



Design LINES

THE TENNESSEE BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS

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Did You Know?

BOARD SIGNS AGREEMENT WITH THE JAPAN PE/FE EXAMINERS COUNCIL

Thursday, December 15, 2016

NASHVILLE – The Tennessee Department of Commerce & Insurance's (TDCI) Board of Architectural and Engineering Examiners has signed a Memorandum of Understanding (MOU) with the Japan PE/FE Examiners Council (JPEC),

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2018 MEETING SCHEDULE

February 14-16.....	Committee/Board Meetings/Hearings
April 11-13.....	Committee/Board Meetings/Hearings
June 13-15	Committee/Board Meetings/Hearings
August 8-10	Committee/Board Meetings/Hearings
October 3-5	Planning Session/Board Meeting (location to be determined)
December 5-7.....	Committee/Board Meetings/Hearings

Unless otherwise indicated, all meetings are held in Nashville, Tennessee, in the Davy Crockett Tower, 500 James Robertson Parkway. Please contact the Board office at 615-741-3221 or 800-256-5758 to verify times and locations, as the meeting schedule is subject to change. Meeting agendas are available on the Board's website:

www.tn.gov/commerce/section/architects-engineers

BOARD SIGNS AGREEMENT continued from page 1

the organization that administers engineering exams in Japan.

The MOU is intended to facilitate the application process for Japanese engineers seeking registration as a Professional Engineer (PE) in Tennessee. The PE license is regarded as a global standard and recognized indicator of an individual's engineering competency. The PE license also signifies a commitment to the protection of the public's health, safety, and welfare in the practice of engineering.

Japanese engineers applying for PE registration in Tennessee must meet all of

the standard education, experience, and examination requirements for licensure. The engineering examinations developed by the National Council of Examiners for Engineering and Surveying (NCEES), which are required for PE licensure in Tennessee, have been administered in Japan since 1992.

Tennessee now joins several other U.S. jurisdictions, including Kentucky, Mississippi, North Carolina, and Texas, in establishing a formal licensing agreement with JPEC. Such agreements have proliferated in part due to the fact that Japan is one of the largest foreign

investors in the U.S. According to the Tennessee Department of Economic and Community Development, there are over 180 Japanese-owned companies operating in the state, and Japan is the largest foreign investor in Tennessee.

"Engineering is a global profession, and license mobility is a matter of prime importance to the Board," said Board Executive Director John Cothron. "The Board hopes that this MOU will foster further cooperation with Japan and encourage Japanese engineers working in the state to pursue registration in Tennessee."

TIPS FOR OBTAINING AND DOCUMENTING "PROGRESSIVE ENGINEERING EXPERIENCE"

FOR YOUR ENGINEERING INTERN EMPLOYEES
PREPARING TO APPLY FOR THE PE EXAM

By Ricky Bursi, P.E., and Robert Campbell, P.E.

Under Tennessee law, a person with an Engineer Intern (EI) certification who has a minimum of four years of progressive engineering experience under the direct supervision of a registered professional engineer is eligible to apply for registration by examination as a Professional Engineer (PE) in Tennessee (T.C.A. § 62-2-401). It is not uncommon for PE exam applications to contain descriptions of progressive engineering experience activities that don't qualify, or don't adequately communicate the experience. Here are some tips for employers and managers to help an applicant provide progressive engineering experience that qualifies for their EIs, and for helping the applicant communicate the experience properly on their exam application.

Providing the right kind of experience:

- Refer to the description of what constitutes progressive engineering experience on the Board's website at <http://www.tn.gov/commerce/license/Engineers>.
- Provide tasks for EIs which require that engineering principles, calculations, and analyses are used to design or to solve problems. Simply reporting problems to someone else does not qualify.
- Tasks that are clerical, or are managerial with little design application, such as relaying information from contractors to designers, or collecting documentation for a project file, do not qualify as progressive design experience.
- Tasks that are commonly performed by a technician may not qualify.
- If tasks are solely a CAD function or a survey function, an applicant may only get partial credit.
- It may take more than four years of work experience to accumulate four years of progressive engineering experience.
- Make sure a PE can vouch for the EI's work. Suggestion: a

managerial supervisor may not necessarily oversee the technical parts of an EI's work experience.

- Tip for EIs: request tasks that qualify for progressive design experience.

Describing the experience on a PE application:

- For design experience, EIs are encouraged to be detailed in their descriptions. Saying "I was part of a team that designed..." is not enough. Offer descriptions such as, "I calculated the pipe sizes by determining drainage areas, slopes, and velocities using Manning's number..." or "I calculated cooling loads using the ASHRAE CLTD/CLF Method, with R-values of specific building materials obtained to calculate building component U-Factors...."
- For problem-solving experience, EIs need to describe the problems, how they collected data, and used engineering judgment to derive a solution.
- A senior engineer should review the EI's application, especially the experience description, to make sure it is accurate, detailed, and conveys the required type of information.
- Coach EIs to keep a log of their experience, describing the tasks they perform.
- References need to perform this task thoughtfully and seriously; they should not hesitate to send back the application if the experience description is not accurate. Make an honest evaluation of whether or not the applicant is ready to be a PE. Better that person take another year to get licensed than have someone who doesn't have the right experience designing future systems that the public will use.

Hopefully these tips will help employers give their EIs the best chance to grow into PEs.

NCEES

Licensure Exchange,
August 2017

UNDERSTANDING DIGITAL SIGNATURES



Jason Kent, P.E., Oregon Board of Examiners for Engineering and Land Surveying Member
Ron Singh, P.L.S., Oregon Board of Examiners for Engineering and Land Surveying Past Member

NCEES Model Law 140.10(C) [and Tenn. Code Ann. § 62-2-306 and Tenn. Comp R. & Reg. 0120-02-.08] requires documents to be sealed, signed, and dated. Traditional handwritten signatures on physical engineering documents worked well when documents were written or drawn by hand. They also worked reasonably well in the early days of using computers to simply speed up the document-development process, with the intent of producing final documents on paper. However, computer use has progressed into an era in which electronic documents are transmitted, reviewed and approved, used during the bidding process and for stakeless construction, and archived for future retrieval. Applying a handwritten signature to these electronic files requires printing the document, signing it, and then scanning it back into an electronic file. This process loses the electronic file's native format and any imbedded intelligence. It is also time consuming and unnecessary.



Electronic vs. digital signatures

The terms electronic signature and digital signature are often used interchangeably. In the information security world, however, the two terms are distinctly different. An electronic signature may include scanned images of handwritten signatures or typed

notations such as “/s/ Jane Doe” without any authentication or encryption system included. For example, a drawing set that uses computer-aided drafting with a digital reproduction of an engineer's or surveyor's seal and signature across the seal is an electronic signature. This type of signature is neither a handwritten signature nor a digital signature, and it is digitally insecure. Similarly, a signature block on an email message may also be considered an electronic signature.

The term digital signature is more properly used to describe a signature system applied to an electronic document that uses specific technical processes to provide significant added signer authentication, document authentication, document encryption (if necessary), and efficiency. Instead of using pen and paper, a digital signature uses digital keys to attach the identity of the signer to the document and record a binding commitment to the content of the document. Digital signatures enable authentication of digital documents, assuring the recipient of the sender's identity and the document's integrity. A digital signature provides who signed the digital file. A time stamp of that digital signature provides when the digital file was signed.



Why use digital signatures?

A digital signature provides a greater degree of security than a handwritten signature does. The recipient of a digitally signed document can verify that the document originated from the person whose signature is attached

and that the document has not been altered (intentionally or accidentally) since it was signed.

Digital signature technology is not an emerging technology. It has undergone thorough research and development over the past two decades. Several national and international standards allow digital signatures. These standards were developed and are accepted by many corporations, banks, and government agencies. A robust digital signature system is capable of creating a signature unique to the person using it, capable of verification, under the sole control of the person using it, and linked to the document so that the digital signature is rendered invalid if any part of the document is altered. **These requirements are listed in NCEES Model Rules 240.20 C8 [and Tenn. Comp R. & Reg. 0120-02-.08(8)(b)].** Less-robust digital signature systems that do not provide these benefits should be avoided.



What is needed to create a digital signature?

Creating a digital signature requires software, a signing certificate, and optionally, hardware to provide further security with a signer's private key.

Creating the signing certificate involves making a public-private digital key pair and, optionally, obtaining the services of a certificate authority.

The public key certificate creates proof of the signer's identity and is made available to anyone who needs to verify the signature. Also called a signer's certificate, the public key certificate is created by the combination of the public key and proof of identity.

The document is signed with the private key, which is kept by only the signer. The public and private keys are related mathematically. Knowing the public key allows a signature to be verified but does not allow new signatures to be created. If the

private key is not kept private, someone could create the original signer's signature on a document without consent. It is critical to keep the private key secret.

To verify a digital signature, the verifier must have access to the signer's public key and have assurance that it corresponds to the signer's private key. This assurance can be provided by using a trusted third party to associate an identified signer with a specific public key. That trusted third party is known as a certification authority.

To associate a key pair with a prospective signer, the certification authority issues a certificate—an electronic record that lists a public key as the subject of the certificate—and confirms that the prospective signer identified in the certificate holds the corresponding private key. The certification authority performs a background check on each person who is assigned a signing certificate.

A self-signed certificate is one that is created by the individual signer without the services of a certification authority. It should be avoided. Digital IDs provided by third parties are generally considered more secure because an independent certification authority has ratified them. A signature applied using a self-signed certificate signature tells document recipients, "This document is valid, and I am authorized to sign it," while a signature applied using a third-party digital ID tells them, "This document is valid, I am authorized to sign it, and [certification authority] verifies my identity." This additional assurance can

make a big difference when it comes to legal documents or documents sent out to a wide audience.



Security of digital signatures

Digital signatures provide a secure, efficient, and convenient process for sealing a document pursuant to **NCEES Model Law 140.10 C [and Tenn. Code Ann. § 62-2-306 and Tenn. Comp R. & Reg. 0120-02-.08]**. For recipients of digitally signed documents, they also provide assurance that a document is

authentic and original. Digital signature technology is well established and accepted in a multitude of settings. In addition, certification authorities have developed technologies that can evolve to meet the scenarios set forth in **Model Rules 240.20 C [and Tenn. Comp R. & Reg. 0120-02-.08(8)(b)]**.

Member boards should recognize that digital signature technology is not universally understood, and the terms digital signature and electronic signature are commonly confused. Boards and licensees should be aware of the distinctions between these strategies and recognize the insecurities of using electronic signatures as well as the robustness and security afforded by digital signature technology.

**This article was adapted with permission from the article, "Understanding Digital Signatures," printed in the August 2017 issue of NCEES Licensure Exchange.*

STAY INFORMED SIGN UP FOR NOTIFICATIONS!

You can now sign up to receive e-mail or text notifications
from the board related to the following:

- **New or Amended Statutes - New or Updated Rules**
- **Changes to Fees - Rulemaking Hearings Related to Fees**
- **Significant Changes Impacting Your License - Changes to Policies**

The notification system is now the primary way registrants are notified of proposed rules and rulemaking hearings since rule filings often do not coincide with newsletter publication dates. To ensure that you receive these notices, please sign up at

https://apps.tn.gov/notify-app/sign_up.html?agencyid=3

BOARD OF ARCHITECTURAL AND ENGINEERING EXAMINERS AWARDS GRANTS GRANTS TO **13** TENNESSEE UNIVERSITIES



NASHVILLE – April 27, 2017 – The Tennessee Department of Commerce and Insurance (TDCI) announces today that the Board of Architectural and Engineering Examiners has awarded grants totaling \$331,700 to 13 Tennessee universities. Grant funds may be used for computers to be utilized by students, laboratory or instructional equipment, library resources, or to pay intern development program fees or examination fees for students in accredited architectural, engineering, landscape architectural, and interior design programs.

“The Board appreciates the opportunity to assist in the education of architecture, engineering, landscape architecture, and interior design students,” said John Cothron, Executive Director of the Board of Architectural and Engineering Examiners. **“Education lays the foundation for developing the knowledge and skills needed to practice the design professions and to protect the public’s health, safety, and welfare.”**

Receiving grant funds this year are:

- **Christian Brothers University—\$13,835 to the School of Engineering.** Funds will be utilized to purchase a differential scanning calorimeter repair/upgrade, hydrographic surveying equipment, a ground based robotics systems, and an unmanned aerial system.
- **East Tennessee State University—\$3,000 for the interior design program.** Funds will be utilized to pay Interior Design Fundamentals Examination (IDFX) fees for students and to purchase a color laser printer and construction tools. The IDFX exam is typically the first step in the process leading to registration as a Registered Interior Designer (RID), and may be taken by students in the senior year of an interior design curriculum.
- **Lipscomb University—\$12,777 to the College of Engineering.** Funds will be utilized to pay Fundamentals of Engineering (FE) examination fees for students and to purchase a complete water quality lab and total coliform lab. The FE exam is typically the first step in the process leading to licensure as a Professional Engineer (PE), and may be taken by students in the senior year of an engineering curriculum.
- **Middle Tennessee State University—\$3,000 to the College of Behavioral and Health Sciences for the interior design program; \$13,605 to the Mechatronics Engineering program.** Funds will be utilized to pay FE examination fees for students and to purchase a CNC router and 3D printer for the mechatronics engineering program, and resource library equipment and computer-related items for the interior design program.
- **O’More College of Design—\$3,000 to the School of Interior Design.** Funds will be utilized to purchase a desktop laser cutter.
- **Tennessee State University—\$18,649 to the College of Engineering.** Funds will be utilized to purchase equipment to renovate the Civil Engineering laboratory, including a concrete compression machine with controller.
- **Tennessee Technological University—\$33,725 to the College of Engineering.** Funds will be utilized to purchase furniture, computer equipment, networks for Internet access, and work benches for a student design center.
- **Union University—\$10,962 to the Department of Engineering.** Funds will be utilized to purchase a heat treat oven, a printed circuit board (PCB) computer numerical control (CNC) router, components for a wind tunnel, and vertical mill accessories.
- **University of Memphis—\$22,614 to the College of Engineering; \$25,439 to the College of Communication and Fine Arts for the architecture and interior design programs.** Funds will be utilized to purchase interdisciplinary design lab equipment (3D printers, laser cutter, color printer, flatbed scanner, oscilloscopes) for the College of Engineering, and security alarm equipment, a projection system, blackout shades, cachet chairs, design+build studio equipment, and a laser printer for the architecture and interior design programs.
- **University of Tennessee-Chattanooga—\$25,716 to the College of Engineering and Computer Science; \$3,000 to the College of Health, Education and Professional Studies for the interior design program; \$20,000 for a**

special project grant. Funds will be utilized to purchase a signals and systems experimentation station and control design applied experimentation stations for the Electrical Engineering department, and to pay IDFX exam fees for students and purchase lighting equipment and design studio supplies for the interior design program. The \$20,000 special project grant will be used to develop an interdisciplinary low-income community design studio in Chattanooga in partnership with the University of Tennessee at Knoxville.

- **University of Tennessee-Knoxville—\$44,461 to the College of Architecture and Design; \$42,825 to the College of Engineering.** Funds will be utilized pay FE examination fees for students and to purchase transportation simulation laboratory upgrades, portable materials science laboratory equipment, and 3D laser scanning equipment for the College of Engineering, and

plotters, workstations and laptop computers for the College of Architecture and Design.

- **University of Tennessee-Martin—\$12,800 to the College of Engineering and Natural Sciences.** Funds will be utilized to purchase a servo rotary table.
- **Vanderbilt University—\$22,292 to the School of Engineering.** Funds will be utilized to pay FE examination fees for students and to purchase a professional graphics workstation and 3D printer.

Grant funding is provided from the Board's revenues or reserve funds. The Tennessee General Assembly and Governor Bill Haslam authorized funding for the grants (2016 Public Acts, Chapter 758, Section 7, Item 31). The Board has awarded over \$3.5 million in grant funds since the inception of the program in 2002.

NCIDQ
EXAM



— NOW FULLY COMPUTERIZED —

October 2017 marks the first administration of the new computerized Practicum portion of the National Council for Interior Design Qualification (NCIDQ) examination. Designed to test certification candidates' knowledge with equal rigor as the paper and pencil version of the exam, the computerization offers a more efficient way to assess the same overall competencies as before. Taking half the time as the original exam, candidates are given 4 ½ hours to complete the 120 question exam.

The computerized Practicum consists of three separate case studies, covering large commercial, small commercial, and residential. All questions are attached to one of the case studies. While the

testing platform and layout have changed, the knowledge and information candidates need to synthesize remains largely unchanged.

For candidates who want to be best prepared for the exam, the Council for Interior Design Qualification (CIDQ) offers several tools on its website to provide important information to assist in their preparation, including an exam blueprint outlining the content of the exam, the special set of building codes that are referenced in the exam, and a practice quiz. Several videos are also available to provide insight on the new Practicum exam.

Visit <https://www.cidq.org/practicum> for more information.

UPDATE ON NATIONAL COUNCIL ACTIVITIES

The Tennessee Board of Architectural and Engineering Examiners continues to participate in meetings of the following national regulatory councils: the National Council of Architectural Registration Boards (NCARB), the National Council of Examiners for Engineering and Surveying (NCEES), the Council of Landscape Architectural Registration Boards (CLARB), and the Council for Interior Design Qualification (CIDQ). The national councils assist member boards by developing uniform national examinations and model laws and regulations, among other responsibilities.

The following issues were discussed at the 2017 NCARB Annual Meeting:

- **Shaping NCARB's Strategy**—Participants provided input on refreshing the NCARB strategic plan.
- **Investigation Best Practices**—Enforcement staff from member boards provided an overview of investigation best practices.
- **Making Education Count**—Presenters provided an overview of the National Architectural Accrediting Board (NAAB) accreditation process.
- **Opportunities in the New Regulatory Environment**—Keynote speakers Malcolm K. Sparrow and David C. King, professors at Harvard's Kennedy School of Government, explored the importance of reasonable regulation—including techniques for building relationships with elected officials in an era when professional licensure is being questioned.
- **Pre-licensure Titling**—Delegates discussed which pre-licensure titles would be allowed in their jurisdictions in response to an American Institute of Architects (AIA) position statement supporting use of the titles "Design Professional" and "Architectural Associate." Most jurisdictions reported that use of these titles by unlicensed persons would be unlawful in their jurisdictions. The Tennessee Board is currently discussing the issue.

The following issues were discussed at the 2017 NCEES Annual Meeting:

- A motion passed to amend Position Statement 35 (Future Education Requirements for Engineering Licensure) to provide a new practice-oriented

pathway to obtain additional education beyond the bachelor's degree. The full text of NCEES Position Statement 35 is available online at <https://ncees.org/PS35>.

- Work continues on transitioning the PE exams to a computer-based format. The Chemical and Nuclear exams will be transitioned in 2018.
- Session topics included: Professional Ethics; Understanding Exam Development; Public Relations; Challenges to Licensure; Building Information Modeling (BIM); UAVs in the Surveying Profession; and the Education Leg of the Licensure Stool.

The following issues were discussed at the 2017 CLARB Annual Meeting:

- The meeting began with a legislative update (including threats to licensure and regulation) and a presentation on growth and diversity in the landscape architecture profession. It was noted that landscape architecture is one of 60 professions regulated in all U.S. jurisdictions.
- Attendees participated in a "friction analysis" exercise to identify and assess points of friction in the licensure process. A two-part strategy was emphasized: (1) Prepare for and defend against threats (tactical); and (2) Rethink the licensure framework (strategic).
- Breakout discussion topics included: Creative Ways to Educate Legislators; Empower Your Board by Building Successful Relationships; and Antitrust and How to Avoid It.
- A resolution passed to adopt significant changes to the Model Law and Model Regulations.

NEW LICENSE SELF-PRINT FEATURE



The Regulatory Boards Division of the Department of Commerce and Insurance has exciting news for you as a licensee of the A&E Board. Your license can now be printed directly from your home or office without extra cost. This convenience allows you to immediately have a copy of a new or renewed license once your application is approved.

To use this feature, log into (or set-up) your CORE account at <http://core.tn.gov>. You may also renew your license, order a duplicate wall certificate, or change your address through the CORE system.

WE HOPE THAT ALL REGISTRANTS WILL TAKE ADVANTAGE OF THIS NEW SYSTEM!



Former Engineer Board member Hal Balthrop received his emeritus certificate from Chair Susan Ballard on December 8, 2016. Mr. Balthrop served on the Board from 2008 to 2016.



Former Landscape Architect Board member Bill Lockwood received his emeritus certificate from Chair Susan Ballard on December 8, 2016. Mr. Lockwood served on the Board from 2008 to 2016.



Former Architect Board member Jerry Headley received his emeritus certificate from Chair Susan Ballard on December 8, 2016. Mr. Headley served on the Board from 2012 to 2016.

East Tennessee State University's interior design program was recently awarded accreditation from CIDA (the Council for Interior Design Accreditation) for a six-year term (2017-2023). The Accreditation Commission's decision was based on the program's demonstrated achievement of sixteen accreditation standards.

At the June 1, 2017, Board meeting, Frank W. Wagster, AIA, was elected to serve as Board Chair; Robert Campbell, Jr., PE, was elected to serve as Vice Chair; and Blair Parker, PLA, was elected to serve as Secretary. All officers will serve from July 1, 2017, to June 30, 2018.

Richard Bursi, PE (Memphis, Tennessee) was recently appointed to serve as an engineer member representing West Tennessee, replacing Philip Lim. At the time of his appointment, Mr. Bursi was serving as the associate engineer member from West Tennessee. Mr. Bursi will serve in his new position until June 30, 2021.

L. Alton Hethcoat, PE (Franklin, Tennessee) was recently appointed to serve as an associate engineer member representing Middle Tennessee, replacing Laura Reinbold. Mr. Hethcoat will serve until June 30, 2021. Mr. Hethcoat previously served as an associate engineer member from 2009 to 2013.

Formal Disciplinary Actions Taken by the Board

Walter L. Anderson, P.E. #6045
Bolivar, Tennessee

VIOLATION: Gross negligence and/or incompetency. Tenn. Code Ann. §§ 62-2-306(b), 62-2-308(a)(1)(B) and (E), and Rules 0120-02-.03(1) and (2) and 0120-02-.08(3) and (5)(a).

PENALTY: Voluntary and permanent retirement of license.

CONSENT ORDER: June 14, 2017

Jason Christopher Elliott, P.E. #112209
Knoxville, Tennessee

VIOLATION: Practiced engineering on an expired certificate of registration. Tenn. Code Ann. §§ 62-2-101 and 62-2-105.

PENALTY: \$500 civil penalty; take and pass the Board's law and rules exam.

CONSENT ORDER: April 25, 2017

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Joseph A. Girgenti, P.E. #113660
Tampa, Florida

VIOLATION: Practiced engineering on an expired certificate of registration. Tenn. Code Ann. §§ 62-2-101 and 62-2-105.

PENALTY: \$1,000 civil penalty; take and pass the Board's law and rules exam.

CONSENT ORDER: August 31, 2017

Jason Randal Creasy Needham, P.E. #104544
Arlington, Tennessee

VIOLATION: Convicted of a felony. Tenn. Code Ann. § 62-2-308.

PENALTY: Voluntary revocation of certificate of registration.

CONSENT ORDER: August 15, 2017

John R. Stone, R.A. #20978
Suwanee, Georgia

VIOLATION: Practiced architecture on an expired certificate of registration. Tenn. Code Ann. §§ 62-2-101 and 62-2-105.

PENALTY: \$500 civil penalty; take and pass the Board's law and rules exam.

CONSENT ORDER: January 10, 2017

Richard D. Sullivan, P.E. #21614
Arrington, Tennessee

VIOLATION: Practiced engineering on an expired certificate of registration. Tenn. Code Ann. §§ 62-2-101 and 62-2-105.

PENALTY: \$500 civil penalty; take and pass the Board's law and rules exam.

CONSENT ORDER: March 13, 2017

Daniel David Woods, R.L.A. #793
Brentwood, Tennessee

VIOLATION: Practiced landscape architecture on an expired certificate of registration. Tenn. Code Ann. §§ 62-2-101 and 62-2-105.

PENALTY: \$500 civil penalty; take and pass the Board's law and rules exam.

CONSENT ORDER: July 7, 2017

Freddie R. Young, R.I.D. #805
Memphis, Tennessee

VIOLATION: Failure to supply required documentation of continuing education hours claimed during audit process. Registration had been previously renewed based on certification of having obtained the required hours. Rule 0120-05-.04.

PENALTY: \$1,000 civil penalty; must bring all continuing education hours current and submit proof prior to reactivation of registration; take and pass the Board's law and rules exam prior to reactivation of registration.

CONSENT ORDER: August 9, 2017



The Board and Staff wish to extend our sympathies to the families and friends of these individuals who have honored their professions:

Robert L. Sylar, P.E. #6021, Brentwood, TN (1933-2017)

The Board was saddened to hear that former Board member Robert L. Sylar passed away on February 20, 2017, at the age of 83. A passionate advocate of the engineering profession, Mr. Sylar served in numerous state and national leadership positions, culminating in being elected as the NSPE National President (1998-1999). In 2000, he was selected as a Fellow by NSPE. Mr. Sylar served on the Tennessee Board of Architectural

and Engineering Examiners from 2000-2004, and served as Chair of the Board in 2003-2004. He will be greatly missed by engineers, friends and family alike.

ARCHITECTS

Arvin D. Braden, #20646, Madison, TN
Kenneth E. Brandenburg, #6355, Lookout Mountain, GA
Charles P. Jester, #8764, Germantown, TN
Bill S. Lester, #12170, Sunset Beach, NC
Alvin L. McCreary, #18940, Tulsa, OK
Rollin M. Nelson, #8448, Seymour, TN
Kevin Bradley Oldland, #103353, Salisbury, MD
Jon Rosson Summers, #102509, Memphis, TN
David L. Wooley, #17960, Knoxville, TN
Jackie B. Wynn, #18226, Chattanooga, TN



ENGINEERS

- William D. Adams, #14444, Greenville, SC
- John W. Ashworth, #5744, Collierville, TN
- Morris E. Beavers, #3782, Altoona, FL
- Martin Matthew Braun, #110214, Maumee, OH
- Henry F. Brown, #9459, Birmingham, AL
- Roberto Jose Cardozo, #114775, Coral Gables, FL
- Ronald B. Cox, #7871, Signal Mountain, TN
- Vincent J. Desimone, #101202, New York, NY
- Lawrence Carsey Gerow, #102239, Knoxville, TN
- Richard C. Gwaltney, #5652, Oak Ridge, TN
- Kevin H. Haas, #100491, Brentwood, TN

- Gregory S. Hamrick, #23393, Nashville, TN
- Kenneth R. Harrington, #3907, Nashville, TN
- Everett P. Henry, #9059, Nolensville, TN
- A. Thomas Hoffman, #7271, Lebanon, TN
- Douglas R. Hungate, #12124, Johnson City, TN
- Gregory Ray Jeffers, #105410, Atlanta, GA
- Richard L. King, #2145, Memphis, TN
- Michael R. Knauff, #16938, Chattanooga, TN
- Stanley Eugene Koehlinger, #103707, Bolivar, OH
- Luther L. Leavell, #7914, Knoxville, TN
- William H. Lowry, #11423, Knoxville, TN
- Woodrow W. Marcum, #109625, Louisville, KY
- Don M. Savage, #3463, Memphis, TN
- Oscar Shefsky, #102450, Memphis, TN
- Gerald M. Spencer, #17715, Lawrenceville, GA
- Kennyn D. Statler, #8457, Denver, CO

- Glenn A. Swinehart, #11964, Gallatin, TN
- A. B. Tankersley, #2376, Milton, FL
- Fred H. Terry, #8037, Memphis, TN
- Lester Wade Towles, #14234, Memphis, TN
- Bruce A. Tschantz, #8129, Knoxville, TN
- Mac Douglas Waldrup, #21464, Gadsden, AL
- Richard Thomas Walker, #4728, Valrico, FL
- Charles Edward Walls, #108536, Boalsburg, PA
- Bruce B. Wilson, #18060, Hixson, TN
- Roy L. Wright, #7418, Valrico, FL

LANDSCAPE ARCHITECTS


- Jon Eric Benson, #553, Atlanta, GA
- William J. Oliphant, #119, Knoxville, TN

REGISTERED INTERIOR DESIGNERS

- James Alden Embry II, #411, Gatlinburg, TN

If you have a name that should be recognized in this section, please contact the Board office.

LEGISLATIVE Up-Date



The Tennessee General Assembly enacted statutory amendments during the 2017 legislative session which may impact licensees of the Tennessee Board of Architectural and Engineering Examiners.

Public Chapter 348 allows the Board to issue an engineer's license to a person holding a master's degree in engineering from an institution with an ABET accredited engineering program approved by the board as being of satisfactory standing, and with a specific record of twenty (20) years or more of progressive experience on engineering projects of a grade and character that indicates to the board that the applicant is competent to practice engineering and who has passed the Fundamentals of Engineering examination and Principles and Practice of Engineering examination. This act is repealed on June 30, 2019.
<http://publications.tnsosfiles.com/acts/110/pub/pc0348.pdf>

Public Chapter 226 eliminates the requirement for an engineer to have obtained certification as an engineer intern and instead requires anyone applying for an engineer license to have passed an examination prepared by the National Council of Examiners for Engineering and Surveying involving the fundamentals of engineering.
<http://publications.tnsosfiles.com/acts/110/pub/pc0226.pdf>



Information On Examinations



The Board would appreciate your sharing information about these professional examinations with interns in your office.

ARCHITECTURE

In order to sit for the Architect Registration Examination (ARE), candidates must first establish a record with the National Council of Architectural Registration Boards (NCARB), including enrollment in the Architectural Experience Program (AXP, formerly known as IDP). Candidates must then submit an application to the Tennessee Board for exam authorization. The ARE, AXP, and the required experience must be completed prior to registration.

ARE 4.0 Exam Results (11/7/16-10/13/17)

	Total	Pass%	Pass
Constr. Doc. & Services	79	46	58%
Prog., Planning & Practice	85	53	62%
Structural Systems	48	28	58%
Bldg. Design & Const. Sys.	42	33	79%
Schematic Design	22	17	77%
Site Planning & Design	61	42	69%
Building Systems	42	17	40%

ARE 5.0 Exam Results (11/11/16-10/23/17)

	Total	Pass%	Pass
Practice Management	18	11	61%
Project Management	11	6	55%
Programming & Analysis	21	9	43%
Project Planning & Design	45	28	62%
Project Dev. & Doc.	28	22	79%
Construction & Eval.	12	6	50%

ENGINEERING

•Fundamentals of Engineering Examination (FE) –

The FE exam is now offered in a computer-based format throughout the year at Pearson VUE test centers. Applicants for the FE exam no longer apply to the Tennessee Board for authorization to sit for the FE exam. Applicants now register for the exam directly with NCEES at www.ncees.org and then apply to the Tennessee Board for Engineer Intern certification after passing the exam.

•Principles and Practice of Engineering (PE) and Structural Engineering (SE) Examinations –

PE and SE exam applicants must first apply to the Tennessee Board for authorization to sit. The application deadline for new applicants for the spring PE/SE exams is December 1. The fall deadline is June 15. All supporting documents (references, transcripts, etc.) are due in the Board office within thirty (30) days after the application deadline. The exams will be given in Nashville, Knoxville, and Memphis on:

April 13-14, 2018
October 26-27, 2018

To facilitate scheduling of the exams, retake requests should be received by the Board office by February 1 for the spring exam and by August 15 for the fall exam. Registrants wishing to take other exam disciplines must submit an application to add an exam discipline (available at the Board's website) by January 1 for the spring exam and by July 15 for the fall exam. ALL EXAM FEES ARE NOW PAID DIRECTLY TO NCEES WHEN RESERVING A SEAT FOR THE EXAM.

Following approval by the Tennessee Board to sit for an exam, applicants must register with NCEES at www.ncees.org to pay the exam fee and reserve a seat for the exam. For information regarding exam study materials, which calculators are permitted in the examination room and exam specifications, please visit the NCEES website.

NOTE: The PE Chemical exam is now computer-based and is administered year-round at NCEES-approved Pearson VUE test centers. Board approval is still required in order to sit for the exam.

Exam Results

	Total	Pass%	Pass
Fundamentals of Engineering January-September 2017	668	406	61%

	Total	Pass %	Pass
Principles and Practice of Engineering April 2017			
Architectural	1	1	100%
Chemical	8	4	50%
Civil	124	60	48%
Electrical & Computer	40	18	45%

Environmental	4	1	25%
Industrial	2	2	100%
Mechanical	32	15	47%
All Disciplines	211	101	48%

Structural Engineering (16-hour)

	Total	Acceptable	% Pass Result
Vertical Component	8	4	50%
Lateral Component	13	4	31%

Note: To pass the Structural exam, an acceptable result must be obtained on both the vertical and lateral components. Four (4) candidates passed the Structural exam this administration.

National pass rates are available on the NCEES website (www.ncees.org).

LANDSCAPE ARCHITECTURE

In order to sit for the Landscape Architect Registration Examination (LARE), candidates must first establish a record with the Council of Landscape Architectural Registration Boards (CLARB) and then submit an application to the Tennessee Board for exam authorization. The LARE and the required experience must be completed prior to registration.

Additional information regarding the LARE, including current fees and exam dates, is available at CLARB's website (www.clarb.org).

Exam Results (4/17)

	Total	Pass%	Pass
Section 1	5	3	60%
Section 2	3	2	67%
Section 3	1	0	0%
Section 4	2	2	100%

Exam Results (8/17)

	Total	Pass%	Pass
Section 1	7	7	100%
Section 2	8	7	88%
Section 3	5	5	100%
Section 4	2	2	100%

cont. page 13

NEW REGISTRANTS

The Board and staff congratulate the following registrants who passed their respective professional examinations and were registered between January 1, 2017, and October 31, 2017:

ARCHITECTS (Architect Registration Examination)

Micah Daniel Antanaitis
Omar Sidney Baker
Michelle Liane Beauvais
Ryan Blocher
Cameron Scott Bolin
Meredith Bucher
Tricia Toy Cartner
Harrison Michael Daigle
Michael Alan Davis
Brenda Anne Dean
Ashley Dunbar Elliott
Justin William Erholtz
Elizabeth Jewell Gatlin
Kathryn Dupree Thompson
Greer
Cory Thomas Griffis
Meagan Lyndee Grohol
Sean Christopher Guth
Lindsay Beck Hamilton
Sarah Elizabeth Hargis
William Rexford Hart
Holly Elaine Hendrix
Christopher David Hoal
Christina Leigh Holden
Charlotte Lee Moellendick
Ryan Phillip Morris
Alyssa Catherine Nealon
Andrew S. Newman
Adam White Nicholson
Katherine Armstrong O'Neil
Jeffery Daniel Parnell
Cody Ian Pless
Jonathan Warren Sexton
Candace Duffelle Shriver
Iain Alexander Shriver
Brenda Forrester Smith
Matthew Miller Smith
John Thomas Trail
Nicholas Franz-Joseph
vonWerssowetz
Martin Joseph Wieck

ENGINEERS (Principles and Practice of Engineering Examinations)

Amber Vendel Aboulfaida
Steven Ryan Adcox
Quitman Wardale Alexander
Akar Shirwan Aran
Juan Gilberto Arboleda
Robert Daniel Arthur
Andrew Kary Mehdi
Assadollahi
Colin Michael Aubuchon
Ryan Christopher Bachor

Darrell Demetrious Banks
James Daniel Barre
Bryan Andre Bartnik
Adam Michael Belew
Samuel Lawrence Betten
Thomas Allen Bird
Matthew David Bishop
Joseph Edward Black
Samuel Martin Black
Jarrod Thomas Bonar
Tyler Carr Bourne, Jr.
Stephen Daniel Brady
Matthew Wayne Brazille
Ryne Ernest Bridges
Karl M. Broer
William Martin Brogley
Wesley Leonard Brown
Phillip Ray Buell
Barry Andrew Burgess
Joshua Wheeler Burnette
Sam Phillip Burns
Luke Howard Burris
Evan Nicholas Burton
Michael John Cain, Jr.
Anthony Morris Campbell
Taylor Riley Cardin
Gregory J. Carrico
Theodore William Castellano
Jennifer Barnes Casterline
Stephen Ryne Catignani
Samuel Elisha Caviness II
Cesar Orlando Ceballos
Jon Ryan Chamblee
George C. Chamoun
Brennon Macaile Clayton
Rachel Henry Cole
Felix Condurat
Christopher Steven Crawford
Ronny Tyler Daniel
Hamilton Reese DeBlois
David C. Denkenberger
William Parker DePriest
Andrew Lewis Dial
Jody Creed Dunnigan
Cheryl Leigh Eddy
Rudolph John Elizondo
Mary Elizabeth Elrod
John Avery Emison, Jr.
James Oliver Ensley
Matthew David Fasig
Kayla Marie Ferguson
Richard Warren Forehand
Allyson Nicholle Foster
Gregory Vaughn Freeman
James Nicholas Garner
Eric Michael Gasielki
Pamela S. Gilmer
Jeffrey Todd Girten
Christopher Hogan Gollither

Robert Orr Graham III
Tarris Wondell Greer
Charles Paul Gregory
Kyle Eugene Griffin
Chris R. Grundt
John Andrew Hamilton
Patrick Marshall Hannah
Willie Joseph Harden
Patrick Sullivan Harrington
Robert Allen Harshman
Kristopher Charles Hatchell
Qiang Jonathan He
Wesley Vernon Henderson
Justin Lynn Henley
Keely Jaine Higbie
Andrew Gilbert Highlander
Boone Stephen Hillenbrand
Derek Ryan Holt
Mark David Hopkins
Howell Paul Hopper, Jr.
Michael James Howell
Joseph William Hull
Christopher Shane Hulseley
Thomas Daniel Humbert
David Albert Jacobs
Justin David James
Michael Scott Johnson
James Allen Jones
Sam Kahel
Brian Augustus Kelley
Shannon Eubank Kennedy
Rebekah Faye Kerley
John Darby Kilpatrick
Wook Kim
Taylor Ellison Korth
Matthew James Ladenburger
Lonnie James Lanners
Lealand Wesley LaPoint II
Jennifer Nicole Leaf
Eric Dillon List
Jordan Dale Livesay
Christopher Dyer Loftis
Elizabeth Anne Mack
Kyle Robert Mangum
Samuel Austin May
Jonathan Kyle McGehee
Sarah Beth McGehee
Beau Andrew McLeod
Benjamin Derek Meade
Alexander James Merritt
Gabriel Alexander Miller
Brenton Bishop Montgomery
Russell Moore
Erica Morales
Anthony James Morgan
Christopher James Morrival
Joel Clifton Morris
Jonathan Andrew Morrison
David Cameron Mosley

John Samuel Mullen
Andrew Richard Murphy
Michael Foster Murray
Amanda Nicole Neighbors
Aaron Thomas O'Hern
Casey LaWayne Oliver
Fred Norman Overbay, Jr.
Michael William Palmer
Zane Hunter Pannell
Matthew Jacob Parker
Jonathan Coleman Parrish
Joshua Turney Pendergrass
Ovidiu George Pomohaci
Frank William Ponzio
Charles Carrington Porter
Thomas Bruce Powell
Brett Michael Ragsdale
Sydney Flowers Reddoch
Warren Arthur Reeder
Nicholas Joseph Renna
Blaine Anthony Rice
George David Richardson
Michael L. Riddle
Andrew Joseph Ruppe
Troy Dustin Russell
Tyler Everette Rutherford
Nicholas Drake Rutledge
Daniel Mark Schafran
Will T. Scheidt
Spenser Maxwell Schwartz
William Cortez Scott
Joseph Radford Sellers IV
Zachary Knowlton Shaw
Cody Earl Shields
Daniel Edward Sikes
Paul Vanterpool Simmons
Christopher Michael Sipos
Branden Paul Slagle
Preston Allan Snyder
Timothy Scott Sojourner
William Travis Stalans
James Ashley Strong III
Robert Chad Sullivan
Nathaniel McMahan Taylor
Nicholas Scott Taylor
Jason Glenn Tays
Angie Melissa Temples
Irfan Ahmed Thakur
Justin Owen Thompson
Eric Gordon Tidquist
Rebecca Eulene Tinker
Wesley Alan Tipton
Timothy James Truster
Matthew Alexander Turner
Mario Columbus Valentini
Jonathan A. Vest
Merrick Gene Walker

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DID YOU KNOW?

Registrants can receive continuing education credit for attending Board meetings. Rule 0120-05-.06(2)(i) allows credit for "Attendance at Board meetings and professional society legislative events, and active participation in a technical/professional society or organization, or a technical or professional public board, as an officer or committee member." A maximum of eight (8) Professional Development Hours per biennium may be claimed for these activities [Rule 0120-05-.07(1)(e)].

NEW REGISTRANTS continued from page 12

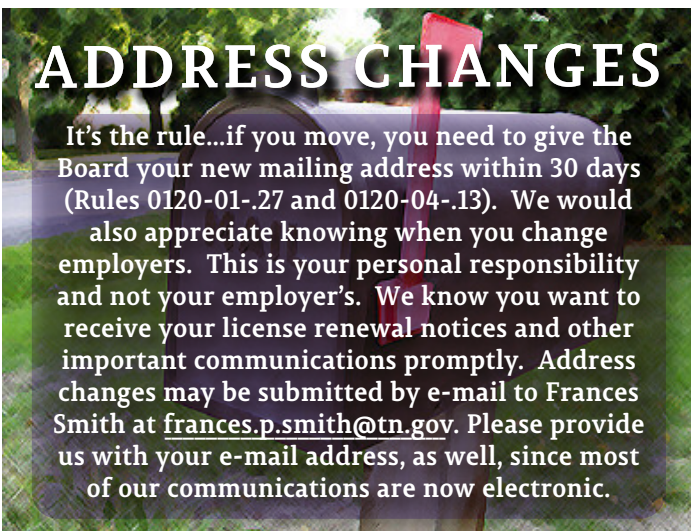
David Jonathan Ward
Justin Claude Watson
Samuel Luther Watson
Charles Street Webb
Daniel Kane Webb
Justin Pat Webb
John Charles West
Michael Paul Williams
Thomas Brian Williamson
James Aaron Wiser
Douglas Steven Wright
Matthew Glenn Wykoff
Keith Lynn Wyrick

LANDSCAPE ARCHITECTS (Landscape Architect Registration Examination)

Keli Renee Frymire
Troy P. Gardner
Cameron Reese Rodman

REGISTERED INTERIOR DESIGNERS (National Council for Interior Design Qualification Examination)

William Andrew Clark
Elizabeth Laurel Anne Morton
Brenna Suzanne Murphy
Patricia Anne Poole
Erin Metelka Ramsey
Laura Anne Sneed
Kelli Jean Straub
Alexandra Taylor
Jennifer Nicole Whisenant



ADDRESS CHANGES

It's the rule...if you move, you need to give the Board your new mailing address within 30 days (Rules 0120-01-.27 and 0120-04-.13). We would also appreciate knowing when you change employers. This is your personal responsibility and not your employer's. We know you want to receive your license renewal notices and other important communications promptly. Address changes may be submitted by e-mail to Frances Smith at frances.p.smith@tn.gov. Please provide us with your e-mail address, as well, since most of our communications are now electronic.

Examinations continued from page 11

INTERIOR DESIGN

The National Council for Interior Design Qualification (NCIDQ) exam is offered every spring and fall. The exam is now fully computerized, and is divided into three sections: the Interior Design Fundamentals Exam (IDFX), the Interior Design Professional Exam (IDPX), and a Practicum Exam (PRAC). To apply for the exam, visit www.cidq.org. After passing the exam and becoming NCIDQ certified, you may apply to the state board for registration as a registered interior designer. Pass rates are available at <https://www.cidq.org/pass-rates-cida>.

Tennessee Board of Architectural and Engineering Examiners

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