2.1.9. BMilHons in Technology

Admission Requirements

Subject to consultation with the lecturers at the School of Science and Technology, one of the following degrees is required:

- a BMil degree in Technology with a final mark of at least 60% in each of your two major subjects in the final year;
- a BMil degree in Technology and Defence Management with a final mark of at least 60% in Computer Information Systems, as well as in one of the following in the final year: Aeronautical Science (Mil), Military Geography or Nautical Science; or
- any other relevant bachelor's degree that has been approved for this purpose by the Programme Coordinator, obtained with a final mark of at least 60% in your major subjects.

Duration of Programme

The programme runs over two years (distributed in modules).

Programme Structure

The programme consists of the compulsory Research Assignment (code 66753) of 30 credits and a selection of modules applicable to the focus of the study, the credit total of which should be at least 90. You must obtain at least 50% of the total credits at the Faculty of Military Science.

Programme Content

You must select a majority of modules (that are also relevant) from one specialisation field listed below, which may be supplemented with modules from the other specialisation fields, as discussed with your lecturer. The modules in the Military Technology specialisation field can currently only be supplementary to other specialisation fields. In the specialisation field of Physics, you must follow modules at departments of other faculties, for which you must meet the stipulated requirements of the faculty or faculties concerned.

2.9.1. Physics

General Relativity and Cosmology	11720 771(16)
Applied Computer Physics	11721 771(8)
Applied Wave Theory	11722 771(8)
Computational Physics	11972 772(16)
Nuclear Physics	11973 771(16)
Radiation Detection and Measurement	11974 774(16)
Electromagnetism	10445 776(8)
Digital Signal Processing	11976 775(8)
Radiation Safety (Mil)	13769 773(8)
Experimental Research Project	14143 742(30)

2.9.2. Military Technology

Aircraft Mechanics	21121 771(10)
Aerodynamics	15733 771(10)
Aircraft Design	34304 771(10)

2.9.3. Computer Information Systems

Advanced Programming Applications	11724 771(12)
Network Protocols	11725 771(12)
Network Security	11728 771(12)
Digital Economy and Electronic Commerce	11730 771(12)
ICT Research Methodologies	11732 771(12)
Computer User Interfaces	64998 771(12)
Cyber Forensics	11978 752(12)
Statistical Inference **	11736 771(16)

** If you already have a strong research statistical background, you may choose an alternative module, offered as part of the BMilHons in Technology, subject to the approval of the CIS Department.

2.9.4. Mathematics

Compulsory modules

Computational Mathematics	13766 771(16)
Dynamical Systems	13767 772(16)
Theoretical Fluid Mechanics	13768 773(16)

Elective modules

Partial Differential Equations	10643 719(16)
Probability Theory	11735 771(16)
Statistical Inference	11736 771(16)

2.9.5. Nautical Science

Military Oceanography	12766 771(20)
Operational Oceanography	13570 771(20)
Project Management**	51993 744(20)

**The Project Management module resides under the BMilHons in Organisation and Resource Management.

2. Honours degrees

2.1. Bachelor of Military Science with Honours (BMilHons)

This degree is conferred subject to the following provisions:

- You have obtained a BMil degree at Stellenbosch University, or any other bachelor's degree approved by Senate for this purpose.
- Upon written request, you have been allowed by Senate (or the Executive Committee acting on Senate's behalf) to register for the BMilHons programme. AND
- You have followed the prescribed honours programme for at least one year (after having obtaining the above-mentioned bachelor's degree) at Stellenbosch University, and you have completed the relevant examination successfully.

General information

1. History and functions of the Faculty

1.1. History

The Military Academy was established on 1 April 1950 under the auspices of the University of Pretoria, as a branch of the SA Military College (now the SA Army College) at Voortrekkerhoogte (now Thaba Tshwane). In 1953, the Military Academy would move to Saldanha, under the trusteeship of Stellenbosch University, from which institution successful candidates would receive a BMil degree. In January 1961, the Academy became a faculty in its own right – the Faculty of Military Science of Stellenbosch University.
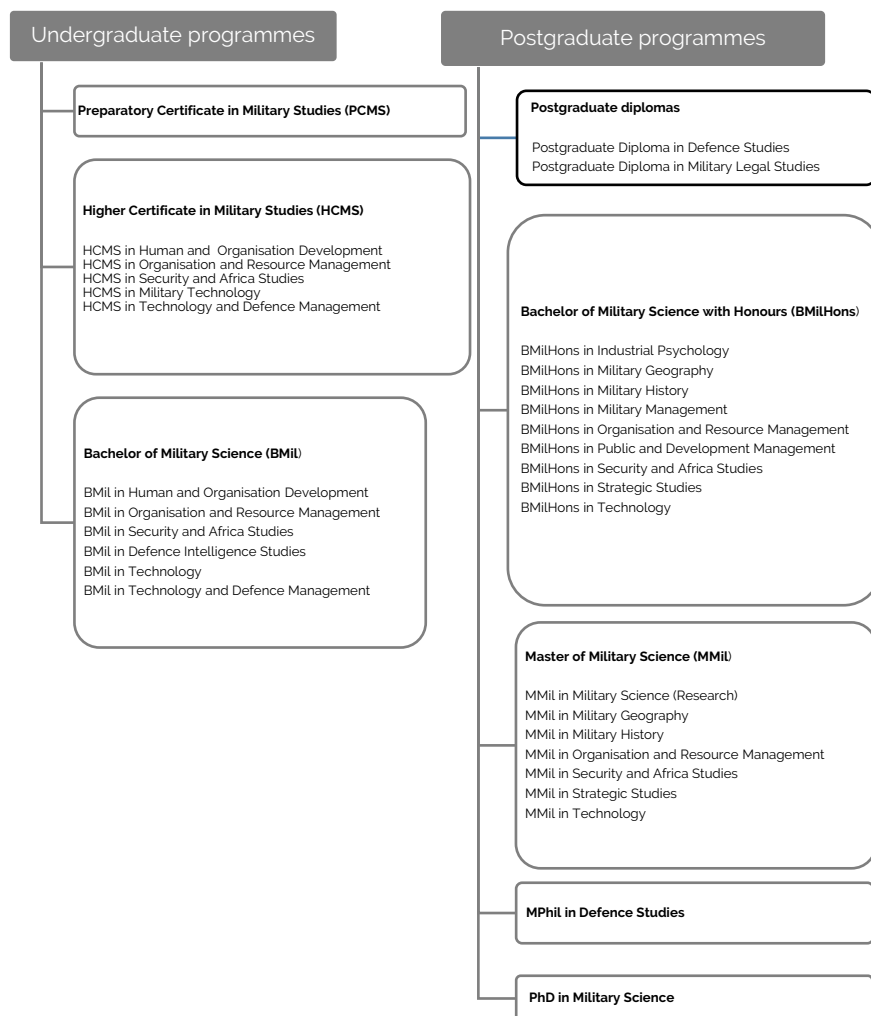
1.2. Functions

Stellenbosch University is the custodian of the Faculty of Military Science through a contractual agreement with the South African Department of Defence (DoD). The Faculty is located within the SA Military Academy in Saldanha Bay on the West Coast of South Africa. On our Campus, civilian and uniform members work together and learners are members of SA Army, SA Navy, SA Air Force, SA Military Health Services and members of the broader DoD. We develop the future military leaders of South Africa and our international partners such as Botswana, France, Mozambique and Namibia.

We are the only Faculty of Military Science in South Africa and our Faculty members have the opportunity to develop expert knowledge in their respective academic disciplines. Our academic programmes are fully accredited by the Council for Higher Education and we own an accredited research journal (Scientia Militaria). Our Faculty members are engaged in teaching, conducting security-related research and being involved in community interaction with the DoD, academic institutions and civil society.

The Faculty of Military Science has five academic schools:

- the School for Security and Africa Studies;
- the School for Defence Organisation and Resource Management;
- the School for Human Resource Development;
- the School of Science and Technology; and
- the School for Geo-spatial Studies and Information Systems.

2. Qualifications offered at the Faculty

Undergraduate programmes	Postgraduate programmes

Preparatory Certificate in Military Studies (PCMS)

Postgraduate diplomas

Postgraduate Diploma in Defence Studies
Postgraduate Diploma in Military Legal Studies

Higher Certificate in Military Studies (HCMS)

HCMS in Human and Organisation Development
HCMS in Organisation and Resource Management
HCMS in Security and Africa Studies
HCMS in Military Technology
HCMS in Technology and Defence Management

Bachelor of Military Science with Honours (BMilHons)

BMilHons in Industrial Psychology
BMilHons in Military Geography
BMilHons in Military History
BMilHons in Military Management
BMilHons in Organisation and Resource Management
BMilHons in Public and Development Management
BMilHons in Security and Africa Studies
BMilHons in Strategic Studies
BMilHons in Technology

Bachelor of Military Science (BMil)

BMil in Human and Organisation Development
BMil in Organisation and Resource Management
BMil in Security and Africa Studies
BMil in Defence Intelligence Studies
BMil in Technology
BMil in Technology and Defence Management

Master of Military Science (MMil)

MMil in Military Science (Research)
MMil in Military Geography
MMil in Military History
MMil in Organisation and Resource Management
MMil in Security and Africa Studies
MMil in Strategic Studies
MMil in Technology

MPhil in Defence Studies

PhD in Military Science

3. Other services offered by Faculty

3.1. Academic development

- study and career guidance;
- life skills development;
- psychotherapeutic services; and
- academic support services.

3.2. Language service

Informal isiXhosa, isiZulu, SeSotho, French and German courses are available on request to staff and students.

Disclaimer:

The content above comes from the 2025 Military Science Yearbook. Make sure to consult the full **Military Science Yearbook** to see this extract in context and to check if there have been any changes. Take special note of additional information in the yearbook under section *1. Postgraduate diplomas.*