	Financial Aid Contact Details
Eastern Cape	Buffalo City	043 7049 218
·	Eeast Cape Midlands	041 9952 000
	King Hintsa	047 4016 400
	Lovedale	043 6421 331
	Port Elizabeth	041 5857 771
Free State	Flavius Mareka	016 9760 815
	Goldfields	057 9106 000
	Maluti	058 7136 100
	Motheo	051 4069 330
Gauteng	Central JHB	011 4841 388
-	Ekurhuleni East	011 7364 400
	Ekurhuleni West	086 1392 111
	Sedibeng	016 4226 645
	South West Gauteng	011 5278 300
	Tshwane North	012 4011 941
	Tshwane South	012 4015 021
	Western	011 6924 004
KwaZulu Natal	Coastal	031 9057 200
	Elangeni	031 7166 700
	Esayidi	039 3181 433
	Majuba	034 3264 888
	Umfolozi	035 9029 503
	Umgungundlovu	033 3412 101
Limpopo	Lephalele	014 7632 252
	Letaba	015 3075 440
	Mopani South east	015 7815 721
	Sekhukhune	013 2690 278
	Vhembe	015 9633 156
	Waterberg	015 4918 581
Mpumalanga	Ehlanzeni	013 7527 105
	Gert Sibande	017 7129 040
	Nkangala	013 6901 430
North West	Orbit	014 5928 461
	Taletso	018 3842 346
	Vuselela	018 4067 800
Northern Cape	Northern Cape Rural	054 3313 836
	Northern Cape Urban	053 8392 000
Western Cape	Boland	021 8867 111
	College of Cape Town	021 4046 700
	False Bay	021 0030 600
	Northlink	021 9709 000
	South Cape	044 8840 359
	West Coast	022 4821 143





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