

DD-1601-0035

12Y30 GEOSPATIAL ENGINEERING- ADVANCED LEADERS (GE-ALC)

Course Number: 491-405; 491-405 (12Y30 ALC).

Location: The School of Geospatial-Intelligence, Fort Belvoir, VA.

Length: 17 weeks (640 hours).

Exhibit Dates: 10/09–Present.

Learning Outcomes: Upon completion of the course, the student will be able to merge aspects of cartography and terrain analysis to create a useful image; produce soft and hard copy of geographic information and transmit these data using global geospatial information systems; and manage the production of maps and other images.

Instruction: Methods of instruction include audiovisual materials, classroom exercises, computer-based training, discussion, lecture, documentation, and practical exercises. General course topics include data management; file management; software application; vector analysis and raster data analysis in 2D and 3D surfaces.

Related Competencies: Geographic information systems topics include 2-D and 3-D geospatial analysis, data formats, data management, data synthesis, geographic information systems fundamentals review, geographic information systems modeling and workflows, and raster and vector data. Remote image processing topics include data formats and manipulation, radar image analysis, radiometric image enhancement, remote sensing fundamentals, spatial image enhancement, spectral image enhancement, stereo image analysis, and supervised and unsupervised classification.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in geographic information systems, and 3 in remote image processing (9/10)(9/10).