

BACHELOR OF GEOMATICS HONOURS (NQF - Level 8)

Programme Aims/Purpose:

The Bachelor of Geomatics Honours is a postgraduate specialisation degree that aims at consolidating and deepening the knowledge and skills of students in the main cognate area of learning, as well as developing their capacity to conduct supervised research of an applied nature. The programme is purposely designed to equip students with advanced concepts and theories, while it facilitates practice-oriented mastery of and insight into the application of geospatial skills in various contexts.

The main aim of the Bachelor of Geomatics Honours is to equip students' career with high level knowledge and skills in the acquisition, processing, presentation, and management of geospatial data.

The programme prepares students for their 'survey articles', which they have to complete before they can register as professional land surveyors. Survey articles comprise of an internship under a professional land surveyor for a period of about two years, followed by a trial survey and law examinations set by the Namibian Council for Professional Land Surveyors, Technical Surveyors and Survey Technicians (SURCON). Graduates from this programme will be eligible to do their survey articles and to register as Professional Land Surveyors. Graduates will be employed in both Government and the private sector responsible for mapping, surveying and registration of plots in urban informal settlements.

The programme has been endorsed by members of the Programme Advisory Committee while academic peers at higher learning institutions were also consulted for purposes of international benchmarking (attached, please find evidence of consultation, benchmarking and support).

Exit Programme Outcomes (Qualification Outcomes):

Upon completion of the Bachelor of Geomatics Honours programme, graduates should be able to:

- Perform advanced surveying and mapping operations, using a wide variety of equipment, software and techniques, under a wide variety of conditions;
- Apply analytical critical and problem solving skills to acquire, process, analyse and present survey data;
- Resolve complex boundary issues and disputes using advanced cadastral surveying principles and methods;
- Produce professional survey diagrams, plans and maps (cadastral and topographic);
- Develop effective software applications for the processing and analysis of survey observations and coordinates;
- Plan and execute research of applied nature requiring a wide range of advanced surveying, analysis techniques;
- Manage the effective and efficient acquisition, processing, presentation and maintenance of spatial data;
- Present and communicate academic or professional work effectively, catering for a wide range of audiences and/or in diverse genres; and
- Perform and manage advanced Global Navigation Satellite System (GNSS) and Geodetic Control surveys.

Criteria for Admission:

In order to be admitted to this programme, applicants must have a Bachelor of Geomatics degree from the Polytechnic of Namibia at NQF Level 7, an equivalent qualification at NQF Level 7 from a recognised institution, worth at least NQF 360 credits or a pre-NQF approved Bachelor over 3 year in the field of surveying/geomatics. All admissions are at the discretion of the Department and exceptions may be approved by the Department.

Applicants may be required to attend a pre-selection interview and/or test at the discretion of the Department. Applicants from other institutions must submit detailed information on all courses in their previous qualifications, as well as contact details of three referees. The latter also applies to applicants who have been working in the field subsequent to obtaining their previous qualifications.

Holders of Bachelor of Science in Geomatics from the Polytechnic of Namibia may be admitted into this Honours programme, but they will have to pass the additional course Mathematics 2, before they can register for the Honours programme.

Mode of Delivery:

The programme will be delivered in full-time mode, with diverse teaching modes over a period of one year in accordance with Polytechnic rules and regulations.

Requirements for Qualification Award:

The Bachelor of Geomatics Honours will be awarded to students credited with a minimum of 120 NQF credits all at NQF Level 8. Students are required to complete five compulsory courses (worth 75 credits), and a thesis (worth 45 credits). In addition, students should meet the administrative and financial requirements spelt out in Part 1 of the Polytechnic of Namibia Yearbook.

Year 1: Semester 1:

Course Code	Course Title	Comprehensive Learning Outcome	Prerequisite	Compulsory or Elective	NQF Level	Notional Hours	NQF Credits
TBC	Advanced Cadastral Surveying	Perform advanced cadastral surveying, resolve complex boundary issues and disputes, and provide professional consultation and advice on complex boundary and land development issues.	None	Compulsory	8	150	15
TBC	Geodetic Surveying	Plan, execute, process and analyse geodetic control surveys.	None	Compulsory	8	150	15
TBC	Geomatics Programming	Develop effective survey software to perform coordinate transformations and least squares adjustment of complex survey networks.	None	Compulsory	8	150	15
RMG810S	Research Methodology	Produce and present a comprehensive research proposal	None	Compulsory	8	150	15
							Total Credits: 60

Year 1: Semester 2:

Course Code	Course Title	Comprehensive Learning Outcome	Prerequisite	Compulsory or Elective	NQF Level	Notional Hours	NQF Credits
AGV820S	Advanced Geovisualisation	Generate and present geospatial information professionally to support spatial decision-making.	None	Compulsory	8	150	15
TBC	Mini-thesis	Conduct applied research requiring a wide range of advanced surveying, analysis, research and presentation techniques and skills.	Research Methodology, Geodetic Surveying, Geomatics Programming	Compulsory	8	450	45

**Total
Credits:
60**