

## Universities

Walter Sisulu University  
North-West University  
Durban University Technology  
Nelson Mandela University  
Central University of Technology  
Cape Peninsula University of  
Technology  
Wits University  
University of Cape Town  
University of Pretoria  
University of Stellenbosch  
University of Venda  
University of Johannesburg  
University of South Africa  
Tswane University of  
Technology  
Mangosuthu University of  
Technology  
Vaal University of  
Technology



# Faculty of Engineering and Built Environment

#### Disclaimer

- This brochure should be viewed in conjunction with the university prospectus.
- Meeting minimum requirements does not guarantee acceptance.
- Minimum requirements found in this brochure are not for all universities, averages and maximum requirements are used based on available information.
- This brochure only contains qualifications, where they can be found, minimum requirements, and future careers.
- Where possible list of companies offering bursaries is included.



- The details provided in this brochure are believed to be true and accurate to the best of our understanding at the time of publication and are intended solely for informational purposes.



Qualification	Course	Minimum requirements		Universities	Future Career
		<b>APS</b>	<b>Subjects</b>		
Diploma	Chemical Engineering	30	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>Vaal</li> <li>UNISA</li> <li>MUT</li> </ul>	<ul style="list-style-type: none"> <li>Biochemical Engineer</li> <li>Environmental Engineer</li> <li>Food Processing Engineer</li> <li>Process Control Engineer</li> <li>Process Design Engineer</li> <li>Process Plant Manager</li> <li>Systems Engineer</li> <li>Technical Sales Engineer</li> </ul>
Bachelor of Engineering	Chemical Engineering	34	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>UP</li> <li>US</li> <li>NWU</li> </ul>	
Bachelor of Engineering in Technology	Chemical Engineering	36	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>UJ</li> <li>DUT</li> <li>TUT</li> </ul>	
Bachelor of Science	Chemical Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> </ul>	



- Absa Fellowship/ Scholarship Programme
- AECI Limited Bursary
- AFROX Bursary
- Alfeco Bursary
- ArcelorMittal Bursary
- BHP Billiton Bursary
- Bombela Bursary
- Cape Winelands District Municipality Mayoral Bursary
- Capitec Bank Bursary
- CHIETA Bursary
- Clover Pinnacle Bursary
- Columbus Stainless Bursary
- CSIR Bursary
- Cullinan Diamond Mine Bursary
- Department of Mineral Resources Bursary
- Dr Xolani Mkhwanazi South32 Bursary
- East Rand Water Care Company (ERWAT) Bursary
- Eskom Bursary
- Element Six Bursary
- FinX BEE Bursary
- Fluor Bursary
- Gauteng Department of Agriculture and Rural Development Bursary
- Gold Fields Ltd Bursary
- Golder Bursary
- Hatch Bursary
- Illovo Sugar Ltd Bursary
- Impala Platinum/ Implats Bursary
- Industrial Development Corporation (IDC) Bursary
- ISFAP Bursary
- ISFAP Postgraduate Bursary





Qualification	Course	Minimum requirements		Universities	Future Career
		APS	Subjects		
Diploma/ Diploma in Engineering Technology	Civil Engineering	30	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>Vaal</li> <li>CUT</li> <li>WSU</li> <li>DUT</li> <li>UNISA</li> <li>MUT</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Design</li> <li>Construction</li> <li>Maintenance</li> <li>Bridge Engineer</li> <li>Earthquake Design Engineer</li> <li>Consulting Engineer</li> <li>Construction Manager</li> <li>Environmental Engineer</li> <li>Geotechnical Engineer</li> <li>Hydrologist</li> <li>Structural Engineer</li> <li>Water Resource Manager</li> </ul>
Bachelor of Engineering in Technology	Civil Engineering	36	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>TUT</li> </ul>	
Bachelor of Engineering	Civil Engineering	32	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>UP</li> <li>US</li> <li>CUT</li> <li>UJ</li> </ul>	
Bachelor of Science	Civil Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> </ul>	



- ISFAP Bursary
- ISFAP Postgraduate Bursary
- J.P. Morgan Bursary
- Keaton Energy Mining Bursaries
- Kropz Elandsfontein Bursary
- KwaZulu-Natal Government Bursaries
- L'Oréal-UNESCO For Women in Science South Africa Grant
- Limberg Mining Company Bursary
- Limpopo Department of Economic Development, Environment and Tourism (LEDET) Bursary
- Lonmin Bursary
- Makhuduthamaga Local Municipality
- (RBM) Bursary
- Safripol Bursary
- Samancor Chrome Bursary
- Santam Bursary
- Sappi Bursary
- SAPREF Bursary
- SARS Bursary
- Sasol Bursary
- SEIFSA Bursary
- Seriti Bursary
- Silulumanzi Bursary
- Siza Water Bursary
- South32 HMM Bursary
- Steve Tshwete Local Municipality Bursary



Qualification	Course	Minimum requirements		University	Future Career
		APS	Subjects		
Diploma/ Diploma in Engineering Technology	Electrical / Electronic Engineering	30	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>CUT</li> <li>Vaal</li> <li>WSU</li> <li>TUT</li> <li>UNISA</li> <li>MUT</li> </ul>	<ul style="list-style-type: none"> <li>Telecommunications</li> <li>Electronics</li> <li>Biotechnology</li> <li>Manufacturing</li> <li>Automation</li> <li>Transport</li> <li>Defence</li> <li>Mining</li> <li>Information technology</li> <li>Consulting services.</li> <li>Power Systems Industry</li> <li>Control Systems</li> <li>Embedded Systems</li> <li>Instrumentation</li> <li>Renewable Energy Industry</li> </ul>
Bachelor of Engineering	Electrical and electronic engineering science	32	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>UJ</li> <li>NWU</li> <li>US</li> <li>UP</li> <li>TUT</li> </ul>	
Bachelor of Engineering in Technology	Electrical Engineering	36	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>CUT</li> <li>NMU</li> </ul>	
Bachelor of Science	Electrical Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> </ul>	



- Bursary
- Megchem Bursary
- merSETA Bursary
- Mining Qualifications Authority (MQA) Bursary
- NAACAM Bursary
- NCP Chlorchem Bursary
- NESP Scholarship
- Nestlé's Future Talent Bursary
- Northam Zondereinde Mine Bursary
- NUMSA Bursary
- Omnia Bursary
- Overberg District Municipality Bursary
- Paper Manufacturers Association of South Africa (PAMSA) Bursary
- PG Group Bursary
- Pilanesberg Platinum Mines (PPM) Bursary
- PPC Bursary
- PSG Bursary
- Rand Refinery Bursary
- RCL Foods Bursary
- Rheinmetall Denel Munition (RDM) Bursary
- Richards Bay Industrial Development Zone (RBIDZ) Bursary
- Rio Tinto/ Richards Bay Minerals (RBM) Bursary
- Safripol Bursary
- Samancor Chrome Bursary
- Santam Bursary
- Sappi Bursary
- SAPREF Bursary
- SARS Bursary



Qualification	Course	Minimum requirements		University	Future Career
		APS	Subjects		
Diploma/ Diploma in Engineering Technology	Mechanical Engineering	30	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 5</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>CUT</li> <li>WSU</li> <li>UNISA</li> <li>Vaal</li> <li>MUT</li> </ul>	<ul style="list-style-type: none"> <li>Aerospace industry</li> <li>Automotive industry</li> <li>Biomedical engineering</li> <li>Business and management</li> <li>Construction</li> <li>Product development</li> <li>Education</li> <li>Energy supply and alternative forms</li> <li>Manufacturing and automation</li> <li>Marine engineering</li> <li>Mining</li> <li>Research and development.</li> <li>Transport</li> </ul>
Bachelor of Engineering in Technology	Mechanical Engineering	32	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 5</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>TUT</li> <li>DUT</li> <li>CUT</li> <li>NMU</li> </ul>	
Bachelor of Engineering	Mechanical Engineering	35	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>UJ</li> <li>UP</li> <li>US</li> </ul>	
Bachelor of Science	Mechanical Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> </ul>	



- Sasol Bursary
- SEIFSA Bursary
- Seriti Bursary
- Silulumanzi Bursary
- Siza Water Bursary
- South32 HMM Bursary
- Steve Tshwete Local Municipality Bursary
- TauSadi Mining and Engineering Bursary
- TCTA (Trans-Caledon Tunnel Authority) Bursary
- Tharisa Bursary
- Tiger Brands Bursary
- Toyota South Africa Motors Bursary
- Transnet Bursary
- Tronox Bursary
- Umgeni Water Bursary
- Unilever Bursary
- Vhembe District Municipality Mayoral Bursary
- Weir Minerals Africa Bursary
- WSP Bursary
- Zutari Bursary South Africa

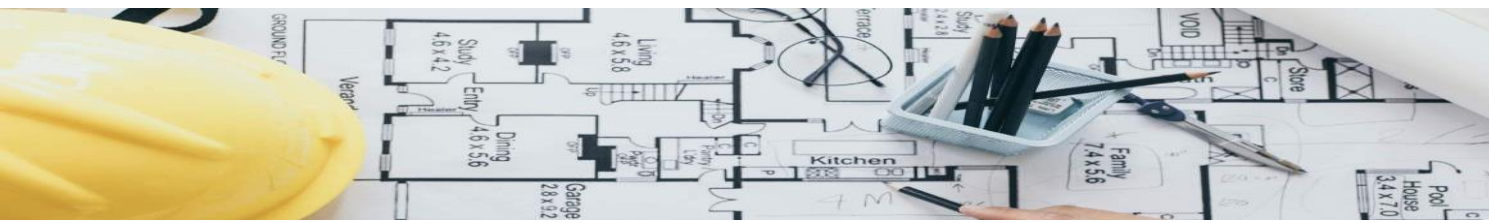




Qualification	Course	Minimum requirements		University	Future Career
		APS	Subjects		
Diploma/Diploma in Engineering Technology	Industrial Engineering	30	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> <li>Vaal</li> <li>UNISA</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Resource Planning Consultant</li> <li>Inventory Engineer</li> <li>IT Consultant</li> <li>Logistics Engineer</li> <li>Management Consultant</li> <li>Production and Operations Manager</li> <li>Process Engineer</li> <li>Quality Control Engineer</li> <li>Supply Chain Consultant</li> <li>Technical Manager</li> </ul>
Bachelor of Engineering Technology	Industrial Engineering	32	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>DUT</li> <li>NMU</li> <li>TUT</li> <li>UJ</li> </ul>	
Bachelor of Engineering	Industrial Engineering	35	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>UP</li> <li>US</li> </ul>	
Bachelor of Sciences	Industrial Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 5</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> </ul>	

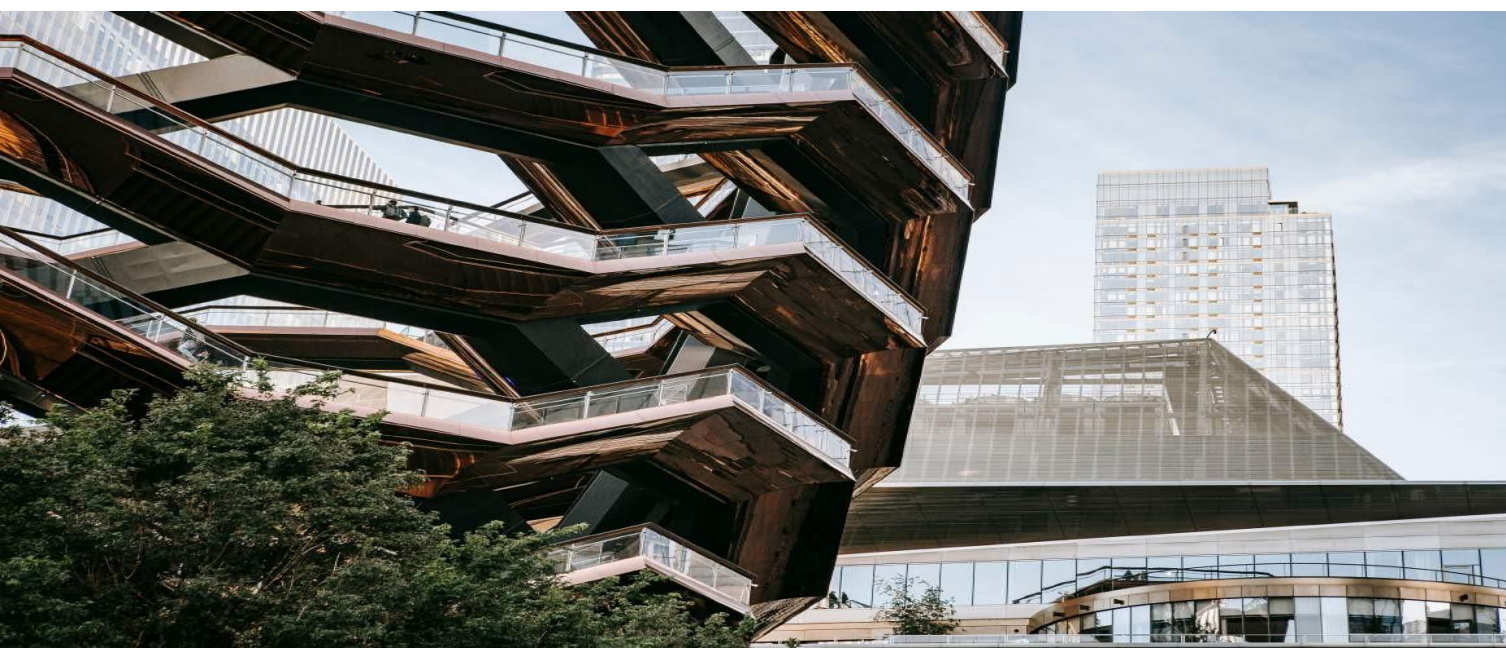


Qualification	Course	Minimum requirements		Universities	Future Career
		APS	Subjects		
Diploma	Construction	25	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> </ul>	<ul style="list-style-type: none"> <li>CPUT</li> </ul>	<ul style="list-style-type: none"> <li>Careers within local Authorities and Government</li> <li>Commercial Trading as a Materials or Equipment Supplier</li> <li>Construction Management</li> <li>Project Management</li> <li>Quantity Surveying Practice</li> <li>Subcontractor in the Construction Industry</li> </ul>
Bachelor	Built Environment in Construction Studies	25	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>DUT</li> </ul>	
Bachelor	Construction Management		<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	
Bachelor of Science	Construction Studies	36	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> </ul>	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> <li>UJ</li> <li>NMU</li> </ul>	
Diploma	Building	26	<ul style="list-style-type: none"> <li>Math 4</li> </ul>	<ul style="list-style-type: none"> <li>NMU</li> </ul>	<ul style="list-style-type: none"> <li>Building Project Manager</li> <li>Construction Manager</li> <li>Quantity Surveyor</li> </ul>
Bachelor	Urban/ Town and regional planning	27	<ul style="list-style-type: none"> <li>English 4</li> <li>Maths 4</li> </ul>	<ul style="list-style-type: none"> <li>UJ</li> <li>DUT</li> <li>NMU</li> </ul>	<ul style="list-style-type: none"> <li>Regional Planner</li> <li>Remote Sensing Analyst</li> <li>Town, urban, city and Regional Planner</li> </ul>
Bachelor of Science	Quantity Surveying	30	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Science 4</li> </ul>	<ul style="list-style-type: none"> <li>UP</li> <li>NMU</li> <li>CUT</li> </ul>	<ul style="list-style-type: none"> <li>Quantity surveying consultancies.</li> <li>Financial Institutions</li> <li>Construction and specialist trade companies.</li> <li>Design and build companies.</li> </ul>





Qualification	Course	Minimum requirements		Universities	Future Career
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Diploma	Architectural Technology	32	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics 4</li> <li>Physical Sciences 4</li> </ul> Technical drawing and Design subjects required	<ul style="list-style-type: none"> <li>CPUT</li> <li>NMU</li> </ul>	<ul style="list-style-type: none"> <li>Architectural draughts person</li> <li>Interior designer</li> <li>Furniture designer/fabricator</li> <li>Urban designer</li> <li>A landscape designer/landscape architect</li> <li>Urban planner</li> <li>Architectural historian or researcher</li> <li>Lecturer or Professor in Architecture</li> </ul>
Bachelor	Built Environment in Architecture	20	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics 4</li> </ul>	<ul style="list-style-type: none"> <li>DUT</li> </ul>	
Bachelor	Architectural Studies	30	<ul style="list-style-type: none"> <li>Maths 4</li> <li>English 4</li> </ul> Interview and exercise (Written and Graphic) NBT in mathematics may be required	<ul style="list-style-type: none"> <li>Wits</li> <li>UCT</li> <li>UKZN</li> <li>UJ</li> <li>UFS</li> </ul>	
Diploma	Geometrics	23	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics 4</li> <li>Physical Sciences 4</li> </ul>	<ul style="list-style-type: none"> <li>TUT</li> </ul>	
Bachelor of Science	Geometrics	30	<ul style="list-style-type: none"> <li>Maths 5</li> <li>Physical Sciences 5</li> </ul> Interview and exercise (Written and Graphic) NBT in mathematics may be required	<ul style="list-style-type: none"> <li>UCT</li> <li>UP</li> </ul>	



Qualification	Course	Minimum requirements		Universities	Future Career
		APS	Subjects		
Bachelor of Science	Aeronautical engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Sciences 5</li> </ul>	Wits	<ul style="list-style-type: none"> <li>Aircraft Design Engineer</li> <li>Aircraft Systems Design Engineer</li> <li>Airline Manager</li> <li>Automotive Aerodynamics Engineer</li> <li>Research</li> <li>Production Manager</li> <li>Propulsion Engineer</li> <li>Technical Director</li> </ul>



Qualification	Course	Minimum requirements		Universities	Future Career
		APS	Subjects		
Bachelor of Science	Biomedical Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Maths 5</li> <li>Physical Sciences 5</li> </ul>	Wits	<ul style="list-style-type: none"> <li>Artificial organs</li> <li>Information Technology for Healthcare</li> <li>Medical Imaging System Design (e.g. ultrasound or CT scanning)</li> <li>Modelling and simulation of physiological states and disease</li> <li>Therapeutic Equipment Design</li> </ul>





Qualification	Course	Minimum requirements		Universities	Future Career
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Diploma	Metallurgical Engineering	23		• Vaal	<ul style="list-style-type: none"> <li>Corrosion Engineer</li> <li>Extractive Metallurgist</li> <li>Failure Analysis Consultant</li> <li>Foundry Engineer</li> <li>Heat Treatment Engineer</li> <li>Metallurgical Plant Design Engineer</li> <li>Process Control Engineer</li> <li>Tribologist Materials Consultant</li> </ul>
Diploma	Mining Engineering	18	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics 4</li> <li>Physical Sciences 4</li> </ul>	• UNISA	
Bachelor of Engineering Technology	Mining Engineering	23	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics</li> <li>Physical Sciences 5</li> </ul>	<ul style="list-style-type: none"> <li>UJ</li> <li>TUT</li> </ul>	
Bachelor of Engineering	Mining/ Metallurgical Engineering	35	<ul style="list-style-type: none"> <li>English 5</li> <li>Mathematics 6</li> <li>Physical Sciences 6</li> </ul>	• UP	
Bachelor of Science	Metallurgy and Material Engineering	42	<ul style="list-style-type: none"> <li>English 5</li> <li>Mathematics 5</li> <li>Physical Sciences 5</li> </ul>	• Wits	
Bachelor of Engineering Technology	Material Engineering in Polymer Technology	28	<ul style="list-style-type: none"> <li>English 4</li> <li>Mathematics 4</li> <li>Physical Sciences 4</li> </ul>	• TUT	<ul style="list-style-type: none"> <li>Application Development Engineer Plant Manager</li> <li>Polymer Characterisation Specialist</li> <li>Polymer Lab Engineer</li> <li>Polymer Material Scientist</li> <li>Product Design Engineer.</li> </ul>

