TC 17 – LANDFORM MAPPING
Earth’s relief features, structure and development; concepts in geomorphologic cycle; variations in a cycle; Karst geomorphic cycle; coastal geomorphic cycle; organisms and landforms; domal and folded mountains; mountains, volcanoes and related landforms; measurements, dimensions, and slope values of landforms.

TC 19 – IMAGE INTERPRETATION AND APPLICATIONS
Principles and theories of photo interpretation; landforms and rock types as viewed through aerial photography; applications of aerial photographic techniques to various fields of earth science – soils, geology, forestry and agricultural purposes; crop identification and recognition of ground conditions.

TC 20 – DIGITAL PHOTOGRAMMETRY
Intensive training on the principles and theories of digital photogrammetry, photo control establishment; photogrammetric engineering practice; theory of errors of stereo-photogrammetry, model deformation, aero triangulation; strip block adjustment; rectification; terrestrial photogrammetry and applications.

TC 21 – DIGITAL CARTOGRAPHY
Intensive training on the principles, theories, techniques and applications of digital cartography; history and classification of maps; data compilation; map projection; map design and layout; map compilation; map reproduction; map preservation and cataloguing; digital terrain and elevation models, relief models.

TC 22 – GEODESY AND POSITIONING SYSTEMS
Intensive training on the principles and theories of geodesy; intensive training on the principles, theories and applications of Global Positioning Systems (GPS); GPS surveying, navigation, equipment, techniques.

TC 23 – MODERN SURVEYING
Plane and Geodetic surveying using the most modern equipment such as total stations, GPS receivers and industry standard surveying and CAD software packages; determination of vertical datum (mean sea level); use and adjustment of precise level instruments; field practice on geodetic levelling and computations; precise determination of azimuth, latitude, time and longitude with Theodolites and accessories; field practices on solar and stellar observations.

TC 24 – ENVIRONMENTAL REMOTE SENSING
Physical and mathematical principles of data extraction and analysis involving remotely sensed visible, infrared, thermal and radar satellite-borne imagery; visual interpretation of aerial photographs and satellite images; introduction to digital image processing as applied to remote sensing systems, remote sensing applications, hands on software training.

TC 25 – GEOGRAPHIC INFORMATION SYSTEMS
Overview of GIS; data acquisition, pre-processing, GIS database management, manipulation and analysis, and product generation, evaluation data quality; error analysis of geographically related data, methods of spatial interpolation; GIS applications development, systems planning, design and implementation, hands on software training.

TC 31 – LAND USE MAPPING
Land use and cover mapping from aerial and space-based images; classification scheme; land capability mapping; land use change; land use planning; zoning regulations; mapping requirements for hazard assessment and disaster preparedness planning.

TC 32 – LAND VALUATION AND APPRAISAL
Use of geospatial technologies to support land valuation; sales comparison approach; income approach analysis; land appraisal; property tax assessment techniques and regulations.

Short Courses (1 week) on Real Estate Appraisal in partnership with the National Engineering Center and Institute of Philippine Real Estate Appraisers (IPREA)

Short Courses (1-2 weeks) on Basic and Advanced Remote Sensing and Geographic Information Systems (also in partnership with the National Engineering Center)

Degree courses (through the Department of Geodetic Engineering)

- BS Geodetic Engineering
- MS Geomatics Engineering

For inquiries, please contact

The Director
Training Center for Applied Geodesy and Photogrammetry
College of Engineering, University of the Philippines
Diliman, Quezon City 1101
Tel. No. 881-8500 loc. 3124 or 3125
Telefax No. 920-8924

www.dge.upd.edu.ph

TRAINING CENTER FOR APPLIED GEODESY 
AND PHOTOGRAMMETRY
College of Engineering
University of the Philippines
Diliman, Quezon City 1101
Philippines
Courses

Course “B+” APPLIED GEOINFORMATICS
This training course is suited for technical personnel engaged in environmental management and conservation and for those want to gain operational knowledge in resource information extraction.

<table>
<thead>
<tr>
<th>Course “B+“ Contents</th>
<th>Units</th>
<th>Lect</th>
<th>Lab</th>
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<tbody>
<tr>
<td>TC 17 Landform Mapping</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<tr>
<td>TC 19 Image Interpretation and Applications</td>
<td>5</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>TC 21 Digital Cartography</td>
<td>3</td>
<td>2</td>
<td>3</td>
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<tr>
<td>TC 24 Remote Sensing of the Environment</td>
<td>3</td>
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<tr>
<td>TC 25 Geographic Information Systems</td>
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<td><strong>TOTAL</strong></td>
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Course “E+” RESOURCE MAPPING AND VALUATION
This course is designed for local government personnel who are engaged in municipal or city planning, development and revenue-related activities such as property tax assessment, land valuation, and appraisal.

<table>
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<td>TC 31 Land Use Mapping</td>
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</table>

Course “G” GEOMATICS
This course features current developments and practices in core geomatics technologies namely surveying, digital photogrammetry, global positioning systems (GPS), remote sensing, and geographic information systems (GIS).

<table>
<thead>
<tr>
<th>Course “G“ Contents</th>
<th>Units</th>
<th>Lect</th>
<th>Lab</th>
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<tbody>
<tr>
<td>TC 20 Digital Photogrammetry</td>
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<tr>
<td>TC 21 Digital Cartography</td>
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<tr>
<td>TC 22 Geodesy and Positioning</td>
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<tr>
<td>TC 23 Modern Surveying</td>
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</table>

Admission Requirements

Course “B+” APPLIED GEOINFORMATICS
Has finished B.S. Degree in Agriculture, Geology, Forestry, Engineering, or any other related major field and (for government employees) has rendered at least two years service in the government in his/her field of specialization may be admitted to “Course B”.

Course “E+” RESOURCE MAPPING AND VALUATION
Has finished any college degree and (for government employees) has rendered 2 years of service in the government in the field of resource management; or has a working knowledge of algebra and trigonometry.

Course “G” GEOMATICS
Has finished B.S. Degree in Agriculture, Geology, Forestry, Engineering, or any related major field and who has completed six units in surveying or rendered at least three years service in the government in the field of surveying, mapping and/or natural resource inventory.

Additional Requirements

The applicants of the above courses must also comply with the following requirements:

1. Submit recommendation from their head of agency;
2. Submit transcript of undergraduate and/or graduate academic records. (This requirement is waived for U.P. Graduates);
3. Pass a stereo vision test;
4. For course “G”: Pass a written examination in mathematics (geometry, algebra, trigonometry) and basic principles of surveying and
5. Qualify in a personal interview.