## FIND YOUR FIT

## CAREERS AND OPPORTUNITIES IN THE FOREST, PULP AND PAPER SECTOR





#### JUST LIKE OUR TREES, CAREER OPPORTUNITIES IN THE FOREST SECTOR ARE ALWAYS GROWING.

#### IN THE FOREST

In SA, 1.2 million hectares of commercial trees are farmed for their wood. Plantations are sustainably managed, with new trees planted in the place of those harvested. A quarter of forestry land is conserved as grasslands, wetlands and indigenous forests. Managing these plantations takes a large team of people, from nursery workers, foresters, engineers, researchers, chainsaw and machine operators to drivers, fire officials, community development officers and environmentalists!





#### **MAKING OUR PRODUCTS**

Our industry produces everyday essentials and the products of the future. It takes a small army of people to make printing paper, tissue, packaging, pencils, poles and furniture. Among them are chemical and process engineeers, sawmillers, machine operators and product developers. It's an exciting, evolving industry that produces far more than paper!







### **IN A GREEN**



Wood is a carbon-neutral. renewable material. While trees grow, they absorb carbon dioxide, store it as carbon and release oxygen. Wood can be used to replace plastic and fossil fuels. It can be used to make fabric, cellphone and laptop screens, or added to lipstick, medicine and food. Be a scientist or researcher that makes our planet greener through wood and paper innovation.



#### **BEHIND THE SCENES**

Thousands of people keep things running behind the scenes in human resources, accounting, legal, marketing, information technology and health and safety.





#### **BRANCHING OUT** ON OUR OWN

Paper is recyclable. SA's great paper recovery rate is thanks to recycling companies, entrepreneurs and informal collectors who recover paper for re-use in new products.

# CREATE YOUR FUTURE

The forest sector weaves its way through every part of our lives. The fibre that comes from sustainably farmed trees is used to make everyday products such as toilet paper, writing paper and cardboard boxes, to name a few. We also make interesting, innovative and climate friendly material from pulp – like fabric and alternatives to plastic. It can even be used in medicine, make-up and food.



#### **KEY SUBJECTS:**

Maths and science (above 50%) English

- Pulp and paper-making technology
- Process and plant operations (pulp and papermaking)
- Engineering chemical, mechanical, industrial





- Machine operator
- Pulp and paper operator
- Process engineer
- · Chemical engineer

"Opportunities don't happen, you create them."

- Chris Grosser



Academic institution	Location	Qualification and course type	Subjects needed	Entry requirements	Career options
Ekurhuleni TVET College	Springs, Gauteng	NCV: PROCESS PLANT OPERATIONS (PULP AND PAPERMAKING)  - Full-time study  - Entry level 2  - Exit level 4	<ul><li>English</li><li>Mathematics</li><li>Physical science</li></ul>	<ul> <li>Passed Grade 9, 10, 11, or 12</li> <li>Year-end school report for Grade 10, 11 or 12; or</li> <li>NQF Level 1 qualification; or</li> <li>Approved bridging programme designed to access NQF Level 2</li> </ul>	Production control     Process control
Umfolozi TVET College	Mandeni, KZN				
Durban University of Technology	Durban, KZN	DIPLOMA IN PULP AND PAPER-MAKING TECHNOLOGY  • Full time study  • Minimum 2 ½ years class/theory  • Minimum experiential training – 6 months	<ul><li>English</li><li>Physical science</li><li>Mathematics</li></ul>	<ul> <li>Rating code 4 (adequate achievement) in mathematics, physical science and English</li> <li>Matriculation certificate OR minimum D symbol (higher grade) or B symbol (standard grade) in physical science and mathematics.</li> <li>NCV: English 3 first additional (competent: 50-69%), mathematics 3 (competent: 60-69%), physical science 3 (competent: 60-69%)</li> </ul>	Work in a pulp and paper operation
		ADVANCED DIPLOMA IN PULP AND PAPER-MAKING TECHNOLOGY  Distance learning  Minimum formal time – 2 years  Industry project	All course subjects	<ul> <li>University of Technology (formally technikon) National Diploma in engineering or science or</li> <li>University degree in engineering or science, or</li> <li>Government Certificate of Competency.</li> </ul>	Pulp and paper technologist     Superintendent
UNISA	Distance learning	DIPLOMA IN PULP AND PAPER TECHNOLOGY  • Full time study  • Minimum 3 years class/theory  • Minimum 1 year experiential training	Chemical engineering subjects with specialisation in pulp and paper	Above 50% in:  Mathematics (not literacy)  Physical science  English	Work in a pulp and paper operation

## TVET COLLEGES

NATIONAL CERTIFICATE VOCATIONAL (NCV)

PROCESS PLANT OPERATIONS (PULP AND PAPERMAKING)

## UNIVERSITY/UNIVERSITY OF TECHNOLOGY

**DIPLOMA** PULP AND PAPER-MAKING TECHNOLOGY **ADV. DIPLOMA\*** PULP AND PAPER-MAKING TECHNOLOGY

(\*FORMERLY BTECH)

#### **UNIVERSITY**

BACHELOR OF SCIENCE CHEMICAL ENGINEERING

#### **OUR MEMBERS**













**WATCH HOW DIFFERENT PAPER** PRODUCTS ARE MADE



FIND OUT MORE ABOUT WOOD AND PAPER



#### What South Africa makes from wood fibre

- Pulp
- Writing and printing paper
- Paper packaging
- Food and beverage cartons
- Paper cups
- Tissue and towel for home, away from home and industrial use
- Hygiene products
- Cellulose for fabrics, foods, pharmaceutical products
- Sawn timber for furniture, flooring, decking, construction
- Engineered wood for construction
- Wood chips
- Poles
- Lignin
- Xylitol
- · And many more...



We even use by-products and waste products from our processes as fuel, or convert them into biochemicals.

FOR MORE INFORMATION

Ahd Lajabu ahd.lajabu@pamsa.co.za thepaperstory.co.za



