

22 February 2022

**TO: PRINCIPALS OF SCHOOLS ENTERING CANDIDATES FOR THE 2022
NATIONAL SENIOR CERTIFICATE EXAMINATION**

GEOSPATIAL DATA SCIENCE CERTIFICATE TASK

Geospatial Data Science Certificate Task is made up of two parts, Part A and Part B.

Duration: Part A to be completed between **22 March – 31 July 2022**

Part A

Part A is the training and instruction component of the certificate task.
Training and instructions for the certificate task includes the following:

- Using a geospatial software package
- Data management and organising data files to be shared with the group collaboratively
- Using different types of data
- Using geoprocessing tools to perform spatial operations
- Performing spatial queries using the attribute tables of data layers
- Understanding map projections to produce georeferenced maps

Skills

In groups, learners will be required to:

- collect, organise and critically evaluate spatial data
- produce maps based on the collected data
- select spatial data according to layer attributes
- manipulate this spatial data to produce the final product (map) for assessment

Assessment of Part A

Assessment of Part A is to be completed by the teacher using a competency-based rubric.

Assessment will focus on the following areas:

- access and manipulation of spatial data
- geospatial analysis
- collaboration by the group
- how many iterations were required to produce the final product

Part B

Part B is a group task to be completed after Part A.

Duration: Part B to be completed between **1 August and 31 October 2022**.

The group will be required to create and present a poster.

Part B assesses the group according to the following criteria:

- inquiry and research skills
- critical thinking and application
- analysis and problem solving
- collaboration

Assessment to be conducted by teachers using a rubric. Guides and videos on using the rubric will be provided.

The marking will be moderated by an externally appointed moderation team.

Training of Teachers

Training on the use of a GIS package, manipulation of spatial data and geoprocessing will be provided.

- SAGTA and Kartoza will offer webinars for teachers for free. Training videos will also be free on Moodle.
- Kartoza will offer two days training for teachers for a fee. The course is called “Introduction to GIS in the Classroom”. Information on the training course will be made available during the year.

Administration

Learners are required to complete both Part A and Part B in groups of approx. 3 – 4 learners per group.

Cost: R161 per learner

Certification: Certificates of achievement will be sent to schools in the January 2023 delivery.

Please complete the attachment for registration of your learners. Confirmation of successful registration on the Kartoza Moodle site will take place approximately two weeks after registration with the IEB. Teachers will be required to check that they and their learners activate the Kartoza Moodle link sent to the registered email addresses.

An information booklet will be emailed to the Lead Teacher on completion of registration with the IEB.

Please make the contents of this circular known to any interested staff members.

Should you have any queries in respect of this circular, please contact Robyn Mowatt at mowattr@ieb.co.za.

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