



University of Pretoria Yearbook 2017

Cartography 110 (GMC 110)

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| Qualification | Undergraduate |
| Faculty | Faculty of Natural and Agricultural Sciences |
| Module content | Spherical trigonometry. Geometrical geodesy: Datum surfaces and coordinate systems in Geodesy, Calculations on the ellipsoid, Datum transformations. Map projections: Projection principles, distortion determination, and construction of conformal, equivalent and equidistant projections, the Transverse Mercator projection and UTM projection of an ellipsoidal earth, projection transformations. Space geodesy: Time systems, Celestial and observer coordinate systems, Global Navigation Satellite Systems (GNSS), Satellite orbits and orbital parameters, 3-D positioning. A project or assignments of at least 64 notional hours. |
| Module credits | 10.00 |
| Programmes | BSc Information and Knowledge Systems BSc Extended programme - Physical Sciences BSc Geography BSc Geoinformatics BSc Meteorology |
| Service modules | Faculty of Engineering, Built Environment and Information Technology |
| Prerequisites | No prerequisites. |
| Contact time | 3 lectures per week, 1 practical per week |
| Language of tuition | Afrikaans and English is used in one class |
| Academic organisation | Geography, Geoinf + Meteor |
| Period of presentation | Semester 2 |

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