## Occupational Licensing Study 50 State Comparison

State Registration Board for Professional Engineers, Land Surveyors, and Geologists

> Professional Engineer Engineer-in-Training Professional Geologist Geologist-in-Training Professional Land Surveyor Land Surveyor-in-Training

> > Presented by the Pennsylvania Department of State

> > > 2020

An individual licensed and registered by the state board to engage in the practice of engineering.

Engineering is the application of mathematical and physical sciences for the design of public or private buildings, structures, machines, equipment, processes, works or engineering systems.

# **Engineer-In-Training**

A candidate for licensure as a professional engineer, who has been granted a certificate as an engineer-in-training after successfully passing the prescribed written examination in fundamental engineering subjects.

# **Professional Geologist**

#### An individual licensed to practice geologic research and study.

Geology deals with describing the natural processes acting on earth materials, gases or fluids, predicting the probable occurrence of natural resources, predicting and locating natural or man-induced phenomena which may be useful or hazardous to mankind and recognizing, determining and evaluating geologic factors.

This also includes the performance of geological service or work, consultation, investigation, evaluation, planning, mapping and inspection of geological work required in implementing the provisions of any Federal or State law or regulation.

# Geologist-In-Training

A candidate for licensure as a professional geologist who has been granted a certificate as a geologist-in-training after successfully passing the required written examination in fundamental geology subjects.

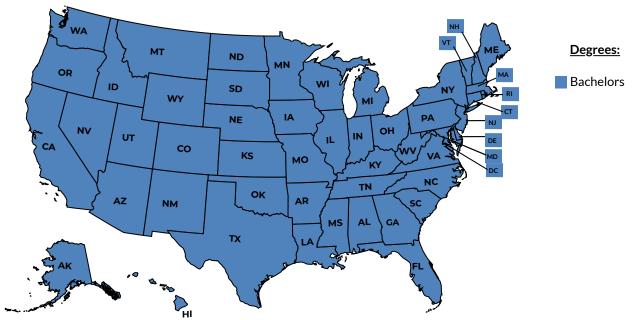
## **Professional Land Surveyor**

An individual licensed and registered by the state board to engage in the practice of land surveying, which is the practice of that branch of the profession of engineering which involves the location, relocation, establishment, reestablishment or retracement of any property line or boundary of any parcel of land or any road right-ofway, easement or alignment.

# Land Surveyor -In-Training

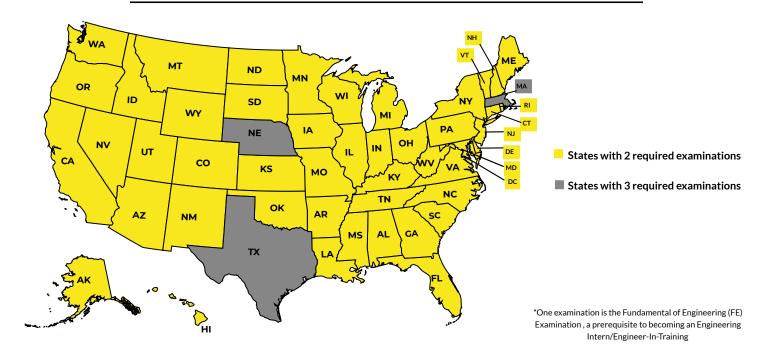
A candidate for licensure as a professional land surveyor who has been granted a certificate as a surveyor-in-training after successfully passing the prescribed written examination in fundamental land surveying subjects.

# **Professional Engineer** Degree Requirement

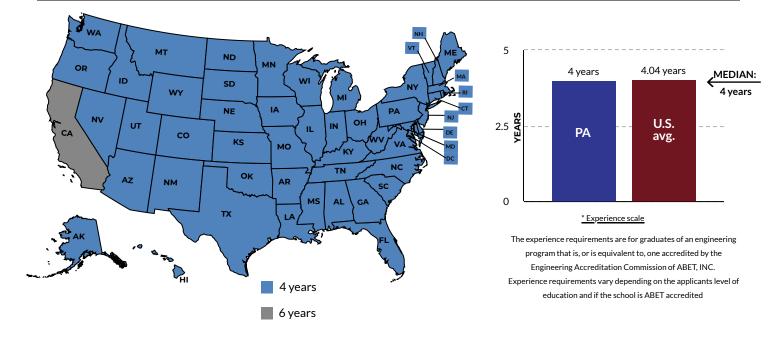


\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience. \*Some states only require that applicants be currently enrolled and within one semester or one year of completing a baccalaureate degree

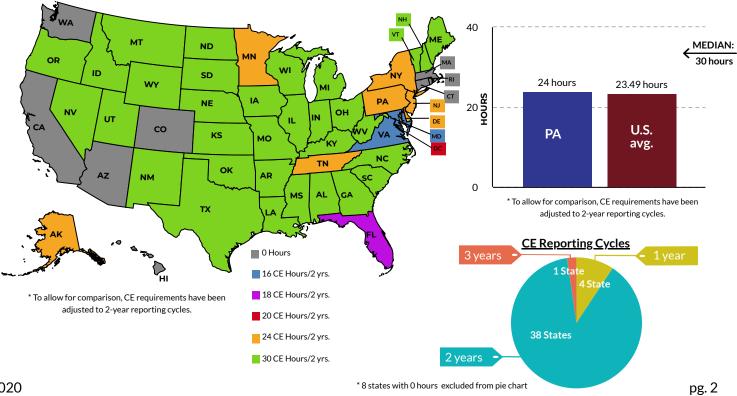
### **Examination Requirement**



### **Training / Experience Requirement**

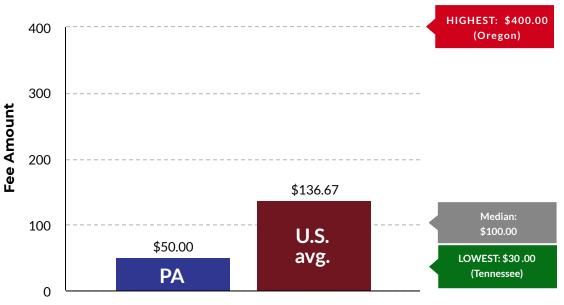


### **Continuing Education Requirement**



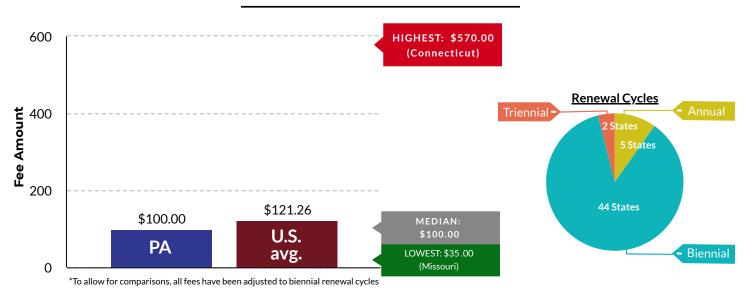
2020

## Initial Licensing Fee



\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees.

#### **Renewal Fees**



#### <u>States with Reciprocity</u> <u>or Endorsement</u>

#### **Endorsement**

Alabama Alaska Arkansas California Colorado District of Columbia Delaware Florida Georgia Hawaii Idaho Illinois Indiana Iowa Kentuckv Maine Massachusetts Minnesota Mississippi Missouri

#### Endorsement Montana

Nebraska

Nevada

New Jersey

New Mexico

New York

North Carolina

North Dakota

Oklahoma

Rhode Island

South Carolina

South Dakota

Tennessee

Utah

Vermont

Virginia

Washington

Wyoming

#### <u>Reciprocity</u>

Arizona Connecticut District of Columbia Kansas Louisiana Maryland Michigan New Hampshire Ohio Pennsylvania\*\* South Carolina South Dakota West Virginia Wyoming <u>Act 41</u>

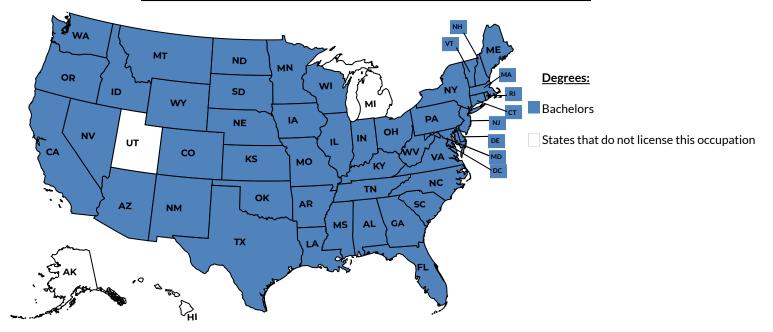
Pennsylvania\*\*

#### Not Specified in Legislation

Oregon Texas

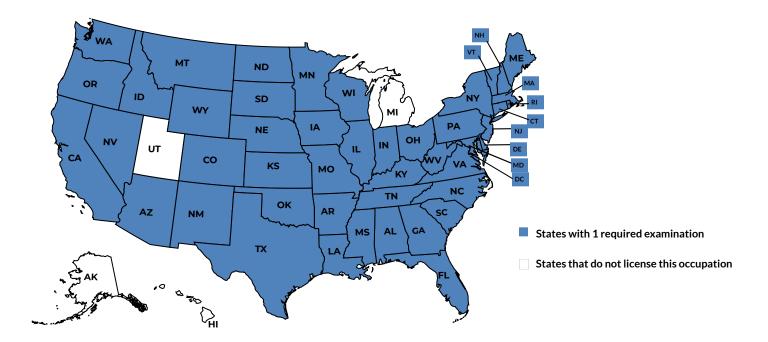
\*\*Act 41, signed by Governor Wolf on July 2, 2019, allows for portability of out-of-state professional licensees coming to work in Pennsylvania. Act 41 does this by granting all boards and commissions within the Commonwealth the authority to immediately endorse licensee from other states, territories or jurisdictions (with substantially equivalent licensing requirements) who are active, in good standing and without discipline against their license or criminal conviction. If a licensee comes from a jurisdiction that does not have substantially equal requirements for licensure, then the boards/commissions may grant a provisional license for a period of such time to allow the new resident to meet the necessary requirements, allowing them access to gainful employment in the interim.

# Engineer – In– Training Degree Requirement

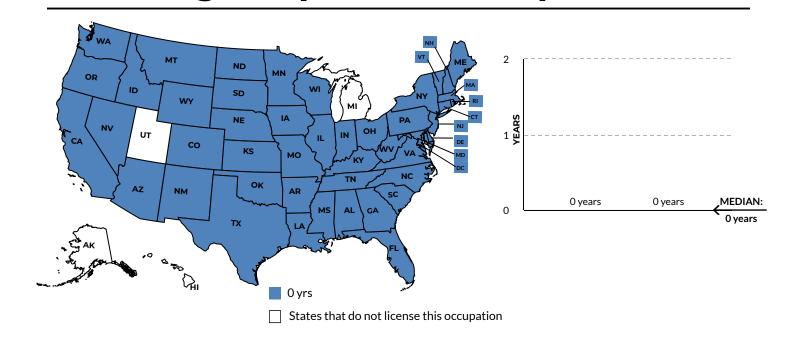


\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience. \*Some states only require that applicants be currently enrolled and within one semester or one year of completing a baccalaureate degree

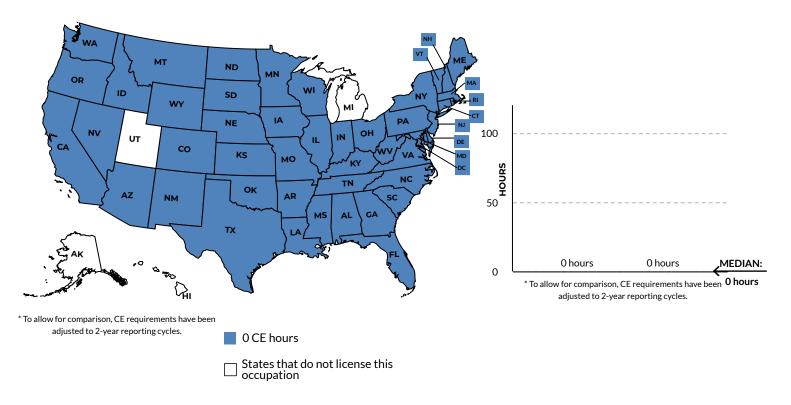
### **Examination Requirement**



# Engineer – In–Training Training / Experience Requirement

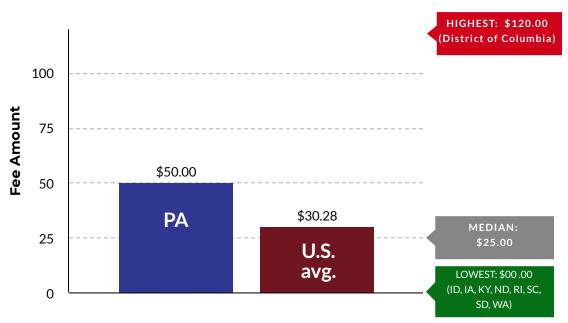


## **Continuing Education Requirement**



# **Engineer - In-Training**

## **Initial Licensing Fee**



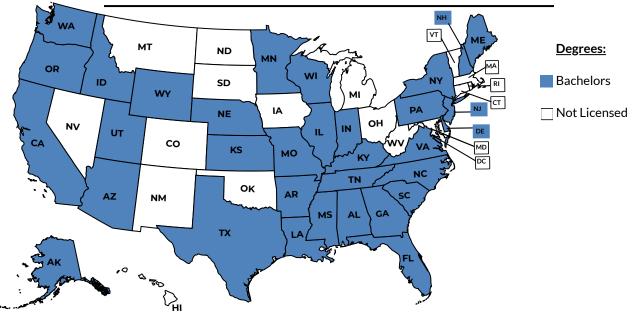
\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees.

#### **Renewal Fee**

\*Most states do not offer a renewal for this license type - No comparable data\*

# **Professional Geologist**

#### **Degree Requirement**

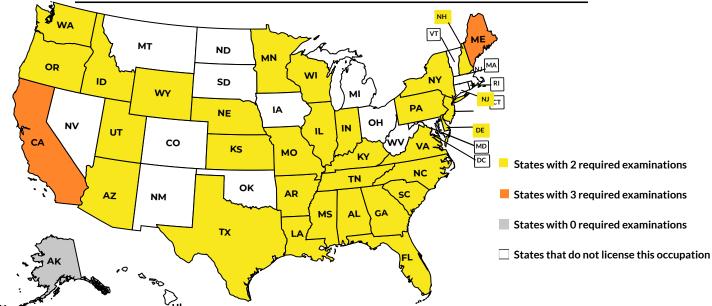


\*There is no professional licensing required for geologists in the state of Connecticut, however geologists, geoscientists, and engineers who work in the field of environmental remediation, often pursue Licensed Environment Professional (LEP) licensing, or work under an LEP licensed supervisor

\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience.

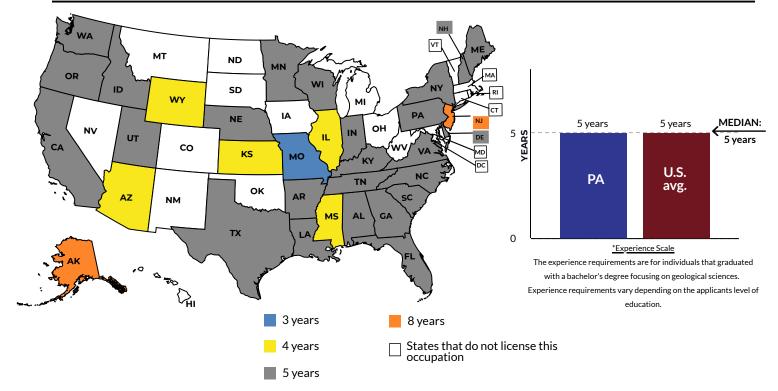
\*West Virginia does not have professional geologist licensing, however someone with a Bachelor's degree from accredited institution in one of the following fields: Biology, Chemistry, Earth Sciences, Environmental Sciences, Geology, Hydrogeology Microbiology, Soil Sciences, Toxicology, Hazardous Waste Management, Engineering can be a LRS. A Licensed Remediation Specialist (LRS) is a person certified by the Director of the West Virginia Department of Environmental Protection (WVDEP) as qualified to perform professional remediation services and to supervise the remediation of contaminated sites

### **Examination Requirement**

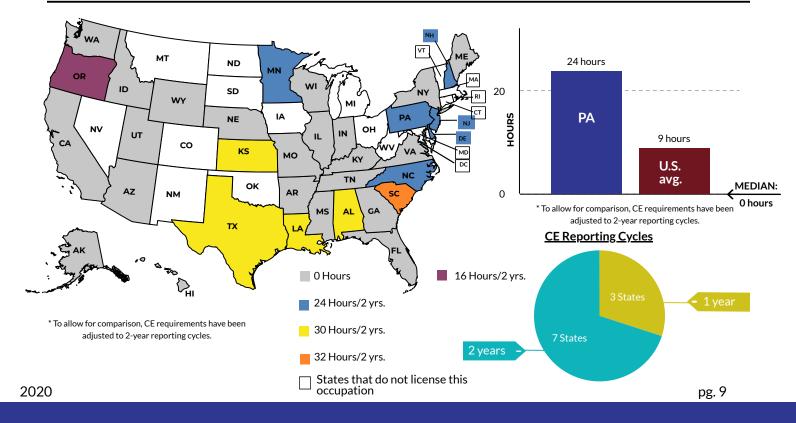


\*States utilize different terms when referring to the National Association of State Boards of Geology Examination. Some states refer to the Fundamentals of Geology and Practice of Geology requirements as separate sections of one examination while other states refer to them as separate examinations. For the purposes of this graphic they are considered to be two separate examinations. The Fundamentals of Geology examination is a requirement to become a Geologist-in-training and thus, is considered to be one of the required examinations for this report.

# **Professional Geologist** Training / Experience Requirement

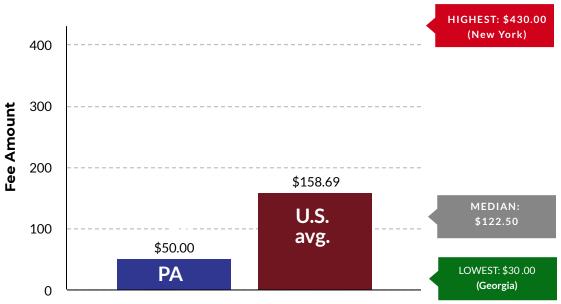


### **Continuing Education Requirement**



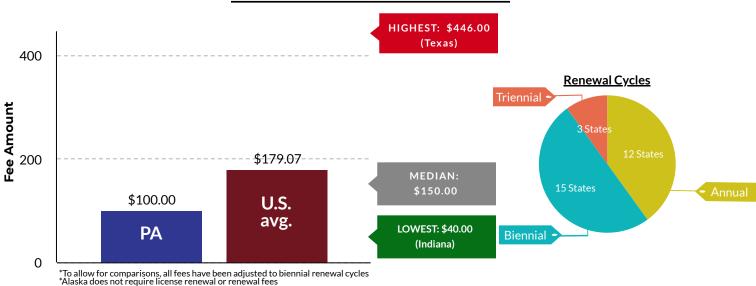
# **Professional Geologist**

### **Initial Licensing Fee**



\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees.

#### **Renewal Fees**



THE STATE REGISTRATION BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS AND GEOLOGISTS

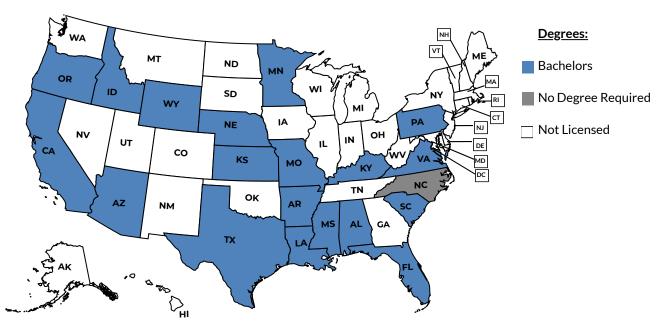
# **Professional Geologist**

#### <u>States with Reciprocity</u> <u>or Endorsement</u>

Endorsement California Florida Illinois Kentucky New York North Carolina Oregon South Carolina Wisconsin Wyoming	ReciprocityAlabamaMississippiArizonaMissouriArizonaMissouriArkansasNebraskaDelawareSouth CarolinaGeorgiaTennesseeKansasTexasLouisianaWashingtonMaineWyomingMinnesota	Not Specified in Legislation Connecticut Idaho Indiana	<u>ACT 41</u> Pennsylvania**

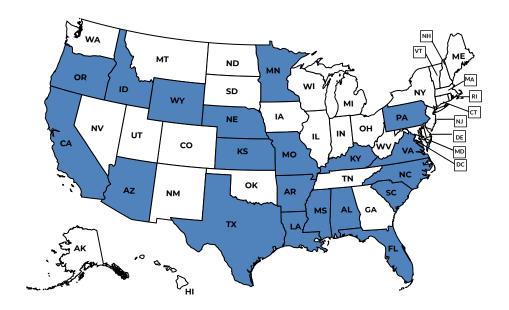
\*\*Act 41, signed by Governor Wolf on July 2, 2019, allows for portability of out-of-state professional licensees coming to work in Pennsylvania. Act 41 does this by granting all boards and commissions within the Commonwealth the authority to immediately endorse licensee from other states, territories or jurisdictions (with substantially equivalent licensing requirements) who are active, in good standing and without discipline against their license or criminal conviction. If a licensee comes from a jurisdiction that does not have substantially equal requirements for licensure, then the boards/commissions may grant a provisional license for a period of such time to allow the new resident to meet the necessary requirements, allowing them access to gainful employment in the interim.

## **Geologist–In-Training** Degree Requirement



\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience.

## **Examination Requirement**

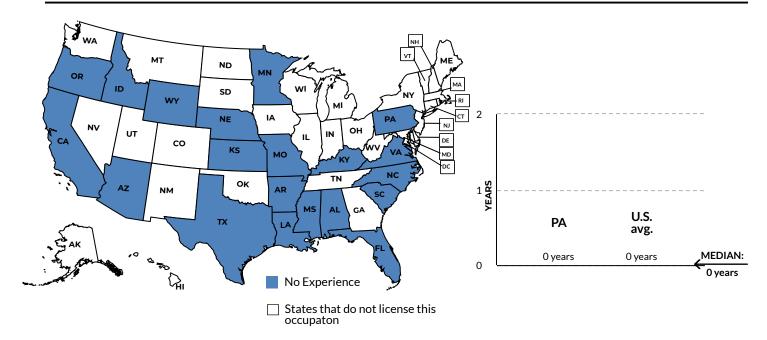


States with 1 required examination

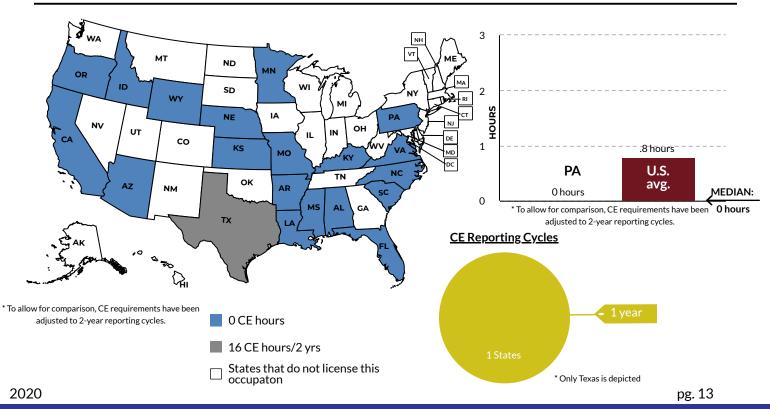
States that do not license this occupation

# **Geologist-In-Training**

## **Training / Experience Requirement**

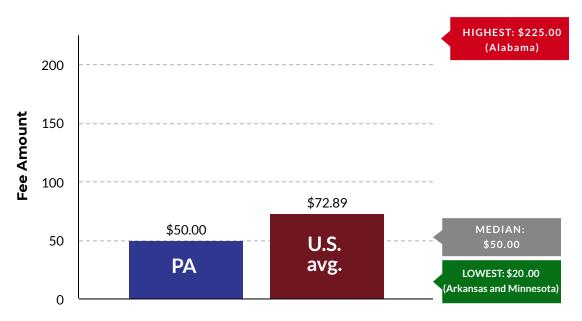


## **Continuing Education Requirement**



# Geologist-In-Training

### **Initial Licensing Fee**



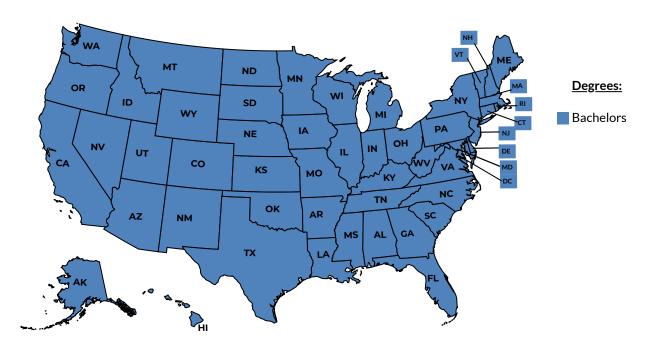
\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees.

#### **Renewal Fee**

\*Most states do not offer a renewal for this license type - No comparable data \*

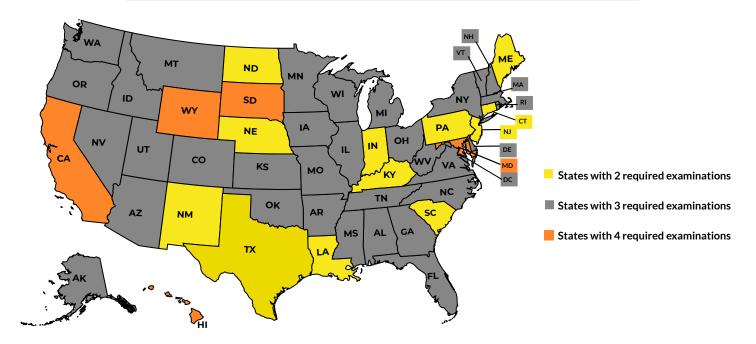
# **Professional Land Surveyor**

#### **Degree Requirement**

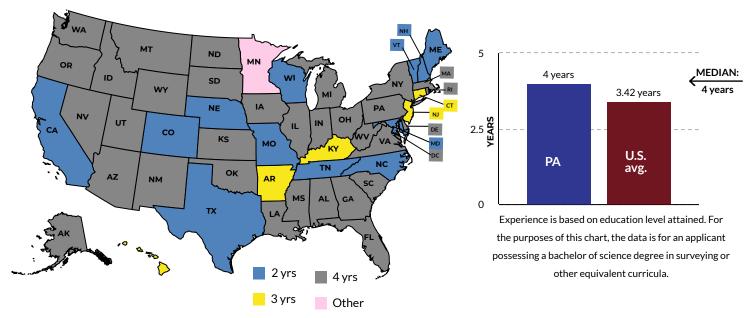


\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience

### **Examination Requirement**

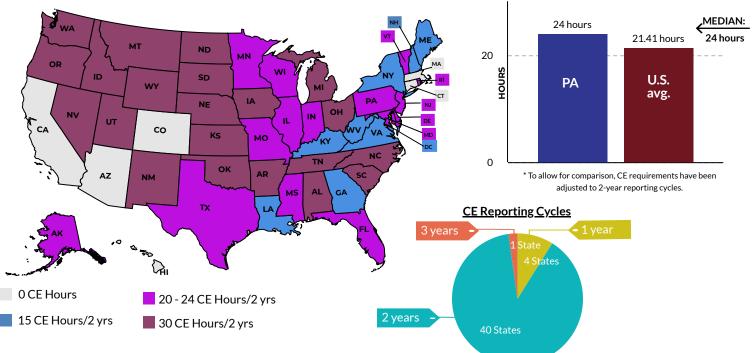


# **Professional Land Surveyor** Training / Experience Requirement

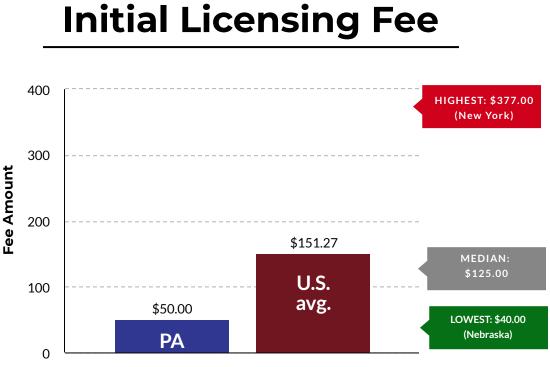


\*Minnesota: (a) a minimum of 160 hours of office experience in plat computations; (b) a minimum of 160 hours of field experience in each of four or more of the following: section subdivision, boundary surveys, land title surveys, government corner restoration, geodetic surveys, staking subdivisions, and common interest communities totaling 3,120 hours or more; (c) a minimum of 160 hours of office experience in each of four or more of the following: record research, record analysis, survey computations, description analysis, description writing, and subdivision design totaling 1,920 hours or more; (d) a minimum of 400 hours of field or office experience in one or a combination of the following: right-of-way surveys; easement surveys; mining surveys; route location surveys, including power, pipelines, etc.; and street grade design and alignment; and (e) a minimum of 400 hours of drafting experience in one or a combination of the following: survey, topographic survey, and plats.

### **Continuing Education Requirement**

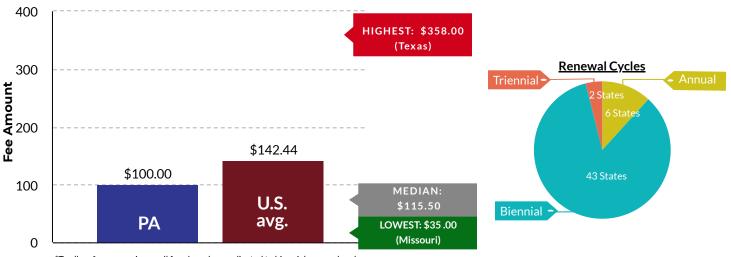


## **Professional Land Surveyor**



\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees.

#### **Renewal Fees**



\*To allow for comparisons, all fees have been adjusted to biennial renewal cycles \*Colorado, Delaware, and Hawaii do not make renewal fees available to the public

# **Professional Land Surveyor**

#### <u>States with Reciprocity</u> <u>or Endorsement</u>

#### **Endorsement**

Alaska Arkansas California Colorado Florida Georgia Hawaii Illinois Iowa Kentucky Maine Massachusetts Minnesota Mississippi Missouri Montana

#### Endorsement

Nevada New Mexico New York North Carolina North Dakota Oklahoma Rhode Island South Dakota Vermont Virginia Washington West Virginia Wyoming

#### <u>Reciprocity</u> Connecticut

Delaware District of Columbia Kansas Louisiana Maryland Nebraska New Hampshire Ohio Pennsylvania\*\* South Dakota Tennessee Texas

> <u>Act 41</u> Pennsylvania\*\*

#### in Legislation Alabama

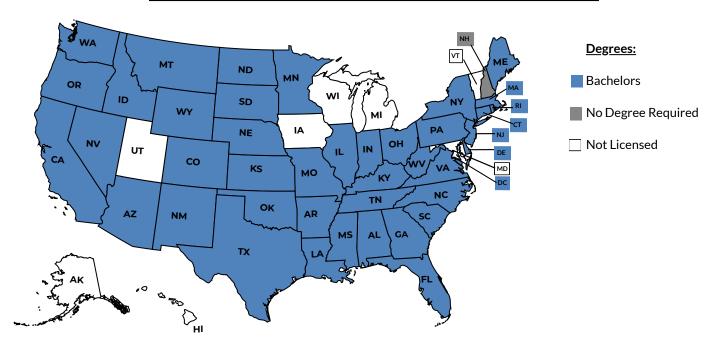
Not Specified

Arizona Idaho Indiana Michigan New Jersey Oregon South Carolina Utah Wisconsin

\*\*Act 41, signed by Governor Wolf on July 2, 2019, allows for portability of out-of-state professional licensees coming to work in Pennsylvania. Act 41 does this by granting all boards and commissions within the Commonwealth the authority to immediately endorse licensee from other states, territories or jurisdictions (with substantially equivalent licensing requirements) who are active, in good standing and without discipline against their license or criminal conviction. If a licensee comes from a jurisdiction that does not have substantially equal requirements for licensure, then the boards/commissions may grant a provisional license for a period of such time to allow the new resident to meet the necessary requirements, allowing them access to gainful employment in the interim.

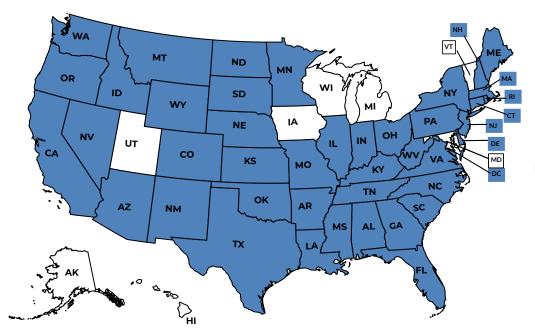
# Land Surveyor -In-Training

#### **Degree Requirement**



\*Some states have multiple paths to licensure, allowing lesser degrees if the applicant has more years of experience \*Some states only require that applicants be currently enrolled and within one semester or one year of completing a baccalaureate degree

### **Examination Requirement**

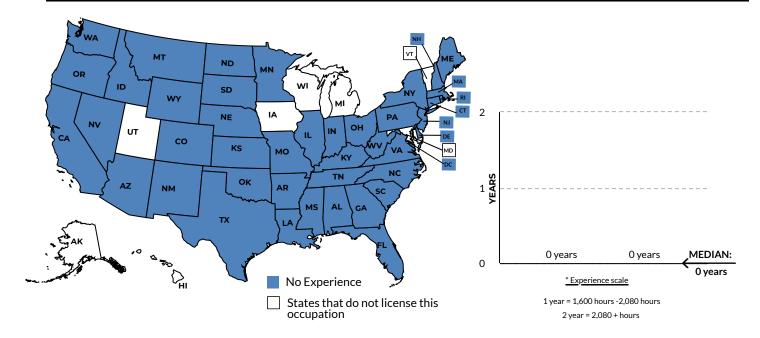


States with 1 required examination

States that do not license this occupation

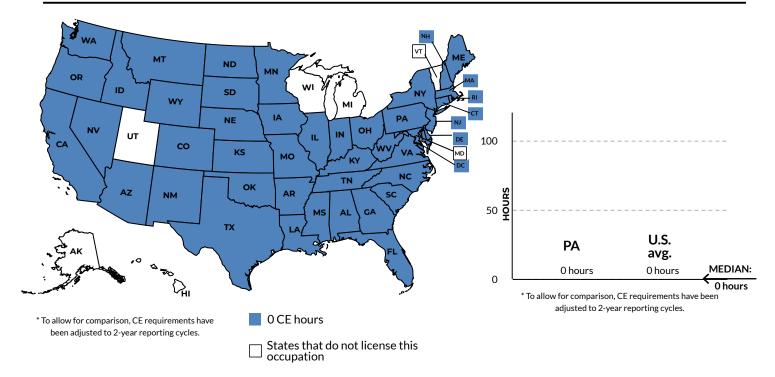
# Land Surveyor -In-Training

## **Training / Experience Requirement**

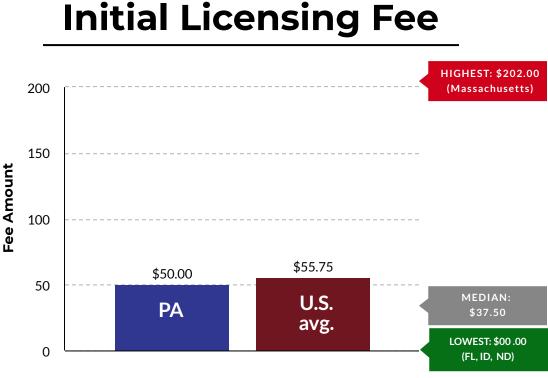


\*Experience requirements are dependent upon the applicants degree and if they attended an ABET accredited school

### **Continuing Education Requirement**



## Land Surveyor -In-Training



\* Initial licensing fee comparison excludes examination fees, background check fees, and finger printing fees. \*Pennsylvania also includes a \$50 fee for "permission to sit for examination" that is not included in this analysis

**Renewal Fees** 

\*Most states do not offer renewal for this license type - No comparable data\*

# **Observation Section**

#### 6 states have 1 regulatory body overseeing these occupations

Arizona State Board of Technical Registration,
California Board for Professional Engineers, Land Surveyors, and Geologists,
Kansas State Board of Technical Professions
Minnesota Board of Architecture, Engineering, Land Surveying, Landscape
Architecture, Geoscience and Interior Design
New York State Board for Engineering, Land Surveying, and Geology,
Pennsylvania State Registration Board for Professional Engineers, Land Surveyors and Geologists,

(These states are depicted in red)

#### 14 States with 1 regulatory body but do not regulate Geologists

Colorado State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors,

**Connecticut** State Board of Examiners for Professional Engineers and Land Surveyors,

District of Columbia State Board of Professional Engineers and Land Surveyors,

Hawaii Board of Professional Engineers, Architects, Surveyors & Landscape Architects,

Iowa Engineering and Land Surveying Examining Board,

Massachusetts Board of Professional Engineers and Land Surveyors,

Montana Board of Professional Engineers and Professional Land Surveyors,

Nevada Board of Engineers & Land Surveyors,

New Jersey State Board of Professional Engineers and Land Surveyors,

New Mexico Board of Licensure for Professional Engineers & Professional Land Surveyors,

North Dakota State Board of Registration for Professional Engineers and Land Surveyors,

Ohio State Board of Registration for Professional Engineers and Surveyors,

Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors,

South Dakota Board of Technical Professions

(These states are depicted in gray)

#### <u>18 states have 2 bodies regulating these occupations</u>

Alabama Board of Licensure for Professional Engineers and Land Surveyors, Alabama Board of Professional Geologists,

Alaska Division of Corporations, Business and Professional Licensing--Geologists Section; Alaska State Board of Registration for Architects, Engineers, Land Surveyors,

Arkansas State Board of Professional Engineers and Professional Surveyors, Arkansas State Board of Registration for Professional Geologists,

Georgia Board of Professional Engineers and Land Surveyors, Georgia Board of Geologists,

Idaho Board of Licensure of Professional Engineers and Professional Land Surveyors, Idaho Board of Registration for Professional Engineers,

Kentucky Board of Engineers & Land Surveyors, Kentucky Board of Registration for Professional Geologists,

Louisiana Board of Professional Geoscientists, Louisiana Professional Engineering and Land Surveying Board

Mississippi Board of Licensure for Professional Engineers and Surveyors, Mississippi State Board of Registered Professional Geologists,

Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Professional Landscape Architects; Missouri Board of Geologist Registration,

North Carolina Board of Examiners for Engineers and Surveyors, North Carolina Board for Licensing of Geologists,

Oregon State Board of Examiners for Engineering & Land Surveying, Oregon State Board of Geology Examiners

South Carolina State Board of Registration for Professional Engineers and Surveyors, South Carolina Board of Registration for Geologists

Texas Board of Professional Engineers and Land Surveyors, Texas Board of Professional Geoscientists,

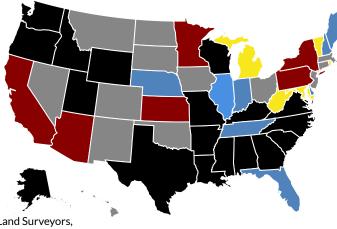
Utah Professional Engineers and Professional Land Surveyors Licensing Board, Utah Professional Geologist Licensing Board,

Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects; Virginia Board for Professional Soil Scientists, Wetland Professionals, and Geologists

Washington Board of Registration for Professional Engineers and Land Surveyors, Washington Geologist Licensing Board,

Wisconsin Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Professional Land Surveyors; Wisconsin Examining Board of Professional Geologists, Hydrologists and Soil Scientists,

**Wyoming** Board of Professional Engineers and Professional Land Surveyors, Wyoming Board of Professional Geologists (These states are depicted in black)



## **Observation Section**

#### 5 States with 2 regulatory bodies but do not regulate Geologists

Maryland Board of Professional Engineers, Maryland Board of Professional Land Surveyors Michigan Professional Engineers Board, Michigan Board of Professional Surveyors Rhode Island State Board of Registration for Professional Land Surveyors, Board of Registration for Professional Engineers Vermont Board of Professional Engineering, Vermont Board of Land Surveying West Virginia State Board of Registration for Professional Engineers, West Virginia Board of Professional Surveyors (These states are depicted in yellow) 8 States with 3 regulatory bodies overseeing these occupations

Delaware Board of Professional Land Surveyors, Delaware State Board of Geologists,

Delaware Professional Engineering Licensing Board

Florida Board of Professional Surveyors and Mappers, Florida Board of Professional Engineers,

Florida Board of Professional Geologists

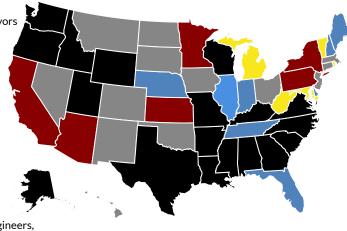
Illinois Land Surveyors Licensing Board, Board of Licensing for Professional Geologists, State Board of Professional Engineers Indiana State Board of Registration for Professional Engineers, State Board of Registration for Professional Surveyors, The Indiana Board of Licensure for Professional Geologists

Maine Board of Licensure of Professional Engineers, Maine Board of Licensure for Professional Land Surveyors, Maine State Board of Licensure of Geologists and Soil Scientists

Nebraska Board of Engineers and Architects, Nebraska Board of Examiners for Land Surveyors, Nebraska Board of Geologists

New Hampshire Board of Land Surveyors, New Hampshire Board of Professional Engineers, New Hampshire Board of Professional Geologists Tennessee Board of Examiners for Land Surveyors, Tennessee Board of Architectural and Engineer Examiners, Tennessee Professional Geologists Licensing Program

(These states are depicted in blue)



#### <u>Sources:</u> <u>State Licensing Boards</u>

Alabama Maryland http://www.bels.alabama.gov/pdf/exams/PE/PE%20A https://www.dllr.state.md.us/license/pe/peapply.shtml pplication%20-%20new%20law.pdf

Alaska https://www.pcshq.com/? https://www.commerce.alaska.gov/web/portals/5/pub page=MA\_ENG\_PS\_9.7.17.pdf /ael4713.pdf

Arizona https://wylicense.r https://btr.az.gov/sites/default/files/documents/files/e seDleg/Login.aspx ngineer\_registration\_packet\_8-5-18\_1.pdf

Arkansas https://www.pels.arkansas.gov/professional-surveyorlicensure-overview

California https://www.bpelsg.ca.gov/pubs/forms/peapp.pdf

Colorado https://pr https://apps.colorado.gov/dora/licensing/Default.aspx 0320.pdf

Connecticut http://www.portal.ct.gov/DCP/License-Services-Division/All-License-Applications/Professional-Engineers-and-Land-Surveyors-Licensing

Delaware https://www.dape.org/ProfessionalEngineers/register Nevada

District of Columbia https://www.dcopla.com/bpe/

Florida https://fbpe.org/licensure/applicationprocess/fundamentals-examination/

Georgia http://sos.ga.gov/cgi-bin/plbforms.asp?board=9

Hawaii https://cca.hawaii.gov/pvl/boards/engineer/applicatio n\_publications/

Idaho https://apps.ipels.idaho.gov/Application/IndexAnonymous

Illinois https://www.idfpr.com/Renewals/Apply/Forms/PE-END.pdf

Indiana https://www.in.gov/pla/2741.htm

lowa https://iowaplb.force.com/IPLB\_login

Kansas https://www.ksbtp.ks.gov/professions/engineers

Kentucky https://elsweb.kyboels.ky.gov/kweb/InitialLicensureA pplication

Louisiana https://www.lapels.com/Appindiv.html

Maine

http://www.maine.gov/professionalengineers/docume nts/2014%20PE%20Application%20Form.pdf

Massachusetts https://www.pcshq.com/? pub.page=MA\_ENG\_PS\_9.7.17.pdf

**Michigan** https://mylicense.mdch.state.mi.us/MyLicenseEnterpri seDleg/Login.aspx

Minnesota https://mn.gov/aelslagid/forms/PEComityEEEApp.pdf

Mississippi https://www.pepls.state.ms.us/pepls/web.nsf/webpag es/LN\_AF\_PAGE\_FORM?OpenDocument

Missouri https://pr.mo.gov/boards/apelsla2/apelsla/375-0320 pdf

Montana http://boards.bsd.dli.mt.gov/pel#9

Nebraska https://ea.nebraska.gov/files/doc/pe\_exam\_app.pdf

Nevada https://nvbpels.org/professionals/engineers

New Hampshire https://www.oplc.nh.gov/engineers/documents/engine er-application.pdf

New Jersey http://www.njconsumeraffairs.gov/pels/Applications/P rofessional-Engineer-Application.pdf

New Mexico http://www.sblpes.state.nm.us/uploads/files/Engineer %20Application\_03-2018%20Form.pdf

New York http://www.op.nysed.gov/prof/pels/pe1.pdf

North Carolina http://www.ncbels.org/forms/PEApplicationForm.pdf

North Dakota https://ndpelsboard.org/data/upfiles/media/2018%20 Combined%20Application-PE%20by%20Examination-2\_4.pdf

Ohio http://www.peps.ohio.gov/IndividualLicensing.aspx

Oklahoma https://www.ok.gov/pels/Applicants/PE\_Application\_-\_Initial\_Applicant.html Oregon

https://www.oregon.gov/osbeels/obtaining/Pages/Appli cations.aspx

Pennsylvania http://www.dos.pa.gov/ProfessionalLicensing/BoardsC ommissions/EngineersLandSurveyorsandGeologists/Pa ges/Professional%20Licensure.aspx

Rhode Island http://www.bdp.state.ri.us/documents/engineers/PEExa mApplication.pdf

South Carolina https://llr.sc.gov/eng/pe.aspx

South Dakota https://apps.sd.gov/LD17BTP/login.aspx

Tennessee https://www.tn.gov/commerce/regboards/architectsengineers/license-applicant-resources/forms-anddownloads.html

**Texas** https://engineers.texas.gov/app/

Utah https://dopl.utah.gov/eng/engineer\_application.pdf

Vermont https://www.sec.state.vt.us/professional-regulation/listof-professions/engineering/forms-instructions.aspx

Virginia

http://www.dpor.virginia.gov/uploadedFiles/MainSite/C ontent/Boards/APELS/0402LIC.pdf

Washington https://www.dol.wa.gov/business/engineerslandsurveyo rs/engapply-exam.html

West Virginia https://www.wvpebd.org/Applications-Forms/Professional-Engineer-PE-exam

Wisconsin https://dsps.wi.gov/pages/Professions/EngineerProfessi onal/Default.aspx

Wyoming https://drive.google.com/file/d/1mcaPRWgznLxxsAfEas W1qP3OW1mWkECX/view