Outline of How to become a Land Surveyor through the Virginia Surveyor Apprenticeship Standards

July 2, 2019

Registered Apprenticeship combines carefully defined and employer-specific training under the guidance of a highly skilled mentor at the worksite. On-the-job training is supplemented with related classroom instruction. Upon successful completion, apprentices are awarded a Certificate of Completion.

Find A Sponsor Near You

Please select ANY OCCUPATION (or specific occupation). Then select City/County OR Zip Code or ANY LOCALITY to search for a list of sponsors in your area. You may also press the down arrow to expand the travel range for sponsors if desired.

PLEASE NOTE: Search results will display those Registered Apprenticeship Sponsors who authorized sharing their company information. **Job seekers should not limit their search to these participants.** Any employer can sign up today to become a Registered Apprenticeship Sponsor. Thank you for your interest in Registered Apprenticeship.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Sponsor</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Zipcode</th>
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</thead>
<tbody>
<tr>
<td>LAND SURVEYOR</td>
<td>BOHLER ENGINEERING</td>
<td>22636 DAVIS DRIVE SUITE#250</td>
<td>STERLING</td>
<td>VA</td>
<td>20164</td>
</tr>
<tr>
<td>LAND SURVEYOR</td>
<td>WALTER L. PHILLIPS</td>
<td>207 PARK AVENUE</td>
<td>FALLS CHURCH</td>
<td>VA</td>
<td>22046</td>
</tr>
</tbody>
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- Speak with your employer to see if your place of employment is a registered apprenticeship sponsor or if there is interest in becoming a sponsor.
- If you work for a Registered Apprenticeship sponsor, have your employer contact a local Virginia Department of Labor and Industry apprenticeship consultant to register you as an apprentice.
- All apprentices are registered through a Department of Labor and Industry apprenticeship consultant.
- Written agreement with Sponsor for employment who is registered with DOLI
- "Apprentice" means a person at least 16 years of age who is covered by a written agreement with an employer and approved by the Commissioner. The agreement shall provide for not less than 2,000 hours of reasonably continuous employment for such person, for his participation in an approved schedule of work experience through employment, and for the amount of related instruction required in the occupation.
TERM OF REGISTERED APPRENTICESHIP

The minimum term of the Land Surveyor registered apprenticeship shall be 10,000 hours (five years) of work experience, which may include the 120 required RTI hours, as stipulated in the Work Processes Outline and shall consist of reasonably continuous employment, supplemented by required approved related instruction. When the apprentice is required to work overtime, these hours will not be credited to the term of apprenticeship.

SAFETY AND HEALTH TRAINING

Before starting in the profession at any site or in any facility, the Sponsor shall instruct the Apprentice in safe and healthful work practices and shall insure that the registered apprentice is trained in facilities and other environments that meet the Virginia Occupational Safety and Health Standards for General Industry and the Construction Industry developed pursuant to the Federal Occupational Safety and Health Act.

RELATED TECHNICAL INSTRUCTION

- min of 120 hours required to be included by each employer (in addition to the 600 core curriculum hours) for a total of 720 hours. This information should be recorded on the below form
- supplements the on-the-job work experience, separate from work processes

SCHEDULE OF WORK PROCESSES (On the Job learning)
allows individuals to prepare for a skilled profession through supervised on the job learning combined with Land Surveyor related classroom instruction.

- Apprentice obtains practical supervised experience;
- Supervisor shall be a Virginia licensed land surveyor, have responsible charge for the apprentice’s work; will be responsible for verification of on the job learning and related technical instruction (RTI). The supervisor may also be the sponsor.
- Apprentice should progress through different levels of responsibility and experience related to the procedures in both the field and office environments until a thorough knowledge of the procedures is attained
- Minimum hours required for advanced operations of the listed procedures
- Apprentice will have additional hours achieving competency in the advanced operations and procedures
- Credit for previous experience towards these years must be given based on the procedures as set forth in the Standards.
- A condensed scheduled of the major divisions of the profession based on approximate hours is recorded in the Work Processes Outline as adopted by the APELSCIDLA Board.
- Apprentice’s sponsor provides on-the-job training through qualified journeypersons.

1. Application, care and practices of proper steel and cloth tape measurement procedures with the understanding of obtainable precision and accuracy in determining horizontal distances. **200 Hours**
2. Application, care, and adjustment of surveying equipment. **200 Hours**
3. Recording of hand and electronic field notes, including the use of reference sketches, describing control points and other pertinent field data. **800 Hours**
4. Application, care, use, operation, and adjustment procedures for vertical and horizontal angles when performing topographic contouring and open or closed traversing. **700 Hours**
5. Application, care, and use of equipment for selecting turning points, identifying topographical features on site surveys. **800 Hours**
6. Establishing observation points, performing interior angle and deflection angles, controls for R/W and boundary identification, determine error of closure and accuracy. **1,000 Hours**
7. Observation for azimuth determination, establishing GPS control sites, HARN stations, identifying picture points of aerial photography. **500 Hours**
8. Application and use of field and office equipment including software programming for the development of plans or plats from field surveys. **1,000 Hours**
9. Interpret plans for establishment of: boundaries and R/W, drainage and utility layout, horizontal and vertical curves, slope and grade stakes. **1,000 Hours**
10. Field and office procedures for area and volume determinations. **500 Hours**
11. Application, care, and adjustment procedures for establishing elevation profiles and cross sections using differential, trigonometric, and GPS leveling procedures. **800 Hours**
12. Application, care, and procedures for conducting research of land records, deeds, wills, and plats. Understanding, applying, and relating local or states codes, statutes, and regulations that influence or control surveying procedures. **400 Hours**
13. Application, computation, and field procedures for establishing state plane coordinates. **400 Hours**
14. Other general or advanced surveying operations that lead to the complete development of the surveying apprentice but does not clearly fit into the previous thirteen items. **1,200 Hours**
15. Health and Safety Procedures. **500 Hours**

**TOTAL =** **10,000 Hours**
In order to receive credit for completing the surveyor apprenticeship program, all applicants must provide the APELSCIDLA Board with proper documentation indicating that the program (including classroom instruction and on the job learning), has been successfully completed.

Successful completion of the Registered Apprenticeship Program earns the apprentice nationally recognized state certification as a journeyperson.

Surveyor in Training (SIT)

To sit for the FLS exam, apprentice must have successfully completed Board approved survey apprenticeship program, with a minimum of 480 hours and minimum of 6 years approved LS experience

After passing FLS exam, receive SIT designation