

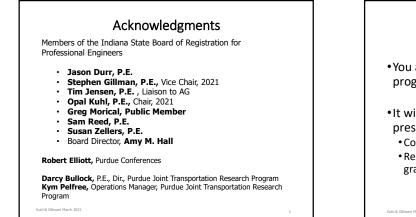
Disclaimer

The speakers are expressing their own views and opinions on the matters being discussed and do not represent the official views of the State Board of Registration for Professional Engineers, the Indiana Society of Professional Engineers, or Purdue University.

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Quiz • You are invited to complete the Quiz as we progress through the course • It will be administered at the end of the presentation and will be used to: Confirm your attendance at the session • Responses to the questions on the course will be graded. Kuhl & Gillmanl March 2021

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Outline

- Expectations for this Session
- Indiana Code vs Indiana Administrative Code
- Selected Statutes and Rules applied to Practice of Engineering
 - Registration by Comity
 - . Registrant's Seal
 - Computer Based Testing for FE and PE exams
 - Rules for Continuing Education
 - Audits for 2018 Renewals
- Board Structure, Appointments and Future Issues
- · Legislative Matters and Professional Licensure
- Closing Comments, Questions, and Discussion

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Changes from Previous Version

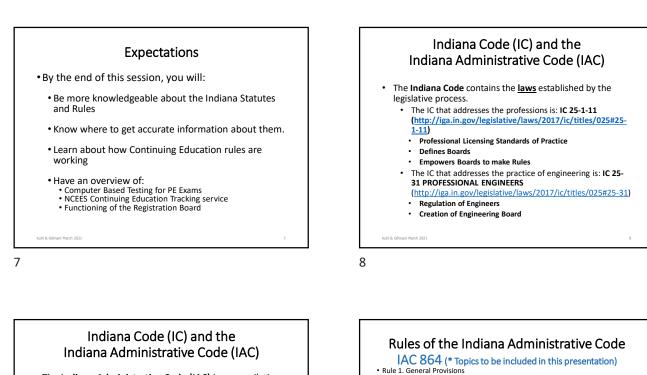
- Application for Licensure from engineers without an ABET EAC accredited degree
- Information on Computer-Based PE Exams
- NCEES Record for Comity
- Information on the Indiana Board of Registration for **Professional Engineers**
- Pending Federal legislation concerning public utilities

Registration Board Newsletter

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- The Indiana <u>Administrative</u> Code (IAC) is a compilation of the text of all permanent Indiana administrative rules.
 - The rules created by the boards
 - Approved by the procedures set up in the IC.
 - 864 IAC applies to the Practice of Engineering
 - It frequently refers to the IC for authority and guidance.
 - 864 IAC ARTICLE 1.1. ADMINISTRATION; GENERAL REQUIREMENTS
 - Within Article 1.1 are the Rules for Engineering Licensure (http://www.in.gov/legislative/iac/iac title?iact=864)

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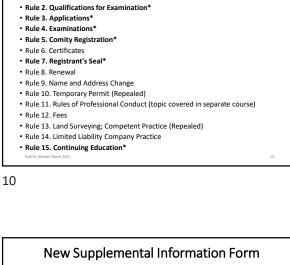
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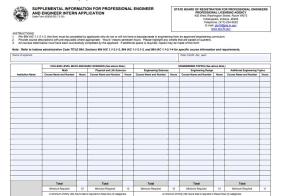


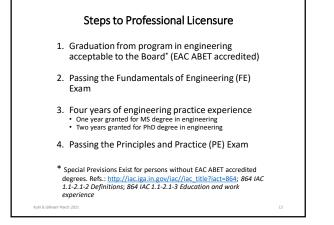
- Clarify accredited degree to "EAC ABET"
- Clarify examination attempts timeline,
- Update Seal definition
- the registrant's original handwritten, electronic, or other signature recognized under Indiana law
- Reduce the fee for comity from \$500 to \$300
- For applicants without ABET EAC BS degree
- Increased total number of credits from 44 to 54
- Increased flexibility on Math and Science
- Creates new category of "Additional Engineering Topics"

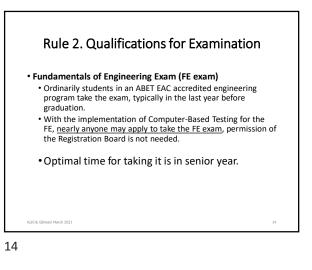


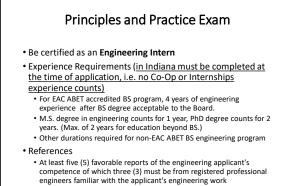
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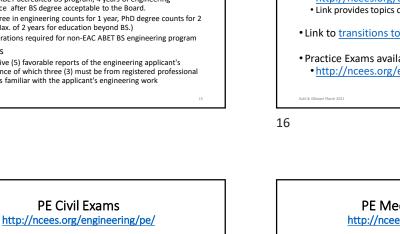






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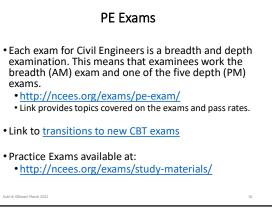


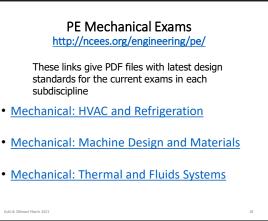
- <u>Civil: Construction</u>
- Civil: Geotechnical

• Civil: Structural

- These links give PDF files with the most up to date design standards exams in each subdiscipline
- <u>Civil: Transportation</u>
- <u>Civil: Water Resources and Environmental</u>

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Recent PE Exam Pass Rates

http://ncees.org/engineering/pe/pass-rates/

Exam	First-time takers		Repeat takers		Format	Availability	
							updated
	Volume	Pass Rate	Volume	Pass Rate			
PE Agricultural and Biological	16	69%	1	100%	P&P	1x/year	Dec-20
PE Architectural	72	64%	10	30%	P&P	1x/year	Dec-20
PE Chemical	236	67%	42	29%	CBT	Year round	Jan-21
PE Civil: Construction	989	61%	542	35%	P&P	2x/year	Dec-20
PE Civil: Geotechnical	685	55%	328	24%	P&P	2x/year	Dec-20
PE Civil: Structural	1838	64%	662	41%	P&P	2x/year	Dec-20
PE Civil: Transportation	2133	70%	760	39%	P&P	2x/year	Dec-20
PE Civil: Water Resources and							
Environmental	2091	71%	603	46%	P&P	2x/year	Dec-20
PE Control Systems	193	67%	59	31%	P&P	1x/year	Dec-20
PE Electrical and Computer: Computer							
Engineering	34	71%	7	29%	P&P	2x/year	Dec-20

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Recent PE Exam Pass Rates, Cont'd. http://ncees.org/engineering/pe/pass-rates/ First-time takers Repeat takers Format Availability Last Exam updated Volume Pass Rate Volume Pass Rate PE Electronics, Controls, and 62% 32 22% P&P 2x/year Dec-20 71% N/A N/A CBT Year round Jan-21 71% 66 50% CBT Year round Jan-21 88% N/A N/A CBT Year round Jan-21 86% A/A N/A CBT 1x/year Jan-21 75% 45 58% CBT Year round Jan-21 Communications PE Electrical and Computer: Power 152 643 PE Environmental PE Fire Protection 306 205 PE Industrial and Systems 117 PE Mechanical: HVAC and Refrigeration PE Mechanical: Machine Design and 664 36% CBT Year round 434 68% 39 Jan-21 Materials Materials PE Mechanical: Thermal and Fluid Systems PE Metallurgical and Materials PE Mining and Mineral Processing PE Naval Architecture and Marine 494 69% 69% 32 11 47% CBT Year round 27% P&P 1x/year Jan-21 48 Dec-20 40 65% 14 14% P&P 1x/year Dec-20 22 12 68% 18 61% P&P 1x/year 40% CBT 1x/year Engineering PE Nuclear Dec-20 Jan-21 58% PE Petroleum 106 63% 27 37% CBT 1x/year Jan-21 Kuhl & Gilmanl March 2021

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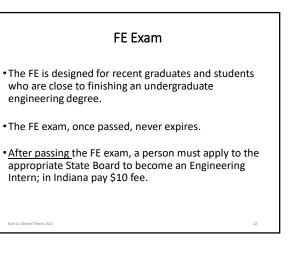
Computer-Based Testing

- Computer-Based Testing for the <u>FE exams</u> began on January 2014.
- Four, three-month long testing windows each year
- Test duration is 6 hours
- Done at Pearson Vue testing centers
- Computer-Based Testing for the <u>Principles and</u> <u>Practice (PE) Exams</u> began in 2018 for Chem. Engrg. & Nuclear Engrg.
- Other disciplines will follow; all by 2024
- All except Nuclear will be available Year-round.

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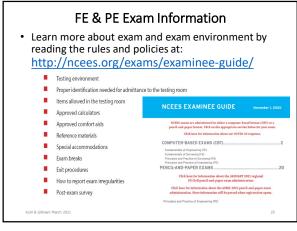
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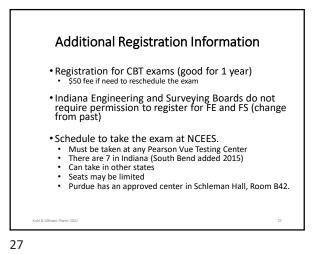


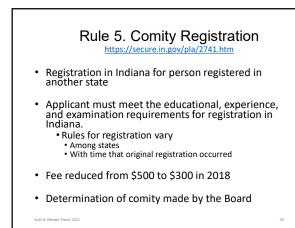


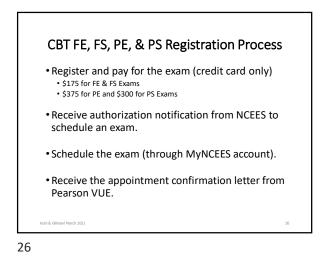


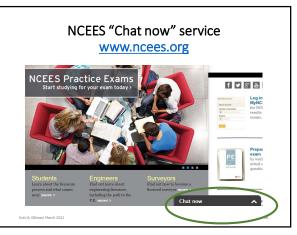












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Expedite Comity with NCEES Record

http://ncees.org/records/

NCEES Records is a service designed for engineers seeking comity licensure. One-time fee of \$175, no annual fee. There is a \$75 transmittal fee.

Steps for completing the Record application process:

- 1. Applicant creates an account
- 2. Applicant completion of all sections of the online application
- Seven sections Education, Examinations, Licensure, References, Questions for the Applicant, Experience Record, and Payment Information.
- 3. NCEES verifies application information
- 4. NCEES reviews and verifies all transcripts and responses from references and employers.

5. NCEES notifies applicant and provides a Record Number



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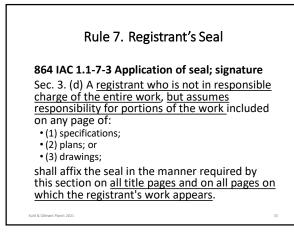
NCEES Model Laws, Rules, and Continuing Professional Competency (CPC) Guidelines

- NCEES (National Council of Examiners for Engineering and Surveying)
 - Membership: Board members from all states and territories
 - Creates and maintains: Model Law https://ncees.org/wpcontent/uploads/Model Law 2017.pdf
 - Model Rules <u>https://ncees.org/wp-</u> content/uploads/ModelRules-2017.pdf

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Rule 7. Registrant's Seal	
 864 IAC 1.1-7-3 Application of seal; signature Sec. 3. (c) When a registrant is in responsible charge of engineering work for which one (1) or more: (1) specifications; (2) plans; and (3) drawings; 	
, the registrant shall apply the seal in the full manner required by this section <u>on each page of all</u> drawings or plans and on the title page of all specifications.	

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Rule 7. Registrant's Seal

•864 IAC 1.1-7-4 Use of seal and signature;

Sec. 4. (a) The seal and signature of a registrant

on any drawings, documents, or instruments

signifies the registrant's acceptance of full

responsibility for the professional work

represented thereon, except as another

registrant shall have assumed a limited

responsibility for portions of the work in

accordance with section 3(d) of this rule.

acceptance of full responsibility

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Rule 7. Registrant's Seal •864 IAC 1.1-7-3 Application of seal; signature • Sec. 3. (e) When affixing the seal, the registrant shall denote the registrant's part of the work by inserting below the registrant's signature and date, language similar to the following: COVERING DESIGN. Kuhl & Gillmanl March 2021

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Rule 7. Registrant's Seal 864 IAC 1.1-7-4 Use of seal and signature; Sec. 4. (b) A registrant may include in the registrant's plans certain predesigned manufactured equipment or products which have become established as acceptable for the proposed use, when such items: (1) meet standards established by nonprofit trade organizations; (2) meet the requirements for the proposed use as indicated by tests performed by a competent, unbiased testing agency; (3) are mechanical, electrical, or other types of machinery or systems guaranteed by a reputable manufacturer; or (4) do not affect the structural safety of the project.

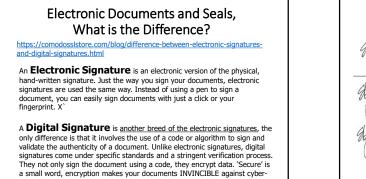
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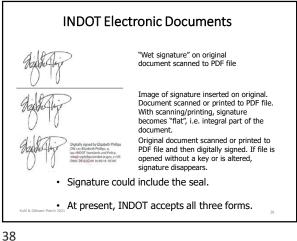
DVP1 Steve Gillman takes over. Drnevich, Vincent P, 1/19/2021

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attacks.

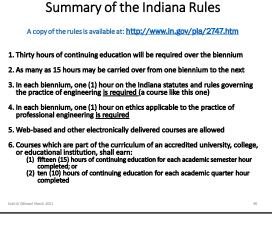


Rule 15. Continuing Education • Adopted in August 2010 · Requirements must be met for every renewal starting July 2012 Rules were updated in 2014 Kuhl & Gilmanl March 2021 39 40



- 7. Credit for teaching courses at an accredited university, college, or educational institution for the first time will carry two (2) times the hours obtained by students in the course, but only for the initial instruction.
- Services as an instructor or presenter at a qualified continuing education course 8. earn two (2) hours' of continuing education for each hour taught, but only for the initial instruction or presentation.
- Active participation in educational outreach activities with kindergarten to grade 9. 12, or higher education, e.g. JETS, MathCOUNTS, EPICS, Engineering Week, student chapter advising, etc. (max. 1 PDH per activity, and a max. 2 PDH's per biennium)*
- 10. Active participation in a professional or technical society relating to the practice of engineering (1 PDH per year of service and, max. of 2 PDH's per biennium)*

* Changed, January 1, 2014

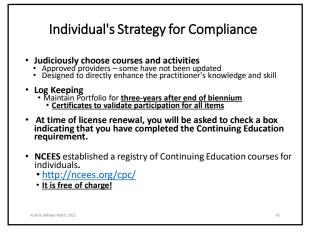




Summary of the Indiana Rules, Cont'd. 11. <u>Authoring of published papers, articles, or books relevant to the</u> professional engineer's practice of engineering (5 PDH's, but 10 PDH's if in peer reviewed archived journals, in the biennium in which the publication occurred, 1 article per biennium)* 12. Attainment of a patent relevant to the professional engineer's practice of engineering (10 PDH's for each patent)* 13. Provisions exist for hardship cases (detailed process, typically for people in armed services or for those with or caring for people with serious

- illnesses.)
- 14. Provisions exist for obtaining lnactive Status where no continuing education would be required, but the licensee could not practice engineering while in the status of inactive

* Changed, January 1, 2014

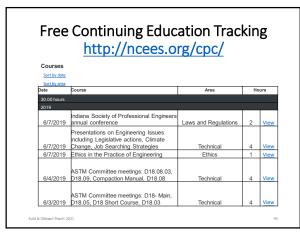




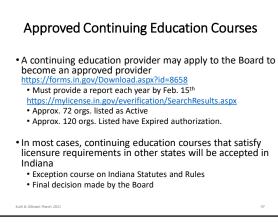
- Information Entry
 - Log into your MyNCEES account and select the appropriate state licensing boards; enter renewal period information for each.
 - Enter Continuing Education course information and professional development hours (PDH)
- Upload supporting information, e.g. certificates
- View a side-by-side comparison of the state's requirements and your completed courses.
- Transmit your completed report electronically to a state licensing board.

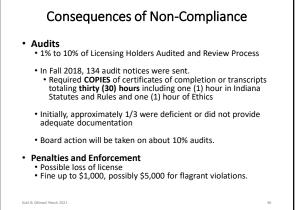
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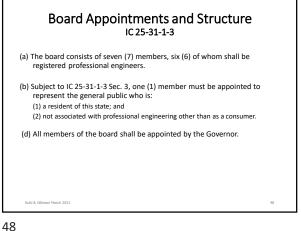
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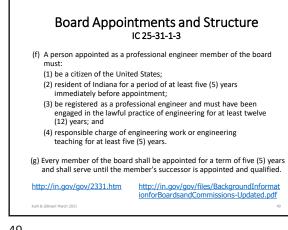
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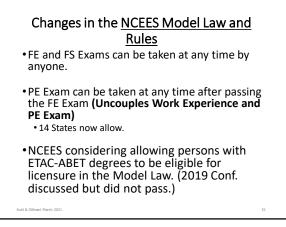




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2021 Chair and Vice Chair Indiana Board of **Registration for Professional Engineers**



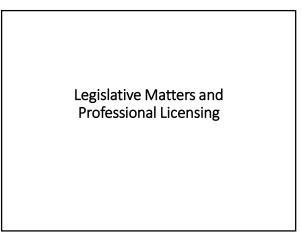
Opal Kuhl, P.E. Board Chair Opal recently retired as Executive Director of the Tippecanoe County Highway Department. She has a B.S. and M.S. in Math Education. Opal is a Nebraska native and taught mathematics for thirteen years before completing a B.S. degree in civil engineering from the University of Nebraska.

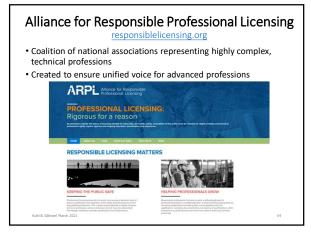


Steve Gillman, P.E. Chair

Steve retired from Eli Lilly and Company at the end of 2013 where he was Vice President of Health, Safety, and Environment. Born in Brookville, Indiana, Steve received a Bachelor of Science degree in chemical engineering from Rose-Hulman Institute of Technology.

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NSPE-IN JOURNAL

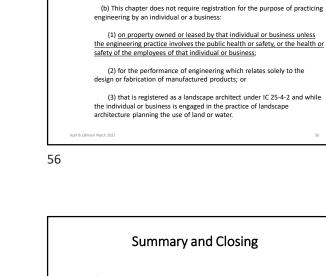
INDIANA SOCIETY OF PROFESSIONAL ENGINEERS

Code Corner https://tinyurl.com/wg6jsgp

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(a) An employee or a subordinate

Exempt persons

Industrial Exemption in Indiana

IC 25-31-1-20

- Professional Engineering Practice in Indiana is regulated by the Indiana Code and by Rules established by the Board
 - Complete listing of Statutes and Rules: <u>http://www.in.gov/pla/3878.htm</u>
- Computer-Based Testing
- Four, three-month long testing windows each year
- FE Exam since Jan. 2014
- PE Exam started in 2018; completed by 2025
- Done at Pearson Vue testing centers

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