

Surveyor and Mapping Technician Information Session

Employer Edition

April 19, 2022



Welcome!



Welcome and Introductions

- Thank-you for joining us today to learn more about IPLSA's Surveyor & Mapping Technician Training Program. We understand that you are all very busy and appreciate that you have taken time out of your day meet with us.
- My name is Tim Murphy, and I am the Chair of the Workforce Development Committee for IPLSA and NSPS. I will be providing some background and an overview of the program.
- Joining us today is Jeni Lyon, president of Hampton Lenzini and Renwick. Jeni will be sharing her experience as an employer who has participated in the Apprenticeship Program.



Welcome and Introductions

- Also joining us today is Clayton Thurston, instructor for Parkland College and for IPLSA's training program. Clayton will be talking about the program and what the technicians will be learning.
- Joining as well is Sharon Polk from the IL Department of Commerce and Economic Opportunity (DECO). Sharon will providing additional information on tax credits that are available to employers participating in "Apprentice" programs.



Polling Question #1

- How did you hear about IPLSA's Surveyor and Mapping Technician Training Program?



Stated Purpose

- The stated purpose of today's presentation is to inform you of the details and benefits of the program.
- Our "ask" today is for you to invite any current technicians that you have to a 2nd presentation that will be geared specifically for the technicians.
- The 2nd presentation has been scheduled for Monday May 11th and we ask that you encourage your technicians to attend the presentation and to enroll in the program.



Background/Overview

- As part of our ongoing efforts in workforce development, IPLSA leaders and volunteers discussed a plan for recruiting and training new survey technicians in February 2019. IPLSA recognized that employers may not have the resources to provide appropriate training for technicians.
- This discussion led to a partnership with Parkland College and the creation of a U.S. Department of Labor approved training program to train both existing and new survey technicians in core survey skills.



Background/Overview

- Obtaining approval from the U.S. Department of Labor was a crucial step in the early planning. This approval is the reason that Illinois tax credits are available for participating employers.
- The partnership with Parkland College allows the technicians to obtain training by qualified instructors without the pressure and demands of productivity as would be the case with employer training while concurrently earning college credit should they decide to become a Professional Land Surveyor.



Training Program Details

- Over the course of the 2 year program, technicians are required to obtain 3,500 hours of on-the-job learning (OJL) from their employer as well as 300-hours of structured training provided by Parkland.
- There are numerous categories of OJL that are allowed, and there are not any minimum required hours for any of the categories. OJL begins immediately once a technician is accepted in the program.



Training Program Details

- Parkland provides the 300-hours of training through a series of online classes and 13 in-person labs for hands on training.
- The labs are currently scheduled to be held at the Parkland College campus in Champaign all-day Saturday and half day on Sunday. However, Parkland is exploring the possibility of holding the labs on Friday and Saturday if employers and technicians are interested in the change.



Training Program Details

- Initial enrollment for the program is required to be completed through IPLSA by June 1, 2022.
- Technicians will then be directed to apply for the structured training at Parkland. Assessment/placement testing is also required by Parkland and study guides are available to assist technicians to prepare for the assessment test.
- The structured training at Parkland begins in September 2022 and consists of 4 sections that coincide with the school year and would be completed in May of 2024.



Polling Question #2

- Are you planning on sending a survey technician through the Surveyor and Mapping Technician Training Program?



Training Program Details

- The program concludes with technicians completing the NSPS Certified Survey Technician (CST) exam and employers providing documentation of the OJL.
- Technicians are provided with a Certificate of Completion from IPLSA and Parkland and certification from NSPS for completion of the CST exam.
- The certifications provide a sense of accomplishment for the technicians and provide the employer with the knowledge that their technician met all the requirements of the program.



Fees and other Requirements

- IPLSA does not charge any fees for enrollment in the program.
- Structured training at Parkland is charged at the “in-district” rate and is approximately \$750 per quarter plus book fees (\$3,000 for the 2-year program).
- Employers are required to pay all fees directly to Parkland and cannot require the technicians to pay for the training except as noted below.
- Employers may be eligible to receive tax credits to offset the cost of the training.



Fees and other Requirements

- Employers and technicians are required to enter an agreement with IPLSA with regards to following and adhering to the USDOL requirements for the program.
- The USDOL requires a minimum hourly pay rate starting at \$15/hour and a progressive pay increase resulting in a minimum hourly rate of \$17/hour upon completion of the program.
- Employers may pay their technicians any rate that meets or exceeds the USDOL minimum rate.



Fees and other Requirements

- Employers may also have an agreement with their technician that addresses continued employment after completion of the program as well as reimbursement of any fees paid by the employer if the technician decides to leave the program prior to completion.
- If the employer decides to leave the program prior to completion, the employer is not entitled to any reimbursement of any fees from the technician.



Fees and other Requirements

- The cost of travel, meals and lodging for the lab work completed at Parkland is not an expense that employers are required pay.
- At the employer's sole discretion, they may pay for any and/or all costs associated with the travel, meals and lodging for the lab work completed at Parkland.
- In addition, at the employer's sole discretion, they may opt to pay their technicians for attending the lab work completed at Parkland, however, this is not required.



Polling Question #3

- If you answered yes to the last question, do you have a survey technician you would like to send through the program?



The Tax Credit

Sharon Polk

Economic Development Representative

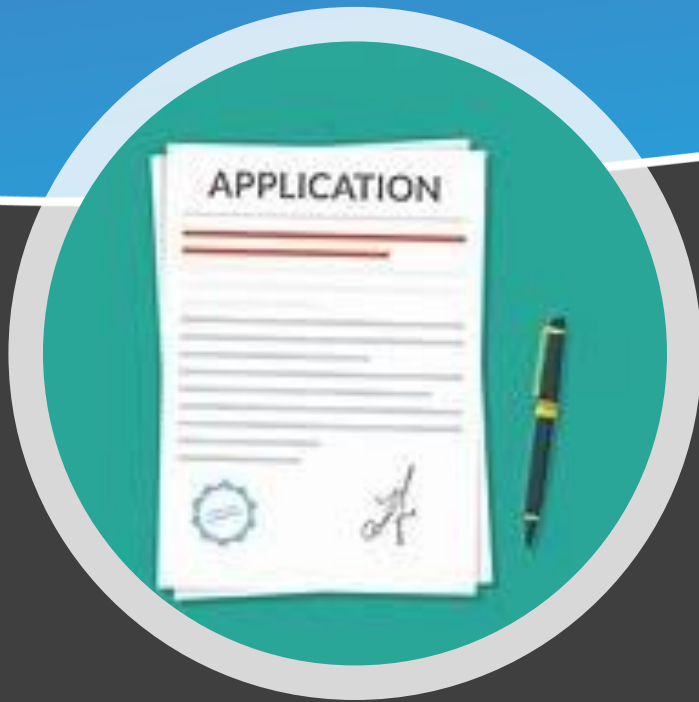
Illinois Department of Commerce and Economic Opportunity



Illinois Apprenticeship Education Expense Tax Credit Program – Eligibility:

- A qualifying apprentice must be: (a) an Illinois resident; (b) at least 16 at the close of the school year for which a credit is sought; (c) a full-time apprentice enrolled in an apprenticeship program registered with U.S. Department of Labor (USDOL), Office of Apprenticeship; and (d) employed by the taxpayer in Illinois.
- Qualified educational expenses include tuition, book fees, and lab fees.
- Enrolled in a qualified Illinois public or nonpublic secondary school that is: (a) an institution of higher education providing a program that leads to an industry-recognized postsecondary credential or degree; (b) an entity that carrying out programs registered under the federal National Apprenticeship Act; or (c) another public or private provider of a program of training services, which may include a joint labor-management organization.





Application & Approval Process



Polling Question #4

- Do the tax credits offered by the Department of Commerce and Economic Opportunity make it more likely or less likely for you to participate in the program?



Contact

Illinois Department of Commerce & Economic Opportunity (DCEO)

<https://www2.Illinois.gov/dceo>

Illinois Apprenticeship Education Expense Tax Credit Program –
Incentives

Sharon Polk Sharon.Polk@illinois.gov
312-590-0324



The Employer Experience

Jeni Lyon

President & CEO

Hampton, Lenzini & Renwick, Inc. (HLR)



WHAT DO YOU THINK OF THE PROGRAM?

- *"It's fantastic! It's a win-win program. There's a tax credit available for the employers, so really there's not a large expense to us. It also shows the employee that we're invested in their future, that we care about giving them the proper education, and then they feel a responsibility to us too because we're paying for it. We offer them a full-time job now, but then after they finish the program, they'll be a full-time employee. It shows a commitment on both sides. I think that the program is just very, very positive."*

-Jeni Lyon, P.E., PLS

President/CEO

Hampton, Lenzini and Renwick, Inc. (HLR)

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HLR's Apprentice in Action!





Discover
SURVEYING



"The Surveyor and Mapping Technician Training

Program has provided me a great opportunity to start surveying hands-on right away while building a strong academic foundation through Parkland College's survey curriculum.

It's exciting to apply what I learn in class in real-world surveying, and vice versa, to learn more in-depth about things I've experienced in the field.

The Apprenticeship Program has allowed me to gain exposure to all facets of surveying, from equipment and field procedures for topographic surveying and construction staking to drafting and survey computations."

***Ryan Baker
Survey Apprentice
Hampton, Lenzini and Renwick, Inc. (HLR)***

Polling Question #5

- We are currently planning an informational session for potential apprentices in May. Do you have a technician that you would recommend attending the session?



The Parkland Experience

Clayton Thurston

Parkland College Instructor

Project Manager - Geotech



Course Curriculum

- Surveyor and Mapping Technician Apprentices can expect to take 4 courses as students at Parkland College:
 - Basic Surveying
 - Plan Reading
 - Construction Staking
 - Design Surveying



Course Curriculum cont'd

- Basic Surveying
 - Taping
 - Leveling
 - Conventional Total Station set-up and operation
 - Field notes
 - Surveying computations
 - Station and offsets
 - Building Layout
 - Contour Interpolation



Course Curriculum cont'd

- Plan Reading
 - Plan-in-hand walk-throughs (Residential and Commercial Subdivisions)
 - Basic hand drafting
 - Architectural plan reading (Residential, Commercial, Industrial)
 - Civil Engineering plan reading
 - Subdivision Plat Reading



Course Curriculum cont'd

- Construction staking
 - GNSS localization and calibration
 - Leveling control points (3-wire) and allowable error distribution
 - Resections
 - Alignment layout
 - Sewer and stormwater management facility layout
 - Structural building layout



Course Curriculum cont'd

- Design Surveying
 - ADA Parking stall and ramp compliance field measurements and drafting
 - Closed loop traverse and adjustment
 - Storm Sewer as-build and profile drafting
 - Existing topography
 - Field codes and linework



Polling Questions 6, 7, & 8

- Does the class material described sound applicable to the work your technicians do?
- What changes would you recommend to the program curriculum?
- What changes would you recommend to the program overall (check all that apply)?



Questions?

