Training Curriculum – First Three Years: Cartographer

The following training list is a recommended progression of official trainings grouped within broad career advancement stages. Courses are listed within recommended career timeframes, to which there is no requirement implied, simply a guide to supervisory expectations of job duty skill acquisition with experience. It should be noted that this curriculum list is specific for the common duties and tasks for Cartographers within the Soil and Plant Science Division (SPSD). Cartographers in other NRCS divisions frequently have workflows involving tools and methodologies that differ from SPSD Cartographers.

The curriculum represents a career progression of NRCS, ESRI courses, and on-the-job training. As a result, time allocated to training (up to 25%) will be scheduled for the first two years of the SPSD Cartographer's career for training in introductory to more advanced DSM and statistics courses, as well as transitioning to ArcGIS Pro and Web Map applications.

Elective courses are highly recommended, but not required within the curriculum. Nor are electives limited to those courses listed on this curriculum -- individuals are encouraged to tailor their trainings to fit their needs.

Offerings are not restricted to the level in which they occur and should not be used as a means of determining promotion eligibility.

These curricula do not in any way reflect the training necessary to fulfill the requirements for specific OPM job series, nor do they serve in any way to change the existing OPM-defined requirements for the specific job series.

You may omit courses that you have already taken as Soil Science or Ecological Sciences training.

Courses included in this curriculum may be recommended to SPSD Cartographic Technicians for professional development. The supervisor has the option of recommending the listed training courses as they see fit for the development of their employees' skills that they need to be productive on their job.

All course titles listed as being offered by the ESRI Academy can be substituted by a ESRI class with similar content due to course titles being updated by ESRI.

Beginner

CORE COURSES
Year 1
- Cartography (ESRI Academy)
- Planning a Cartography Project (ESRI Academy)
- Basics of Python (ESRI Academy)
- Python for Everyone (ESRI Academy)
- Basics of Geographic Coordinate Systems (ESRI Academy)
- Basics of Map Projection (ESRI Academy)
- Displaying Data in ArcGIS Pro (ESRI Academy)
- Getting Started with the Geodatabase (ESRI Academy)
- Labelling Features with ArcGIS Pro (ESRI Academy)

- Managing Map Layers in ArcGIS Pro (ESRI Academy)
- Editing 3D Features Using ArcGIS Pro (ESRI Academy)
- Basic Soil Survey – Field and Lab (NRCS-NEDC-000012)
- Introduction to ArcGIS Pro for GIS Professionals (ESRI Academy)
- Conservation Planning, Part 1 (NRCS-NEDC-000019)*
- Introduction to Field Office Technical Guide (NRCS-NEDC-000149)*

Years 2-3
- Digital Soil Survey Data Editing (NRCS-NEDC-000250)
- Digital Soil Survey Management (NRCS-NEDC-000251)
- Introduction to Image Interpretation (NRCS-NEDC-000275)
- NASIS Basic (Guides)
- Spatial Analysis Workshop (NRCS-NEDC-000271)
- Statistics for Soil Survey, Part 1 (NRCS-NEDC-000400) (prerequisite for Intro to DSM)
- Introduction to Digital Soil Mapping (NRCS-NEDC)
- Map design Fundamentals (ESRI Academy)
- Introduction to Geoprocessing Scripts using Python (ESRI Academy)
- Cultural Resources Training Series, Part 1 (NRCS-NEDC-000141)
- Basic Soils & Web Soil Survey to Interpret Land Capabilities & Limitations (OJT/State/National) (NRCS-NHQ-000009)
- Environmental Evaluation Webinar Series no. 1: Primer on NRCS Environmental Compliance (NRCS-NHQ-000011)
- Environmental Evaluation Webinar Series no. 2: Documenting the Environmental Evaluation (NRCS-NHQ-000012)