

Career Profile: Production Manager

The role of Production and Operations Managers is to convert production and operational 'inputs', e.g. workers, machinery, equipment, raw materials into 'outputs' or products and services for customers.

One way of summarising the job is to refer to the 'five M's': men, machines, methods, materials and money.

- **Men** refers to the people in the operating system. Managing human resources is a major responsibility because people play a key role in all systems and operations.
- **Machines** involve the selection of equipment and technology to be used in the manufacture of products or services.
- **Methods** is closely linked to the use of the machines and involves planning and control of operations and procedures. A safe working environment must be maintained, and health, safety and other relevant legal regulations have to be observed. An industrial engineer can provide invaluable assistance in ensuring that the production process and the ability of workers to adapt to equipment and schedules provide flexibility in the production process.
- **Materials** involve managing workflow processes of both physical (raw materials) and information. The fundamental choices in the design of product and process can have a huge impact on the efficiency of the process.
- **Money** is obviously critical. A production manager has to monitor the inventory (parts and products) to make sure the organisation is not carrying unnecessary inventory. The manager also has to be careful not to sacrifice good customer service to achieve steady operation and delivery. It is critical to avoid the risk of overinvestment in inventory or high current costs.

Education Requirements

National Senior Certificate (NSC)

For a career in production management students are advised to select English and Mathematics and to add to this a selection from the designated subjects. These are subjects that are particularly suitable for tertiary study.

Bachelor Degree

The most relevant degree would be a **Bachelor of Science in Industrial Engineering – BSc Eng (Industrial)** which is a four year degree programme that focuses on developing knowledge and skills for entry into careers in the field of industrial engineering.

Offered at:

- [University of Pretoria](#)¹ (Department of Industrial and Systems Engineering)
- [University of the Witwatersrand](#)² (Faculty of Engineering and the Built Environment)

National Diploma / BTech

Students who prefer a more practical approach can enrol for programmes to qualify as industrial engineering technologist and technician at BTech and National Diploma levels. Another option is Operations Management.

The National Diploma is a three year course which includes gaining practical experience. The diploma is a pre-requisite for admission to a Bachelor of Technology – Btech. Both levels are offered.

Offered at:

- [University of South Africa](#)³ (College of Economics and Management Science)
- University of Johannesburg ([Department of Engineering Technology](#)⁴, [Faculty of Management](#))⁵
- Tshwane University of Technology ([Faculty of Engineering and the Built Environment, Faculty of Management Sciences](#))⁶
- [Vaal University of Technology](#)⁷ (Faculty of Engineering and Technology Industrial Engineering/Operations Management)

Registration as a professional engineer, engineering technologist or technician

You can obtain details of registration requirements from the Engineering Council of South Africa (ECSA).

Possible Employers

- Food processing companies – SASOL, AECl
- General industry, e.g., mining, transport, cement, paper, iron and steel
- Industries dealing with pharmaceuticals, agricultural products, foods, biotechnology products, paints, plastics and polymers, cleaning agents, cosmetics, and textiles

¹ <http://web.up.ac.za/default.asp?ipkCategoryID=2005>

² <http://web.wits.ac.za/Academic/EBE/>

³ http://brochure.unisa.ac.za/brochure/showlist.aspx?d=l_3_23

⁴ <http://www.uj.ac.za/LinkClick.aspx?fileticket=VTLUGUQDYwY%3d&tabid=9525>

⁵ <http://www.uj.ac.za/Default.aspx?alias=www.uj.ac.za/management>

⁶ <http://www.tut.ac.za/Students/facultiesdepartments/managementsciences/departments/operations/Pages/default.aspx>

⁷ http://www.vut.ac.za/new/images/stories/operations_managem.pdf

Find out more

Find out more about production/operations management:

- This [website](#)⁸ provides some interesting views on production management.
- A useful [description](#)⁹ of a career in production management.
- [Association of Operations management of South Africa](#)¹⁰ (SAPICS) brochure.

⁸ http://tutor2u.net/business/production/pom_introduction.htm

⁹ <http://www.youthportal.org.za/Inveloper.asp?iP=116&iVoccid=232&iS=%7B0DC2A49F-CE8C-493D-9A98-A2BB7329036D%7D>

¹⁰ http://www.sapics.co.za/___resources/downloads/SAPICS%20Association/SAPICS%20Education.pdf

Are you suited to this career?

This quick quiz can help you to identify whether you are suited for this career.

QUIZ	YES	NO
Do you see yourself as a practical person?		
Are you interested in solving problems?		
Do you have high levels of energy and determination?		
Are you decisive and willing to take responsibility for your decisions?		
Do you work well with others?		
Would you say that you have good judgement?		
Do you express your ideas clearly in both speech and writing?		
Do you find it easy to organize and plan your work?		
In a group, do you take the lead and try to influence the group?		
Do you enjoy analysing things and gathering data to support your analysis?		

If you have mainly yes answers it may be an indication that this is a career to consider.